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 September 30, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from______ to ______

Commission File Number: 001-12209

RANGE RESOURCES CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware **(State or Other Jurisdiction of Incorporation or Organization)**	**34-1312571** **(IRS Employer Identification No.)**
100 Throckmorton Street, Suite 1200 **Fort Worth, Texas** **(Address of Principal Executive Offices)**	**76102** **(Zip 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, (Par Value $0.01)	RRC	New York Stock Exchange

Registrant's telephone number, including area code
(817) 870-2601

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 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☑ No ☐

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

Large Accelerated Filer	☑	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
		Emerging Growth Company	☐

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☑

256,333,325 Common Shares were outstanding on October 26, 2020

RANGE RESOURCES CORPORATION
FORM 10-Q
Quarter Ended September 30, 2020

Unless the context otherwise indicates, all references in this report to "Range Resources," "Range," "we," "us," or "our" are to Range Resources Corporation and its directly and indirectly owned subsidiaries. For certain industry specific terms used in this Form 10-Q, please see "Glossary of Certain Defined Terms" in our 2019 Annual Report on Form 10-K.

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RANGE RESOURCES CORPORATION
CONSOLIDATED BALANCE SHEETS
(In thousands, except per share data)

	September 30, 2020 (Unaudited)	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 517	$ 546
Accounts receivable, less allowance for doubtful accounts of $3,004 and $8,784	182,698	272,900
Derivative assets	5,264	136,848
Other current assets	20,668	17,508
Total current assets	209,147	427,802
Derivative assets	15,062	706
Natural gas properties, successful efforts method	9,646,901	10,213,737
Accumulated depletion and depreciation	(3,975,930)	(4,172,702)
	5,670,971	6,041,035
Other property and equipment	79,632	102,083
Accumulated depreciation and amortization	(75,203)	(96,708)
	4,429	5,375
Operating lease right-of-use assets	43,763	62,053
Other assets	69,526	75,432
Total assets	$ 6,012,898	$ 6,612,403
Liabilities		
Current liabilities:		
Accounts payable	$ 84,554	$ 155,341
Asset retirement obligations	2,103	2,393
Accrued liabilities	310,376	356,392
Accrued interest	31,680	39,299
Derivative liabilities	53,408	13,119
Divestiture contract obligation	102,665	—
Current maturities of long-term debt	45,334	—
Total current liabilities	630,120	566,544
Bank debt	696,172	464,319
Senior notes	2,328,585	2,659,844
Senior subordinated notes	17,375	48,774
Deferred tax liabilities	62,319	160,196
Derivative liabilities	31,503	949
Deferred compensation liabilities	69,927	64,070
Operating lease liabilities	32,238	41,068
Asset retirement obligations and other liabilities	98,359	259,151
Divestiture contract obligation	383,796	—
Total liabilities	4,350,394	4,264,915
Commitments and contingencies		
Stockholders' Equity		
Preferred stock, $1 par, 10,000,000 shares authorized, none issued and outstanding	—	—
Common stock, $0.01 par, 475,000,000 shares authorized, 256,232,010 issued at September 30, 2020 and 251,438,936 issued at December 31, 2019	2,562	2,514
Common stock held in treasury, 10,005,795 shares at September 30, 2020 and 1,808,133 shares at December 31, 2019	(30,131)	(7,236)
Additional paid-in capital	5,679,197	5,659,832
Accumulated other comprehensive loss	(574)	(788)
Retained deficit	(3,988,550)	(3,306,834)
Total stockholders' equity	1,662,504	2,347,488
Total liabilities and stockholders' equity	$ 6,012,898	$ 6,612,403

The accompanying notes are an integral part of these consolidated financial statements.

RANGE RESOURCES CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenues and other income:				
Natural gas, NGLs and oil sales	$ 381,553	$ 474,754	$ 1,162,907	$ 1,709,987
Derivative fair value (loss) income	(124,690)	74,676	102,182	208,190
Brokered natural gas, marketing and other	42,482	73,015	104,722	303,834
Total revenues and other income	299,345	622,445	1,369,811	2,222,011
Costs and expenses:				
Direct operating	19,515	35,276	75,944	102,484
Transportation, gathering, processing and compression	268,108	295,912	831,748	899,786
Production and ad valorem taxes	6,106	7,805	20,682	29,004
Brokered natural gas and marketing	47,967	79,938	118,752	313,360
Exploration	8,086	11,013	23,190	27,333
Abandonment and impairment of unproved properties	5,667	16,202	16,604	41,631
General and administrative	38,153	41,047	118,695	138,316
Exit and termination costs	521,633	819	533,525	3,025
Deferred compensation plan	6,237	(8,871)	10,287	(16,432)
Interest	47,999	46,997	144,141	150,261
Loss (gain) on early extinguishment of debt	7,821	(2,985)	(14,093)	(2,985)
Depletion, depreciation and amortization	96,167	137,751	303,779	417,974
Impairment of proved properties and other assets	1,955	—	78,955	—
Loss (gain) on the sale of assets	9,230	36,341	(112,443)	30,663
Total costs and expenses	1,084,644	697,245	2,149,766	2,134,420
(Loss) income before income taxes	(785,299)	(74,800)	(779,955)	87,591
Income tax (benefit) expense:				
Current	—	4,079	(366)	4,079
Deferred	(105,251)	(51,298)	(97,947)	(5,511)
	(105,251)	(47,219)	(98,313)	(1,432)
Net (loss) income	$ (680,048)	$ (27,581)	$ (681,642)	$ 89,023
Net (loss) income per common share:				
Basic	$ (2.83)	$ (0.11)	$ (2.82)	$ 0.35
Diluted	$ (2.83)	$ (0.11)	$ (2.82)	$ 0.35
Dividends paid per common share	—	$ 0.02	—	$ 0.06
Weighted average common shares outstanding:				
Basic	239,895	248,082	241,770	247,878
Diluted	239,895	248,082	241,770	248,823

The accompanying notes are an integral part of these consolidated financial statements.

RANGE RESOURCES CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(Unaudited, in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Net (loss) income	$ (680,048)	$ (27,581)	$ (681,642)	$ 89,023
Other comprehensive loss:				
Postretirement benefits:				
Actuarial (loss) gain	—	(12)	7	(37)
Amortization of prior service costs	92	92	277	276
Income tax expense	(22)	(20)	(70)	(59)
Total comprehensive (loss) income	$ (679,978)	$ (27,521)	$ (681,428)	$ 89,203

The accompanying notes are an integral part of these consolidated financial statements.

RANGE RESOURCES CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Operating activities:		
Net (loss) income	$ (681,642)	$ 89,023
Adjustments to reconcile net (loss) income to net cash provided from operating activities:		
Deferred income tax benefit	(97,947)	(5,511)
Depletion, depreciation and amortization and impairment of proved properties and other assets	382,734	417,974
Abandonment and impairment of unproved properties	16,604	41,631
Derivative fair value income	(102,182)	(208,190)
Cash settlements on derivative financial instruments	305,243	138,349
Divestiture contract obligation	486,689	—
Allowance for bad debt	400	(141)
Amortization of deferred financing costs and other	5,023	4,862
Deferred and stock-based compensation	38,380	14,410
(Gain) loss on the sale of assets	(112,443)	30,663
Gain on early extinguishment of debt	(14,093)	(2,985)
Changes in working capital:		
Accounts receivable	91,343	241,514
Other current assets	(5,786)	(4,024)
Accounts payable	(52,820)	(52,645)
Accrued liabilities and other	(80,529)	(155,499)
Net cash provided from operating activities	178,974	549,431
Investing activities:		
Additions to natural gas properties	(321,849)	(550,355)
Additions to field service assets	(2,493)	(803)
Acreage purchases	(18,554)	(39,795)
Proceeds from disposal of assets	246,083	784,527
Purchases of marketable securities held by the deferred compensation plan	(14,855)	(16,741)
Proceeds from the sales of marketable securities held by the deferred compensation plan	20,974	21,344
Net cash (used in) provided from investing activities	(90,694)	198,177
Financing activities:		
Borrowings on credit facilities	1,676,000	1,730,000
Repayments on credit facilities	(1,447,000)	(2,345,000)
Issuance of senior notes	850,000	—
Repayment of senior or senior subordinated notes	(1,120,634)	(90,274)
Dividends paid	—	(15,077)
Treasury stock purchases	(22,992)	—
Debt issuance costs	(12,735)	—
Taxes paid for shares withheld	(2,841)	(3,371)
Change in cash overdrafts	(8,797)	(24,744)
Proceeds from the sales of common stock held by the deferred compensation plan	690	667
Net cash used in financing activities	(88,309)	(747,799)
Decrease in cash and cash equivalents	(29)	(191)
Cash and cash equivalents at beginning of period	546	545
Cash and cash equivalents at end of period	$ 517	$ 354

The accompanying notes are an integral part of these consolidated financial statements.

RANGE RESOURCES CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited, in thousands)

Fiscal Year 2020

	Common stock		Common stock held in treasury	Additional paid-in capital	Retained deficit	Accumulated other comprehensive loss	Total
	Shares	Par value					
Balance as of December 31, 2019	**251,439**	**$ 2,514**	**$ (7,236)**	**$ 5,659,832**	**$ (3,306,834)**	**$ (788)**	**$ 2,347,488**
Issuance of common stock	4,246	42	—	(1,406)	—	—	**(1,364)**
Stock-based compensation expense	—	—	—	5,963	—	—	**5,963**
Treasury stock	—	—	(22,514)	(33)	—	—	**(22,547)**
Other comprehensive income	—	—	—	—	—	73	**73**
Net income	—	—	—	—	144,975	—	**144,975**
Balance as of March 31, 2020	**255,685**	**2,556**	**(29,750)**	**5,664,356**	**(3,161,859)**	**(715)**	**2,474,588**
Issuance of common stock	376	4	—	854	—	—	858
Issuance of common stock upon vesting of PSUs	19	—	—	74	(74)	—	—
Stock-based compensation expense	—	—	—	7,312	—	—	7,312
Treasury stock	—	—	(444)	—	—	—	(444)
Other comprehensive income	—	—	—	—	—	71	71
Net loss	—	—	—	—	(146,569)	—	(146,569)
Balance as of June 30, 2020	**256,080**	**2,560**	**(30,194)**	**5,672,596**	**(3,308,502)**	**(644)**	**2,335,816**
Issuance of common stock	152	2	—	73	—	—	75
Stock-based compensation expense	—	—	—	6,591	—	—	6,591
Treasury stock	—	—	63	(63)	—	—	—
Other comprehensive income	—	—	—	—	—	70	70
Net loss	—	—	—	—	(680,048)	—	(680,048)
Balance as of September 30, 2020	**256,232**	**$ 2,562**	**$ (30,131)**	**$ 5,679,197**	**$ (3,988,550)**	**$ (574)**	**$ 1,662,504**

The accompanying notes are an integral part of these consolidated financial statements.

RANGE RESOURCES CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited, in thousands, except per share data)

Fiscal Year 2019

	Common stock		Common stock held in treasury	Additional paid-in capital	Retained deficit	Accumulated other comprehensive loss	Total
	Shares	Par value					
Balance as of December 31, 2018	**249,520**	**$ 2,495**	**$ (391)**	**$ 5,628,447**	**$ (1,570,462)**	**$ (658)**	**$ 4,059,431**
Issuance of common stock	1,628	17	—	(2,396)	—	—	**(2,379)**
Issuance of common stock upon vesting of PSUs	—	—	—	4	(4)	—	—
Stock-based compensation expense	—	—	—	9,155	—	—	**9,155**
Cash dividends paid ($0.02 per share)	—	—	—	—	(5,023)	—	**(5,023)**
Other comprehensive income	—	—	—	—	—	60	**60**
Net income	—	—	—	—	1,419	—	**1,419**
Balance as of March 31, 2019	**251,148**	**2,512**	**(391)**	**5,635,210**	**(1,574,070)**	**(598)**	**4,062,663**
Issuance of common stock	206	2	—	1,547	—	—	**1,549**
Issuance of common stock upon vesting of PSUs	—	—	—	1	(1)	—	—
Stock-based compensation expense	—	—	—	7,822	—	—	**7,822**
Cash dividends paid ($0.02 per share)	—	—	—	—	(5,026)	—	**(5,026)**
Other comprehensive income	—	—	—	—	—	60	**60**
Net income	—	—	—	—	115,185	—	**115,185**
Balance as of June 30, 2019	**251,354**	**2,514**	**(391)**	**5,644,580**	**(1,463,912)**	**(538)**	**4,182,253**
Issuance of common stock	71	—	—	1,170	—	—	**1,170**
Stock-based compensation expense	—	—	—	7,318	—	—	**7,318**
Cash dividends paid ($0.02 per share)	—	—	—	—	(5,028)	—	**(5,028)**
Treasury stock issuance	—	—	63	(63)	—	—	—
Other comprehensive income	—	—	—	—	—	60	**60**
Net loss	—	—	—	—	(27,581)	—	**(27,581)**
Balance as of September 30, 2019	**251,425**	**$ 2,514**	**$ (328)**	**$ 5,653,005**	**$ (1,496,521)**	**$ (478)**	**$ 4,158,192**

The accompanying notes are an integral part of these consolidated financial statements.

(1) SUMMARY OF ORGANIZATION AND NATURE OF BUSINESS

Range Resources Corporation is a Fort Worth, Texas-based independent natural gas and natural gas liquids ("NGLs") company primarily engaged in the exploration, development and acquisition of natural gas properties in the Appalachian region of the United States. Our objective is to build stockholder value through returns-focused development of natural gas properties. Range is a Delaware corporation with our common stock listed and traded on the New York Stock Exchange under the symbol "RRC".

(2) BASIS OF PRESENTATION

These consolidated financial statements are unaudited but, in the opinion of management, reflect all adjustments necessary for a fair statement of the results for the periods reported. All adjustments are of a normal recurring nature unless otherwise disclosed. These consolidated financial statements, including selected notes, have been prepared in accordance with the applicable rules of the SEC and do not include all of the information and disclosures required by accounting principles generally accepted in the United States of America ("U.S. GAAP") for complete financial statements.

These interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in our 2019 Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on February 27, 2020. The results of operations for third quarter and nine months ended September 30, 2020 are not necessarily indicative of the results to be expected for the full year.

(3) NEW ACCOUNTING STANDARDS

Not Yet Adopted

None that are expected to have a material impact on our financial statements.

Recently Adopted

Financial Instruments – Credit Losses

In September 2016, an accounting standards update was issued that changes the impairment model for trade receivables, net investments in leases, debt securities, loans and certain other instruments. The standards update requires the use of a forward-looking "expected loss" model as opposed to the current "incurred loss" model. This new standards update was effective for us in first quarter 2020. The adoption of this standards update did not have a material impact on our financial statements.

Fair Value Measurement

In August 2018, an accounting standards update was issued which provides additional disclosure requirements for fair value measurements. This new standards update eliminates the requirement to disclose transfers between Level 1 and Level 2 of the fair value hierarchy and provides for additional disclosures for Level 3 fair value measurements. This new standards update was effective for us in first quarter 2020. The adoption of this standards update did not have a material impact on our financial statements.

Lease Accounting Standard

In February 2016, an accounting standards update was issued that requires an entity to recognize a right-of-use ("ROU") asset and lease liability for all leases. Classification of leases as either a finance or operating lease determines the recognition, measurement and presentation of expenses. This accounting standards update also required certain quantitative and qualitative disclosures about leasing arrangements. The new standard was effective for us in first quarter 2019 and we adopted the new standard using a modified retrospective approach, with the date of initial application effective on January 1, 2019. Consequently, upon transition, we recognized a ROU asset (or operating lease right-of-use asset) and a lease liability with no retained earnings impact. Our adoption did not have a material impact on our consolidated balance sheet as of January 1, 2019, with the primary impact relating to the recognition of ROU assets and operating lease liabilities for operating leases which represents approximately a 1% change to total assets and total liabilities.

(4) DISPOSITIONS

We recognized a pretax net loss of $9.2 million on the sale of assets in third quarter 2020 compared to a pretax net loss of $36.3 million in third quarter 2019 and a pretax net gain of $112.4 million in first nine months 2020 compared to a pretax net loss of $30.7 million in first nine months 2019. See discussion below for further details.

2020 Dispositions

North Louisiana. In August 2020, we completed the sale of our North Louisiana assets for total consideration having an estimated fair value of $260.0 million. This estimated fair value reflects (i) cash proceeds of $245.0 million, before normal closing adjustments and (ii) $15.0 million in contingent consideration which represents the estimated fair value, on August 14, 2020, of the contingent consideration we are entitled to receive in the future should certain commodity price thresholds be met. We recorded a pretax loss of $8.1 million, after closing adjustments.

- *Contingent consideration.* We are entitled to receive contingent consideration, annually through 2023, of up to $90.0 million based on future achievement of certain natural gas and oil prices based on published indexes along with the realized NGLs price of the buyer. We used an option pricing model to determine the fair value of the contingent consideration which resulted in an estimated fair value of $15.0 million at closing. The fair value of the contingent consideration is classified as current and noncurrent derivative asset on our consolidated balance sheet. We will revalue the contingent consideration each reporting period, with any valuation changes being recorded as derivative fair value income or loss in our consolidated statements of operations. See also Note 11 and Note 12 for additional information.
- *Divestiture contract obligation.* As part of the sale of our North Louisiana assets, we retained certain midstream gathering, transportation and processing obligations through 2030. We determined the fair value of these obligations as of the closing date of the sale, to be $479.8 million using a probability weighted discounted cash flow model. The divestiture contract obligation is included in current or non-current liabilities in our consolidated balance sheet based on the forecasted timing of payments. These costs are recognized in exit and termination costs in our consolidated statements of operations. See also Note 12 for additional information.
- *Novated derivatives.* Also as part of the sale of our North Louisiana assets, during third quarter 2020, we entered into certain natural gas derivative positions which were subsequently novated to the buyer in conjunction with the completion of the sale. The unrealized fair value of these derivatives at the closing of the sale was a net liability of $12.1 million which was transferred to the buyer. The unrealized loss associated with the novated positions was offset by the gain that we recognized when the liability was transferred to the buyer. These offsetting amounts were recognized on our consolidated statements of operations in loss on sale of assets.

Pennsylvania. In first quarter 2020, we completed the sale of our shallow legacy assets in Northwest Pennsylvania for proceeds of $1.0 million. Based upon the receipt of approval from state governmental authorities of a change in operatorship during that quarter, we recognized a pretax gain of $122.5 million primarily due to the elimination of the asset retirement obligation associated with these properties.

Other. In third quarter 2020, we sold miscellaneous inventory and other assets for proceeds of $11,000 resulting in a pretax loss of $1.1 million. In first six months 2020, we sold miscellaneous inventory and other assets for proceeds of $71,000, resulting in a pretax loss of $833,000.

2019 Dispositions

Pennsylvania. In third quarter 2019, we sold a proportionately reduced 2.5% overriding royalty in three separate transactions primarily covering our Washington County, Pennsylvania leases for gross proceeds of $750.0 million. We recorded a loss of $36.5 million which represents closing adjustments and transaction fees. In second quarter 2019, we sold natural gas and oil property, primarily representing over 20,000 unproved acres, for proceeds of $34.0 million and recognized a pretax gain of $5.9 million.

Other. In third quarter 2019, we sold miscellaneous inventory and other assets for proceeds of $161,000 resulting in a pretax gain of $117,000. In first six months 2019, we sold miscellaneous inventory and other assets for proceeds of $366,000 resulting in a pretax loss of $187,000.

(5) REVENUES FROM CONTRACTS WITH CUSTOMERS

Disaggregation of Revenue

We have three material revenue streams in our business: natural gas sales, NGLs sales and crude oil and condensate sales (referred to below as "oil sales"). Brokered revenue attributable to each product sales type is included here because the volume of product that we purchase is subsequently sold to separate counterparties in accordance with existing sales contracts under which we also sell our production. Accounts receivable attributable to our revenue contracts with customers was $162.9 million at September 30, 2020 and $237.0 million at December 31, 2019. Revenue attributable to each of our identified revenue streams is disaggregated below (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Natural gas sales	$ 211,638	$ 284,980	$ 679,094	$ 1,063,323
NGLs sales	149,263	143,195	416,885	508,035
Oil sales	20,652	46,579	66,928	138,629
Total natural gas, NGLs and oil sales	381,553	474,754	1,162,907	1,709,987
Sales of purchased natural gas	39,180	70,404	94,364	293,209
Sales of purchased NGLs	1,084	(183)	3,230	1,425
Other marketing revenue	2,218	2,794	7,128	9,200
Total	$ 424,035	$ 547,769	$ 1,267,629	$ 2,013,821

(6) INCOME TAXES

We evaluate and update our annual effective income tax rate on a quarterly basis based on current and forecasted operating results and tax laws. Consequently, based upon the mix and timing of our actual earnings compared to annual projections, our effective tax rate may vary quarterly and may make comparisons not meaningful ("NM"). The effective income tax rate is influenced by a variety of factors including geographic sources and relative magnitude of these sources of income. Income taxes for discrete items are computed and recorded in the period that a specific transaction occurs. For the three months and nine months ended September 30, 2020 and 2019, our overall effective tax rate was different than the federal statutory rate due primarily to state income taxes, equity compensation, valuation allowances and other tax items. Our income tax benefit is summarized below (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Income tax benefit	$ (105,251)	$ (47,219)	$ (98,313)	$ (1,432)
Effective tax rate	13.4%	NM	12.6%	NM

(7) INCOME (LOSS) PER COMMON SHARE

Basic income or loss per share attributable to common shareholders is computed as (1) income or loss attributable to common shareholders (2) less income allocable to participating securities (3) divided by weighted average basic shares outstanding. Diluted income or loss per share attributable to common shareholders is computed as (1) basic income or loss attributable to common shareholders (2) plus diluted adjustments to income allocable to participating securities (3) divided by weighted average diluted shares outstanding. The following sets forth a reconciliation of income or loss attributable to common shareholders to basic income or loss attributable to common shareholders to diluted income or loss attributable to common shareholders (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Net (loss) income, as reported	$ (680,048)	$ (27,581)	$ (681,642)	$ 89,023
Participating earnings (a)	—	(67)	—	(1,105)
Basic net (loss) income attributed to common shareholders	(680,048)	(27,648)	(681,642)	87,918
Reallocation of participating earnings (a)	—	—	—	3
Diluted net (loss) income attributed to common shareholders	$ (680,048)	$ (27,648)	$ (681,642)	$ 87,921
Net (loss) income per common share:				
Basic	$ (2.83)	$ (0.11)	$ (2.82)	$ 0.35
Diluted	$ (2.83)	$ (0.11)	$ (2.82)	$ 0.35

(a) Restricted Stock Awards represent participating securities because they participate in nonforfeitable dividends or distributions with common equity owners. Income allocable to participating securities represents the distributed and undistributed earnings attributable to the participating securities. Participating securities, however, do not participate in undistributed net losses.

The following provides a reconciliation of basic weighted average common shares outstanding to diluted weighted average common shares outstanding (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Weighted average common shares outstanding – basic	239,895	248,082	241,770	247,878
Effect of dilutive securities:				
Director and employee restricted stock and performance based equity awards	—	—	—	945
Weighted average common shares outstanding – diluted	239,895	248,082	241,770	248,823

Weighted average common shares outstanding-basic for third quarter 2020 excludes 6.2 million shares of restricted stock held in our deferred compensation plan compared to 3.3 million shares in third quarter 2019 (although all awards are issued and outstanding upon grant). Weighted average common shares outstanding-basic for first nine months 2020 excludes 5.3 million shares of restricted stock compared to 3.1 million shares for first nine months 2019. Due to our net loss for third quarter 2020, third quarter 2019 and first nine months 2020, we excluded all equity grants from the computation of diluted loss per share because the effect would have been anti-dilutive to the computations. For first nine months 2019, equity grants of 1.6 million were outstanding but not included in the computation of diluted net income per share because the grant prices were greater than the average market price of our common shares and would be anti-dilutive to the computation. Nonvested restricted stock and performance based equity awards are included in the computation using the treasury stock method with the deemed proceeds equal to the average unrecognized compensation during the period.

(8) CAPITALIZED COSTS AND ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION (a)

	September 30, 2020	December 31, 2019
	(in thousands)	
Natural gas properties:		
Properties subject to depletion	$ 8,784,788	$ 9,345,557
Unproved properties	862,113	868,180
Total	9,646,901	10,213,737
Accumulated depletion and depreciation	(3,975,930)	(4,172,702)
Net capitalized costs	$ 5,670,971	$ 6,041,035

(a) Includes capitalized asset retirement costs and the associated accumulated amortization.

(9) INDEBTEDNESS

We had the following debt outstanding as of the dates shown below (bank debt interest rate at September 30, 2020 is shown parenthetically). No interest was capitalized during the nine months ended September 30, 2020 or the year ended December 31, 2019 (in thousands).

	September 30, 2020	December 31, 2019
Bank debt (2.2%)	$ 706,000	$ 477,000
Senior notes:		
4.875% senior notes due 2025	750,000	750,000
5.00% senior notes due 2023	532,335	741,531
5.00% senior notes due 2022	169,589	511,886
5.75% senior notes due 2021	25,496	374,139
5.875% senior notes due 2022	48,528	297,617
9.25% senior notes due 2026	850,000	—
Other senior notes due 2022	490	590
Total senior notes	2,376,438	2,675,763
Senior subordinated notes:		
5.00% senior subordinated notes due 2023	7,712	7,712
5.00% senior subordinated notes due 2022	9,730	19,054
5.75% senior subordinated notes due 2021	19,896	22,214
Total senior subordinated notes	37,338	48,980
Total debt	3,119,776	3,201,743
Unamortized premium	525	3,013
Unamortized debt issuance costs	(32,835)	(31,819)
Total debt net of debt issuance costs	3,087,466	3,172,937
Less current maturities of long-term debt (a)	(45,334)	—
Total long-term debt	$ 3,042,132	$ 3,172,937

(a) As of September 30, 2020, current maturities includes $45.4 million principal amount of our 5.75% senior and senior subordinated notes due 2021.

Bank Debt

In April 2018, we entered into an amended and restated revolving bank facility, which we refer to as our bank debt or our bank credit facility, which is secured by substantially all of our assets and has a maturity date of April 13, 2023. The bank credit facility provides for a maximum facility amount of $4.0 billion and an initial borrowing base of $3.0 billion. The bank credit facility also provides for a borrowing base subject to periodic redeterminations and for event-driven unscheduled redeterminations. As of September 30, 2020, our bank group was composed of twenty-six financial institutions with no one bank holding more than 7.0% of the total facility. The borrowing base may be increased or decreased based on our request and sufficient proved reserves, as determined by the bank group. The commitment amount may be increased to the borrowing base, subject to payment of a mutually acceptable commitment fee to those banks agreeing to participate in the facility increase. Borrowings under the bank credit facility can either be at the alternate base rate ("ABR," as defined in the bank credit facility agreement) plus a spread ranging from 0.25% to 1.25% or LIBOR borrowings at the LIBOR Rate (as defined in the bank credit facility agreement) plus a spread ranging from 1.25% to 2.25%. The applicable spread is dependent upon borrowings relative to the borrowing base. We may elect, from time to time, to convert all or any part of our LIBOR loans to base rate loans or to convert all or any of the base rate loans to LIBOR loans. The weighted average interest rate was 2.4% for third quarter 2020 compared to 3.8% for third quarter 2019. The weighted average interest rate was 2.7% for first nine months 2020 compared to 4.0% for first nine months 2019. A commitment fee is paid on the undrawn balance based on an annual rate of 0.30% to 0.375%. At September 30, 2020, the commitment fee was 0.30% and the interest rate margin was 2.00% on our LIBOR loans and 1.0% on our base rate loans.

As part of our redetermination completed in September 2020, our borrowing base was reaffirmed for $3.0 billion and our bank commitment was also reaffirmed at $2.4 billion. On September 30, 2020, bank commitments totaled $2.4 billion and the outstanding balance under our bank credit facility was $706.0 million, before deducting debt issuance costs. Additionally, we had $332.0 million of undrawn letters of credit leaving $1.4 billion of committed borrowing capacity available under the facility. As part of our redetermination completed in March 2020, we agreed to return to a semi-annual borrowing base redetermination, an increase in the applicable margin of 50 basis points on drawn facility balances and an increase to the letter of credit sublimit.

New Senior Notes

In January 2020, we issued $550.0 million aggregate principal amount of 9.25% senior notes due 2026 (the "9.25% Notes") for net proceeds of $541.4 million after underwriting expenses and commissions of $8.6 million. The notes were issued at par. The 9.25% Notes were offered to qualified institutional buyers and to non-U.S. persons outside the United States in compliance with Rule 144A and Regulation S of the Securities Act of 1933, as amended (the "Securities Act"). Interest due on the 9.25% Notes is payable semi-annually in February and August and is unconditionally guaranteed on a senior unsecured basis by all of our subsidiary guarantors. On or after February 1, 2025, we may redeem the 9.25% Notes, in whole or in part and from time to time, at 100% of the principal amounts plus accrued and unpaid interest. We may redeem the notes prior to their maturity at redemption prices based on a premium, plus accrued and unpaid interest as described in the indenture governing the 9.25% Notes. Upon occurrence of certain changes in control, we must offer to repurchase the 9.25% Notes. The 9.25% Notes are unsecured and are subordinated to all of our existing and future secured debt, rank equally with all of our existing and future unsecured debt and rank senior to all of our existing and future subordinated debt. On the closing of the issuance of the 9.25% Notes, we used the proceeds to redeem $324.1 million of our 5.75% senior notes due 2021 and $175.9 million of our 5.875% senior notes due 2022 with the remainder used to repay a portion of our borrowings under our bank credit facility.

In September 2020, we issued an additional $300.0 million aggregate principal amount of our 9.25% Notes (the "Additional 9.25% Notes") for an estimated net proceeds of $295.0 million after underwriting expenses and commissions of $5.0 million. On the closing of the issuance of the additional 9.25% Notes, we used these proceeds, along with proceeds from our credit facility, to redeem $12.1 million of our 5.75% senior notes due 2021 and $291.0 million of our 5.00% senior notes due 2022, $65.1 million of our 5.875% senior notes due 2022, $122.3 million of our 5.00% senior notes due 2023, $1.2 million of our 5.75% senior subordinated notes due 2021 and $8.3 million of our 5.00% senior subordinated notes due 2022.

Early Extinguishment of Debt

In September 2020, we purchased for cash $500.0 million aggregate principal amount of our 5.75% senior notes due 2021, 5.00% senior notes due 2022, 5.875% senior notes due 2022, 5.00% senior notes due 2023, 5.75% senior subordinated notes due 2021 and 5.00% senior subordinated note due 2022. An early cash tender of $5.3 million was paid to note holders who tendered their notes within the ten business day early offer period. We recorded a loss on early extinguishment of debt in third quarter 2020 of $8.0 million, net of transaction call premium costs and the expenses of the remaining deferred financing costs on the repurchased debt. The cash tender offer and the early cash tender premium were financed from the issuance of the Additional 9.25% Notes (see New Senior Notes above) and proceeds from our credit facility. In August, the proceeds received from the sale of our North Louisiana assets were used to reduce borrowings under our credit facility.

Also in third quarter 2020, we purchased in the open market $760,000 principal amount of our 5.75% senior subordinated notes due 2021, $66,000 principal amount of our 5.875% senior notes due 2022, $1.0 million principal amount of our 5.00% senior notes due 2022 and $1.0 million principal amount of our 5.00% senior subordinated notes due 2022. We recognized a gain on early extinguishment of debt in third quarter 2020 of $200,000, net of transaction costs and expensing of the remaining deferred costs on the purchased debt.

In January 2020, we purchased for cash $500.0 million aggregate principal amount of our 5.75% senior notes due 2021 and our 5.875% senior notes due 2022. An early cash tender of $15.1 million was paid to note holders who tendered their notes within the ten business day early offer period. We recorded a loss on early extinguishment of debt in first quarter 2020 of $17.5 million, net of transaction call premium costs and the expenses of the remaining deferred financing costs on the repurchased debt. The cash tender offer and early cash tender premium were financed from the issuance of our new 9.25% Notes. See *New Senior Notes* above.

Also in first quarter 2020, we purchased in the open market $48.5 million principal amount of our 5.00% senior notes due 2022, $5.8 million principal amount of our 5.875% senior notes due 2022 and $56.6 million principal amount of our 5.00%

senior notes due 2023. We recognized a gain on early extinguishment of debt in first quarter 2020 of $30.4 million, net of transaction costs and the expensing of the remaining deferred financing costs on the repurchased debt.

In second quarter 2020, we purchased in the open market $349,000 principal amount of our 5.75% senior subordinated notes due 2021, $12.5 million principal amount of our 5.75% senior notes due 2021, $1.8 million principal amount of our 5.00% senior notes due 2022, $2.2 million principal amount of our 5.875% senior notes due 2022 and $30.2 million principal amount of our 5.00% senior notes due 2023. We recognized a gain on early extinguishment of debt in second quarter 2020 of $9.0 million, net of transaction costs and the expensing of the remaining deferred financing costs on the repurchased debt.

Senior Notes and Senior Subordinated Notes

If we experience a change of control, noteholders may require us to repurchase all or a portion of our senior notes and senior subordinated notes at 101% of the aggregate principal amount plus accrued and unpaid interest, if any. All of the senior subordinated notes and the guarantees by our subsidiary guarantors are general, unsecured obligations and are subordinated to our bank debt and to existing and future senior debt that we or our subsidiary guarantors are permitted to incur.

Guarantees

Range is a holding company which owns no operating assets and has no significant operations independent of its subsidiaries. The guarantees by our subsidiaries, which are directly or indirectly owned by Range, of our senior notes, senior subordinated notes and our bank credit facility are full and unconditional and joint and several, subject to certain customary release provisions. A subsidiary guarantor may be released from its obligations under the guarantee:

- in the event of a sale or other disposition of all or substantially all of the assets of the subsidiary guarantor or a sale or other disposition of all the capital stock of the subsidiary guarantor, to any corporation or other person (including an unrestricted subsidiary of Range) by way of merger, consolidation, or otherwise; or
- if Range designates any restricted subsidiary that is a guarantor to be an unrestricted subsidiary in accordance with the terms of the indenture.

Debt Covenants

Our bank credit facility contains negative covenants that limit our ability, among other things, to pay cash dividends, incur additional indebtedness, sell assets, enter into certain hedging contracts, change the nature of our business or operations, merge, consolidate or make certain investments. In addition, we are required to maintain a ratio of EBITDAX (as defined in the bank credit facility agreement) to cash interest expense of equal to or greater than 2.5 and a current ratio (as defined in the bank credit facility agreement) of no less than 1.0. In addition, the ratio of the present value of proved reserves (as defined in the bank credit facility agreement) to total debt must be equal to or greater than 1.5 until Range has two investment grade ratings. We were in compliance with applicable covenants under the bank credit facility at September 30, 2020.

(10) ASSET RETIREMENT OBLIGATIONS

Our asset retirement obligations primarily represent the estimated present value of the amounts we will incur to plug, abandon and remediate our producing properties at the end of their productive lives. Significant inputs used in determining such obligations include estimates of plugging and abandonment costs, estimated future inflation rates and well lives. The inputs are calculated based on historical data as well as current estimated costs. A reconciliation of our liability for plugging and abandonment costs for the nine months ended September 30, 2020 and the year ended December 31, 2019 is as follows (in thousands):

	Nine Months Ended September 30, 2020	Year Ended December 31, 2019
Beginning of period	$ 251,076	$ 312,754
Liabilities incurred	1,890	4,063
Acquisitions	123	—
Liabilities settled	(3,068)	(5,953)
Disposition of wells	(176,747)	(82,576)
Accretion expense	6,207	15,658
Change in estimate	2,573	7,130
End of period	82,054	251,076
Less current portion	(2,103)	(2,393)
Long-term asset retirement obligations	$ 79,951	$ 248,683

Accretion expense is recognized as a component of depreciation, depletion and amortization expense in the accompanying consolidated statements of operations.

(11) DERIVATIVE ACTIVITIES

We use commodity-based derivative contracts to manage exposure to commodity price fluctuations. We do not enter into these arrangements for speculative or trading purposes. We utilize commodity swaps, collars, three-way collars or swaptions to (1) reduce the effect of price volatility of the commodities we produce and sell and (2) support our annual capital budget and expenditure plans. The fair value of our derivative contracts, represented by the estimated amount that would be realized upon termination, based on a comparison of the contract price and a reference price, generally the New York Mercantile Exchange ("NYMEX") for natural gas and crude oil or Mont Belvieu for NGLs, approximated a net loss of $83.5 million at September 30, 2020. These contracts expire monthly through December 2021. The following table sets forth our commodity-based derivative volumes by year as of September 30, 2020, excluding our basis and freight swaps and divestiture contingent consideration which are discussed separately below:

Period	Contract Type	Volume Hedged	Weighted Average Hedge Price			
			Swap	Sold Put	Floor	Ceiling
Natural Gas (1)						
2020	Swaps	1,133,587 Mmbtu/day	$ 2.63			
2021	Swaps	510,000 Mmbtu/day	$ 2.77			
2020	Collars	5,041 Mmbtu/day			$ 2.00	$ 2.50
January – October 2021	Collars	342,237 Mmbtu/day			$ 2.51	$ 3.00
2020	Three-way Collars	79,891 Mmbtu/day		$ 2.23	$ 2.58	$ 3.19
2021	Three-way Collars	240,000 Mmbtu/day		$ 1.99	$ 2.33	$ 2.60
Crude Oil						
2020	Swaps	6,000 bbls/day	$ 58.02			
2021	Swaps	1,000 bbls/day	$ 55.00			
NGLs (C3-Propane)						
2020	Swaps	6,000 bbls/day	$ 0.51/gallon			
NGLs (NC4-Normal Butane)						
2020	Swaps	1,000 bbls/day	$ 0.60/gallon			
NGLs (C5-Natural Gasoline)						
2020	Swaps	2,000 bbls/day	$ 0.89/gallon			

(1) We also sold natural gas call swaptions of 140,000 Mmbtu/day for 2021 at a weighted average price of $2.88. In addition, we sold natural gas call swaptions of 280,000 bbls per day for 2022 at a weighted average price of $2.81.

Every derivative instrument is required to be recorded on the balance sheet as either an asset or a liability measured at its fair value. We recognize all changes in fair value of these derivatives as earnings in derivative fair value income or loss in the periods in which they occur.

Basis Swap Contracts

In addition to the swaps, collars and swaptions described above, at September 30, 2020, we had natural gas basis swap contracts which lock in the differential between NYMEX Henry Hub and certain of our physical pricing indices. These contracts settle monthly through December 2024 and include a total volume of 81,745,000 Mmbtu. The fair value of these contracts was a gain of $5.4 million at September 30, 2020.

At September 30, 2020, we also had propane spread swap contracts which lock in the differential between Mont Belvieu and international propane indices. The contracts settle monthly in 2020 and include a total volume of 312,500 barrels. The fair value of these contracts was a loss of $529,000 at September 30, 2020.

Freight Swap Contracts

In connection with our international propane sales, we utilize propane swaps. To further hedge our propane price, at September 30, 2020, we had freight swap contracts on the Baltic Exchange which lock in the freight rate for a specific trade route. These contracts settle monthly through December 2021 with the fair value of these contracts equal to a loss of $1.4 million at September 30, 2020.

Divestiture Contingent Consideration

In addition to the derivatives described above, our right to receive contingent consideration in conjunction with the sale of our North Louisiana assets was determined to be a derivative financial instrument that is not designated as a hedging instrument. The contingent consideration of up to $90.0 million is based on future achievement of natural gas and oil prices based on published indexes and realized NGLs prices of the buyer from July through December 2020 and for the years 2021, 2022 and 2023. All changes in the fair value are recognized as a gain or loss in earnings in the period they occur in derivative fair value income or loss in our consolidated statements of operations.

Derivative Assets and Liabilities

The combined fair value of derivatives included in the accompanying consolidated balance sheets as of September 30, 2020 and December 31, 2019 is summarized below. The assets and liabilities are netted where derivatives with both gain and loss positions are held by a single counterparty and we have master netting arrangements. The tables below provide additional information relating to our master netting arrangements with our derivative counterparties (in thousands):

		September 30, 2020		
		Gross Amounts of Recognized Assets	Gross Amounts Offset in the Balance Sheet	Net Amounts of Assets Presented in the Balance Sheet
Derivative assets:				
Natural gas	–swaps	$ 10,083	$ (9,159)	$ 924
	–three-way collars	680	(680)	—
	–basis swaps	6,620	(3,263)	3,357
Crude oil	–swaps	14,065	(13,566)	499
NGLs	–C3 propane spread swaps	2,974	(2,974)	—
	–C3 propane swaps	101	—	101
	–NC4 normal butane swaps	17	(17)	—
	–C5 natural gasoline swaps	25	—	25
Freight	–swaps	19	(19)	—
Divestiture contingent consideration		15,420	—	15,420
		$ 50,004	$ (29,678)	$ 20,326

		September 30, 2020		
		Gross Amounts of Recognized (Liabilities)	Gross Amounts Offset in the Balance Sheet	Net Amounts of (Liabilities) Presented in the Balance Sheet
Derivative (liabilities):				
Natural gas	–swaps	$ (33,359)	$ 9,159	$ (24,200)
	–swaptions	(20,368)	—	(20,368)
	–collars	(14,169)	—	(14,169)
	–three-way collars	(40,563)	680	(39,883)
	–basis swaps	(1,220)	3,263	2,043
Crude oil	–swaps	—	13,566	13,566
NGLs	–C3 propane spread swaps	(3,503)	2,974	(529)
	–NC4 normal butane calls	—	17	17
Freight	–swaps	(1,407)	19	(1,388)
		$ (114,589)	$ 29,678	$ (84,911)

		December 31, 2019		
		Gross Amounts of Recognized Assets	Gross Amounts Offset in the Balance Sheet	Net Amounts of Assets Presented in the Balance Sheet
Derivative assets:				
Natural gas	–swaps	$ 134,364	$ (2,913)	$ 131,451
	–swaptions	—	(1,325)	(1,325)
	–basis swaps	10,766	(1,092)	9,674
Crude oil	–swaps	3,893	(4,794)	(901)
	–swaptions	—	(1,597)	(1,597)
	–calls	—	(349)	(349)
NGLs	–C3 propane spread swaps	1,913	(1,913)	—
	–NC4 normal butane swaps	167	—	167
	–C5 natural gasoline swaps	60	(127)	(67)
Freight	–swaps	1,529	(1,028)	501
		$ 152,692	$ (15,138)	$ 137,554

		December 31, 2019		
		Gross Amounts of Recognized (Liabilities)	Gross Amounts Offset in the Balance Sheet	Net Amounts of (Liabilities) Presented in the Balance Sheet
Derivative (liabilities):				
Natural gas	–swaps	$ (1,657)	$ 2,913	$ 1,256
	–swaptions	(2,594)	1,325	(1,269)
	–basis swaps	(1,371)	1,092	(279)
Crude oil	–swaps	(4,814)	4,794	(20)
	–swaptions	(2,254)	1,597	(657)
	–calls	(349)	349	—
NGLs	–C3 propane spread swaps	(16,040)	1,913	(14,127)
	–C5 natural gasoline swaps	(127)	127	—
Freight	–swaps	—	1,028	1,028
		$ (29,206)	$ 15,138	$ (14,068)

The effects of our derivatives on our consolidated statements of operations are summarized below (in thousands):

	Derivative Fair Value (Loss) Income			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Commodity swaps	$ (91,425)	$ 60,090	$ 142,413	$ 161,799
Swaptions	(14,166)	10,358	(15,520)	39,451
Three-way collars	(20,705)	—	(38,267)	—
Collars	(16,893)	356	(14,336)	(3,590)
Calls	(255)	(224)	(12)	(224)
Basis swaps	15,587	3,448	31,750	7,801
Freight swaps	2,737	648	(4,276)	2,953
Divestiture contingent consideration	430	—	430	—
Total	$ (124,690)	$ 74,676	$ 102,182	$ 208,190

(12) FAIR VALUE MEASUREMENTS

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. There are three approaches for measuring the fair value of assets and liabilities: the market approach, the income approach and the cost approach, each of which includes multiple valuation techniques. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to measure fair value by converting future amounts, such as cash flows or earnings, into a single present value amount using current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace the service capacity of an asset. This is often referred to as current replacement cost. The cost approach assumes that the fair value would not exceed what it would cost a market participant to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence.

The fair value accounting standards do not prescribe which valuation technique should be used when measuring fair value and does not prioritize among the techniques. These standards establish a fair value hierarchy that prioritizes the inputs used in applying the various valuation techniques. Inputs broadly refer to the assumptions that market participants use to make pricing decisions, including assumptions about risk. Level 1 inputs are given the highest priority in the fair value hierarchy while Level 3 inputs are given the lowest priority. The three levels of the fair value hierarchy are as follows:

- Level 1 – Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.
- Level 2 – Observable market-based inputs or unobservable inputs that are corroborated by market data. These are inputs other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date.
- Level 3 – Unobservable inputs for which there is little, if any, market activity for the asset or liability being measured. These inputs reflect management's best estimates of the assumptions market participants would use in determining fair value. Our Level 3 measurements consist of instruments using standard pricing models and other valuation methods that utilize unobservable pricing inputs that are significant to the overall fair value.

Valuation techniques that maximize the use of observable inputs are favored. Assets and liabilities are classified in their entirety based on the lowest priority level of input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the placement of assets and liabilities within the levels of the fair value hierarchy.

Significant uses of fair value measurements include:

- impairment assessments of long-lived assets;
- recorded value of derivative instruments and trading securities; and
- our divestiture contract obligation.

The need to test long-lived assets can be based on several indicators, including a significant reduction in prices of natural gas, oil and condensate, NGLs, unfavorable adjustments to reserves, significant changes in the expected timing of production, other changes to contracts or changes in the regulatory environment in which a property is located.

Fair Values – Recurring

We use a market approach for our recurring fair value measurements and endeavor to use the best information available. The following tables present the fair value hierarchy for assets and liabilities measured at fair value, on a recurring basis (in thousands):

	Fair Value Measurements at September 30, 2020 using:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Carrying Value as of September 30, 2020
Trading securities held in the deferred compensation plans	$ 56,859	$ —	$ —	$ 56,859
Commodity price derivatives –swaps	—	(9,068)	—	(9,068)
–collars	—	(14,169)	—	(14,169)
–three-way collars	—	(39,883)	—	(39,883)
–basis swaps	—	4,871	—	4,871
–swaptions	—	—	(20,368)	(20,368)
Derivatives–freight swaps	—	(1,388)	—	(1,388)
Divestiture contingent consideration	—	15,420	—	15,420

	Fair Value Measurements at December 31, 2019 using:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Carrying Value as of December 31, 2019
Trading securities held in the deferred compensation plans	$ 62,009	$ —	$ —	$ 62,009
Commodity price derivatives –swaps	—	131,886	—	131,886
–calls	—	(349)	—	(349)
–basis swaps	—	(4,732)	—	(4,732)
–swaptions	—	—	(4,848)	(4,848)
Derivatives–freight swaps	—	1,529	—	1,529

Our trading securities in Level 1 are exchange-traded and measured at fair value with a market approach using end of period market values. Derivatives in Level 2 are measured at fair value with a market approach using third-party pricing services which have been corroborated with data from active markets or broker quotes. As of September 30, 2020, a portion of our natural gas derivative instruments contain swaptions where the counterparty has the right, but not the obligation, to enter into a fixed price swap on a pre-determined date. Derivatives in Level 3 are measured at fair value with a market approach using third-party pricing services which have been corroborated with data from active markets or broker quotes. Subjectivity in the volatility factors utilized can cause a significant change in the fair value measurement of our swaptions. We utilize a range of implied volatilities from 21% to 32% with a weighted average implied volatility of 26%. The following is a reconciliation of the beginning and ending balances for derivative instruments classified as Level 3 in the fair value hierarchy (in thousands):

	As of September 30, 2020
Balance at December 31, 2019	$ (4,848)
Total losses:	
Included in earnings	(19,124)
Settlements, net	2,769
Transfers in and/or out of Level 3	835
Balance at September 30, 2020	$ (20,368)

Divestiture Contingent Consideration. In August 2020, we completed the sale of our North Louisiana assets where we are entitled to receive contingent consideration of up to $90 million, based on future achievement of natural gas and oil prices based on published indexes along with NGLs prices based on the realized NGLs prices of the buyer. We used an option pricing model to estimate the fair value of the contingent consideration using significant Level 2 inputs that include quoted future commodity prices based on active markets and implied volatility factors. See also Note 4 and Note 11 for additional information.

Our trading securities held in the deferred compensation plan are accounted for using the mark-to-market accounting method and are included in other assets in the accompanying consolidated balance sheets. We elected to adopt the fair value option to simplify our accounting for the investments in our deferred compensation plan. Interest, dividends, and mark-to-market gains or losses are included in deferred compensation plan expense in the accompanying consolidated statements of operations. For third quarter 2020, interest and dividends were $114,000 and the mark-to-market adjustment was a gain of $3.2 million compared to interest and dividends of $197,000 and a mark-to-market loss of $361,000 in third quarter 2019. For first nine months 2020 interest and dividends were $385,000 and the mark-to-market adjustment was a gain of $234,000 compared to interest and dividends of $560,000 and a mark-to-market adjustment of a gain of $6.3 million in the same period of 2019.

Fair Values – Non-recurring

Certain assets are measured at fair value on a non-recurring basis. These assets are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances. Our proved natural gas and oil properties are reviewed for impairment periodically as events or changes in circumstances indicate the carrying amount may not be recoverable. As a result of such a proved property review in fourth quarter 2019, we recorded noncash impairment charges to reduce the carrying value of our North Louisiana assets. We calculated the fair value of these assets using a discounted cash flow model which uses Level 3 inputs. There were no proved property impairment charges in first nine months 2019. The following table presents the value of these assets measured at fair value on a nonrecurring basis at the time impairment was recorded (in thousands):

	Year Ended December 31, 2019	
	Fair Value	Impairment
North Louisiana	$ 370,500	$ 1,093,531

In first quarter 2020, we recognized additional impairment charges of $77.0 million that reduced the carrying value to the anticipated sales proceeds for our North Louisiana assets which is a market approach using Level 2 inputs. See also Note 4 and Note 14 for additional information.

North Louisiana Divestiture. We have recorded a divestiture contract obligation in conjunction with the sale of our North Louisiana assets. The fair value of this obligation was determined as of the closing date using Level 3 inputs based on a probability-weighted forecast that considers historical results, market conditions and various potential development plans of the buyer to arrive at the estimated present value of the future payments. The present value of the future cash payments was determined using a 12 percent discount rate. See also Note 4 and Note 14 for additional information.

Leases. As part of our ongoing effort to reduce general and administrative expense due to both the lower commodity price environment and in conjunction with the sale of our North Louisiana assets, we have vacated one floor in our Fort Worth headquarters. We have recorded an impairment related to this lease of $2.0 million which is included in impairment of proved property and other assets in our consolidated statements of operations for third quarter 2020.

Fair Values – Reported

The following presents the carrying amounts and the fair values of our financial instruments as of September 30, 2020 and December 31, 2019 (in thousands):

	September 30, 2020		December 31, 2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Commodity swaps, collars and basis swaps	$ 4,906	$ 4,906	$ 137,554	$ 137,554
Divestiture contingent consideration	15,420	15,420	—	—
Marketable securities (a)	56,859	56,859	62,009	62,009
(Liabilities):				
Commodity swaps, collars and basis swaps	(84,911)	(84,911)	(14,068)	(14,068)
Bank credit facility (b)	(706,000)	(706,000)	(477,000)	(477,000)
5.75% senior notes due 2021 (b)	(25,496)	(25,592)	(374,139)	(375,909)
5.00% senior notes due 2022 (b)	(169,589)	(163,558)	(511,886)	(501,582)
5.875% senior notes due 2022 (b)	(48,528)	(47,819)	(297,617)	(294,757)
Other senior notes due 2022 (b)	(490)	(482)	(590)	(592)
5.00% senior notes due 2023 (b)	(532,335)	(505,787)	(741,531)	(683,291)
4.875% senior notes due 2025 (b)	(750,000)	(676,425)	(750,000)	(645,098)
9.25% senior notes due 2026 (b)	(850,000)	(873,103)	—	—
5.75% senior subordinated notes due 2021 (b)	(19,896)	(19,477)	(22,214)	(21,539)
5.00% senior subordinated notes due 2022 (b)	(9,730)	(8,666)	(19,054)	(17,011)
5.00% senior subordinated notes due 2023 (b)	(7,712)	(7,127)	(7,712)	(7,654)
Deferred compensation plan (c)	(84,538)	(84,538)	(74,472)	(74,472)

(a) Marketable securities, which are held in our deferred compensation plans, are actively traded on major exchanges.

(b) The book value of our bank debt approximates fair value because of its floating rate structure. The fair value of our senior notes and our senior subordinated notes is based on end of period market quotes which are Level 2 inputs.

(c) The fair value of our deferred compensation plan is updated to the closing price on the balance sheet date which is a Level 1 input.

Our current assets and liabilities include financial instruments, the most significant of which are trade accounts receivable and payable. We believe the carrying values of our current assets and liabilities approximate fair value. Our fair value assessment incorporates a variety of considerations, including (1) the short-term duration of the instruments and (2) our historical and expected incurrence of bad debt expense. Non-financial liabilities initially measured at fair value include asset retirement obligations, operating lease liabilities and the divestiture contract obligation.

Concentrations of Credit Risk

As of September 30, 2020, our primary concentrations of credit risk are the risks of not collecting accounts receivable and the risk of a counterparty's failure to perform under derivative obligations. Most of our receivables are from a diverse group of companies, including major energy companies, pipeline companies, local distribution companies, financial institutions and end-users in various industries. Letters of credit or other appropriate securities are obtained as deemed necessary to limit our risk of loss. Our allowance for uncollectable receivables was $3.0 million at September 30, 2020 and $8.8 million at December 31, 2019. Our derivative exposure to credit risk is diversified primarily among major investment grade financial institutions, where we have master netting agreements which provide for offsetting payables against receivables from separate derivative contracts. To manage counterparty risk associated with our derivatives, we select and monitor our counterparties based on our assessment of their financial strength and/or credit ratings. We may also limit the level of exposure with any single counterparty. At September 30, 2020, our derivative counterparties include twenty-one financial institutions, of which all but five are secured lenders in our bank credit facility. At September 30, 2020, our net derivative asset includes a net payable of $2.2 million to two of these counterparties that are not participants in our bank credit facility and a net receivable of $3.3 million from three of these counterparties.

Allowance for Expected Credit Losses. Each reporting period, we assess the recoverability of material receivables using historical data, current market conditions and reasonable and supported forecasts of future economic conditions to determine their expected collectability. The loss given default method is used when, based on management's judgment, an allowance for expected credit losses should be accrued on a material receivable to reflect the net amount to be collected. See Note 3 for a discussion on adoption of the new accounting standards update on financial instruments-credit losses.

(13) STOCK-BASED COMPENSATION PLANS

Stock-Based Awards

We have two active equity-based stock plans; our Amended and Restated 2005 Equity-Based Incentive Compensation Plan, which we refer to as the 2005 Plan and the Amended and Restated 2019 Equity-Based Compensation Plan, which was approved by our stockholders in May 2019 and amended in May 2020. Under these plans, various awards may be issued to non-employee directors and employees pursuant to decisions of the Compensation Committee, which is composed of only non-employee, independent directors.

Total Stock-Based Compensation Expense

Stock-based compensation represents amortization of restricted stock and performance units. Unlike the other forms of stock-based compensation, the mark-to-market adjustment of the liability related to the vested restricted stock held in our deferred compensation plan is directly tied to the change in our stock price and not directly related to the functional expenses and therefore, is not allocated to the functional categories. The following details the allocation of stock-based compensation to functional expense categories (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Direct operating expense	$ (74)	$ 319	$ 810	$ 1,459
Brokered natural gas and marketing expense	324	522	905	1,523
Exploration expense	189	496	891	1,372
General and administrative expense	6,863	8,423	24,071	27,561
Termination costs	2,020	(1)	2,020	25
Total stock-based compensation	$ 9,322	$ 9,759	$ 28,697	$ 31,940

Stock-Based Awards

Restricted Stock Awards. We grant restricted stock units under our equity-based stock compensation plans. These restricted stock units, which we refer to as restricted stock Equity Awards, generally vest over a three-year period, contingent on the recipient's continued employment. The grant date fair value of the Equity Awards is based on the fair market value of our common stock on the date of grant.

The Compensation Committee also grants restricted stock to certain employees and non-employee directors of the Board of Directors as part of their compensation. We also grant restricted stock to certain employees for retention purposes. Compensation expense is recognized over the balance of the vesting period, which is typically three years for employee grants and immediate vesting for non-employee directors. In May 2020, vesting for non-employee directors was changed to one year after grant date. All restricted stock awards are issued at prevailing market prices at the time of the grant and the vesting is based upon an employee's continued employment with us. Prior to vesting, all restricted stock award recipients have the right to vote such stock and receive dividends thereon. Upon grant of these restricted shares, which we refer to as restricted stock Liability Awards, the majority of these shares are generally placed in our deferred compensation plan and, upon vesting, withdrawals are allowed in either cash or in stock. These Liability Awards are classified as a liability and are remeasured at fair value each reporting period. This mark-to-market amount is reported in deferred compensation plan expense in the accompanying consolidated statements of operations. Historically, we have used authorized but unissued shares of stock when restricted stock is granted. However, we can also utilize treasury shares when available.

Stock-Based Performance Units. We grant three types of performance share awards: two based on performance conditions measured against internal debt-adjusted performance metrics (Production Per Share Awards or "PS-PSUs" and Reserve Per Share Awards or "RS-PSUs") and one based on market conditions measured based on Range's performance relative to a predetermined peer group ("TSR Awards" or "TSR-PSUs").

Each unit granted represents one share of our common stock. These units are settled in stock and the amount of the payout is based on (1) the vesting percentage, which can be from zero to 200% based on performance achieved and (2) the value of our common stock on the vesting date which is determined by the Compensation Committee. Dividend equivalents may accrue during the performance period and are paid in stock at the end of the performance period. The performance period for the TSR-PSUs is three years. The performance period for the PS/RS-PSUs is based on annual performance targets earned over a three-year period.

Restricted Stock – *Equity Awards*

In first nine months 2020, we granted 4.5 million restricted stock Equity Awards to employees at an average grant date fair value of $3.42 which generally vest over a three-year period compared to 2.8 million at an average grant date fair value of $10.59 in first nine months 2019. We recorded compensation expense for these outstanding awards of $13.4 million in first nine months 2020 compared to $18.9 million in the same period of 2019. Restricted stock Equity Awards are not issued to employees until such time as they are vested and the employees do not have the option to receive cash.

Restricted Stock – *Liability Awards*

In first nine months 2020, we granted 3.3 million shares of restricted stock Liability Awards as compensation to employees at an average grant date fair value of $3.03 which generally vest over a three-year period and 217,000 shares were granted to non-employee directors at an average price of $5.38 with vesting over one year. In first nine months 2019, we granted 1.0 million shares of restricted stock Liability Awards as compensation to employees at an average grant date fair value of $10.39 with vesting generally over a three-year period and 183,000 shares were granted to non-employee directors at an average price of $9.11 with immediate vesting. We recorded compensation expense for these Liability Awards of $7.9 million in first nine months 2020 compared to $7.0 million in first nine months 2019. The majority of these awards are held in our deferred compensation plan, are classified as a liability and are remeasured at fair value each reporting period. This mark-to-market amount is reported as deferred compensation expense in our consolidated statements of operations (see additional discussion below). The following is a summary of the status of our non-vested restricted stock outstanding at September 30, 2020:

	Restricted Stock Equity Awards		Restricted Stock Liability Awards	
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2019	2,002,239	$ 12.32	411,126	$ 10.94
Granted	4,462,711	3.42	3,529,686	3.18
Vested	(1,788,235)	7.08	(2,003,051)	4.03
Forfeited	(431,201)	8.47	(81,570)	3.02
Outstanding at September 30, 2020	4,245,514	$ 5.56	1,856,191	$ 3.98

Stock-Based Performance Units

Production Per Share and Reserve Per Share Awards (debt-adjusted). The PS-PSUs and RS-PSUs vest at the end of the three-year performance period. The performance metrics for each year are set by the Compensation Committee no later than March 31 of such year. If the performance metric for the applicable period is not met, that portion is considered forfeited and there is an adjustment to the expense recorded. The following is a summary of our non-vested PS/RS-PSUs awards outstanding at September 30, 2020:

	Number of Units	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2019	881,573	$ 11.70
Units granted (a)	777,847	2.33
Vested (b)	(101,150)	15.32
Forfeited (c)	(259,711)	2.33
Outstanding at September 30, 2020	1,298,559	$ 5.37

(a) Amounts granted reflect the number of performance units granted; however, the actual payout of shares will be between zero and 200% depending on achievement of specifically identified performance targets.

(b) For the PS-PSUs and RS-PSUs awards issued during 2017 the aggregate payout was approximately 150% of target for the March 2017 and May 2017 grants with a positive performance adjustment of 58,591 shares.

(c) For PS-PSU's tranches granted in 2018, 2019 and 2020 which were set to vest in 2021 and the performance metric is not expected to be met.

We recorded PS/RS-PSUs compensation income of $2.3 million in first nine months 2020 compared to expense of $2.3 million in first nine months 2019.

TSR Awards. TSR-PSUs granted are earned, or not earned, based on the comparative performance of Range's common stock measured against a predetermined group of companies in the peer group over a three-year performance period. The fair value of the TSR-PSUs is estimated on the date of grant using a Monte Carlo simulation model which utilizes multiple input variables that determine the probability of satisfying the market condition stipulated in the award grant and calculates the fair value of the award. The fair value is recognized as stock-based compensation expense over the three-year performance period. Expected volatilities utilized in the model were estimated using a combination of a historical period consistent with the remaining performance period of three years and option implied volatilities. The risk-free interest rate was based on the United States Treasury rate for a term commensurate with the life of the grant. The following assumptions were used to estimate the fair value of TSR-PSUs granted during first nine months 2020 and 2019:

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Risk-free interest rate	1.4%	2.4%
Expected annual volatility	65%	46%
Grant date fair value per unit	$ 3.85	$ 11.34

The following is a summary of our non-vested TSR – PSUs award activities:

	Number of Units	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2019	993,452	$ 19.00
Units granted (a)	610,155	3.85
Vested (b)	(278,184)	26.12
Forfeited	(75,899)	26.66
Outstanding at September 30, 2020	1,249,524	$ 9.55

(a) These amounts reflect the number of performance units granted. The actual payout of shares may be between zero and 200% of the performance units granted depending on the total shareholder return ranking compared to our peer companies at the vesting date.

(b) Includes TSR-PSUs awards issued related to the 2017 performance period where the return on our common stock was in the 60th percentile for the March 2017 grant and the 80th percentile for the May 2017 grant. The remaining 2017 awards are considered to be forfeited.

We recorded TSR-PSUs compensation expense of $1.9 million in first nine months 2020 compared to $2.2 million in the same period of 2019. Fair value is amortized over the performance period with no adjustment to the expense recorded for actual targets achieved.

Other Post Retirement Benefits

Effective fourth quarter 2017, as part of our officer succession plan, we implemented a post retirement benefit plan to assist in providing health care to officers who are active employees (including their spouses) and have met certain age and service requirements. These benefits are not funded in advance and are provided up to age 65 or at the date they become eligible for Medicare, subject to various cost-sharing features. There was approximately $90,000 of estimated prior service costs amortized from accumulated other comprehensive income into general and administrative expense in both the three months ended September 30, 2020 and 2019 and approximately $275,000 amortized in both the nine months ended September 30, 2020 and 2019. Those employees that qualified for this new retirement health care plan were also fully vested in all equity grants. Effective October 2018, officers who qualify for the plan are required to provide reasonable notice of retirement and beginning in 2019 must provide one year of service after the grant date to be fully vested in an equity grant.

Deferred Compensation Plan

Our deferred compensation plan gives non-employee directors and officers the ability to defer all or a portion of their salaries, bonuses or director fees and invest in Range common stock or make other investments at the individual's discretion. Range provides a partial matching contribution to officers which vests over three years. The assets of the plan are held in a grantor trust, which we refer to as the Rabbi Trust, and are therefore available to satisfy the claims of our general creditors in the event of bankruptcy or insolvency. Our stock held in the Rabbi Trust is treated as a liability award as employees are allowed to take withdrawals from the Rabbi Trust either in cash or in Range stock. The liability for the vested portion of the stock held in the Rabbi Trust is reflected as deferred compensation liability in the accompanying consolidated balance sheets and is adjusted to fair value each reporting period by a charge or credit to deferred compensation plan expense on our consolidated statements of operations. The assets of the Rabbi Trust, other than our common stock, are invested in marketable securities and reported at their market value as other assets in the accompanying consolidated balance sheets. The deferred compensation liability reflects the vested market value of the marketable securities and Range stock held in the Rabbi Trust. Changes in the market value of the marketable securities and changes in the fair value of the deferred compensation plan liability are charged or credited to deferred compensation plan expense each quarter. We recorded a mark-to-market loss of $6.2 million in third quarter 2020 compared to a mark-to-market gain of $8.9 million in third quarter 2019. We recorded a mark-to-market loss of $10.3 million in first nine months 2020 compared to a mark-to-market gain of $16.4 million in first nine months 2019. The Rabbi Trust held 6.1 million shares (4.4 million of which were vested) of Range stock at September 30, 2020 compared to 3.2 million shares (2.7 million of which were vested) at December 31, 2019.

(14) EXIT AND TERMINATION COSTS

Exit Costs

In August 2020, we sold our North Louisiana assets and retained certain gathering, transportation and processing obligations which extend into 2030. These are contracts where we will not realize any future benefit. The estimated obligations are included in current and long-term divestiture contract obligation in our consolidated balance sheet. The present value of our estimated obligations was recorded as an exit cost which totaled $479.8 million. Also associated with this sale, we agreed to pay a midstream company $28.5 million to reduce our financial obligation related to the minimum volume commitments associated with this asset which was also recorded as an exit cost in third quarter 2020.

In second quarter 2020, we negotiated capacity releases on certain transportation pipelines in Pennsylvania effective May 31, 2020 and extending through the remainder of the contract. As a result of these releases, we recorded exit costs of $10.4 million which represents the discounted present value of our remaining obligations to the third party.

Termination Costs

In third quarter 2020, we completed the sale of our North Louisiana assets. We recorded $2.5 million of severance costs and stock-based compensation expense associated with this sale. In third quarter 2020, we also announced an additional reduction in our work force as we continue to focus on lowering administrative expenses and recorded $3.7 million of severance costs and stock-based compensation expense related to this reduction in force. In first quarter 2020, we completed the sale of our shallow legacy assets in Northwest Pennsylvania and we recorded $1.6 million of severance costs in first quarter 2020 which is primarily related to the sale of these assets. In third quarter 2019, we sold various non-core assets in Pennsylvania and accrued $819,000 of severance costs related to this sale. In second quarter 2019, we announced another reduction in our work force and recorded $2.2 million of severance costs related to this work force reduction. The following summarizes our exit and termination costs for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Severance costs	$ 4,191	$ 819	$ 5,638	$ 3,000
Transportation contract capacity releases (including accretion of discount)	233	—	10,678	—
Divestiture contract obligation (including accretion of discount)	486,689	—	486,689	—
One-time minimum volume commitment contract payment	28,500	—	28,500	—
Stock-based compensation	2,020	—	2,020	25
	$ 521,633	$ 819	$ 533,525	$ 3,025

The following details the accrued exit and termination cost liability activity for the nine months ended September 30, 2020 (in thousands):

	Exit Costs	Termination Costs
Balance at December 31, 2019	$ —	$ 4,692
Accrued severance costs	—	5,638
Accrued contract obligations	490,115	—
Accretion of discount	7,252	—
Payments	(959)	(6,170)
Balance at September 30, 2020	$ 496,408	$ 4,160

(15) CAPITAL STOCK

We have authorized capital stock of 485.0 million shares which includes 475.0 million shares of common stock and 10.0 million shares of preferred stock. We currently have no preferred stock issued or outstanding. The following is a schedule of changes in the number of common shares outstanding since the beginning of 2019:

	Nine Months Ended September 30, 2020	Year Ended December 31, 2019
Beginning balance	249,630,803	249,510,022
Restricted stock grants	3,390,358	1,186,290
Restricted stock units vested	1,104,596	720,212
Performance stock units issued	279,420	12,747
Performance stock dividends	18,700	—
Treasury shares acquired	(8,197,662)	(1,798,468)
Ending balance	246,226,215	249,630,803

Stock Repurchase Program

In October 2019, our Board of Directors authorized a $100.0 million common stock repurchase program. Under this program, we may repurchase shares in open market transactions, from time to time, in accordance with applicable SEC rules and federal securities laws. The following is a schedule of the change in treasury shares for the three and nine months ended September 30, 2020:

	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
Beginning balance	10,007,327	1,808,133
Rabbi trust shares distributed/sold	(1,532)	(2,338)
Shares repurchased	—	8,200,000
Ending balance	10,005,795	10,005,795

(16) SUPPLEMENTAL CASH FLOW INFORMATION

	Nine Months Ended September 30,	
	2020	2019
	(in thousands)	
Net cash provided from operating activities included:		
Income taxes refunded from taxing authorities	$ 343	$ —
Interest paid	(145,319)	(151,602)
Non-cash investing and financing activities included:		
Increase in asset retirement costs capitalized	4,587	812
Decrease in accrued capital expenditures	(38,942)	(4,424)

(17) COMMITMENTS AND CONTINGENCIES

Litigation

We are the subject of, or party to, a number of pending or threatened legal actions and administrative proceedings arising in the ordinary course of our business including, but not limited to, royalty claims, contract claims and environmental claims. While many of these matters involve inherent uncertainty, we believe that the amount of the liability, if any, ultimately incurred with respect to these actions, proceedings or claims will not have a material adverse effect on our consolidated financial position as a whole or on our liquidity, capital resources or future annual results of operations.

When deemed necessary, we establish reserves for certain legal proceedings. The establishment of a reserve is based on an estimation process that includes the advice of legal counsel and subjective judgment of management. While management believes these reserves to be adequate, it is reasonably possible we could incur additional losses with respect to those matters in which reserves have been established. We will continue to evaluate our litigation on a quarterly basis and will establish and adjust any litigation reserves as appropriate to reflect our assessment of the then current status of litigation.

We have incurred and will continue to incur capital, operating and remediation expenditures as a result of environmental laws and regulations. As of September 30, 2020, liabilities for remediation were not material. We are not aware of any environmental claims existing as of September 30, 2020 that have not been provided for or would otherwise have a material impact on our financial position or results of operations. Environmental liabilities normally involve estimates that are subject to revision until final resolution, settlement or remediation occurs.

Obligations Following Divestitures

Certain contractual obligations were retained by us after our divestiture of our North Louisiana assets. These obligations are primarily related to gathering, processing and transportation agreements including certain minimum volume commitments. For additional information see Note 4 and Note 14.

Transportation, Gathering and Processing Commitments

We have entered into firm transportation, gathering and processing commitments with various pipeline carriers and midstream companies associated with our Pennsylvania production. The accrued obligations shown below is primarily the contractual obligations retained after the sale of our North Louisiana assets and is not included in total commitments below. The ultimate settlement amount and timing of these accrued obligations cannot be precisely determined. As of September 30, 2020, future minimum transportation, gathering and processing fees are as follows (in thousands):

Remainder 2020	$ 212,604
2021	849,807
2022	812,176
2023	779,226
2024	763,965
Thereafter	4,817,605
Total commitments	$ 8,235,383
Accrued obligations (see also Note 14)	$ 496,408

(18) COSTS INCURRED FOR PROPERTY ACQUISITION, EXPLORATION AND DEVELOPMENT (a)

	Nine Months Ended September 30, 2020	Year Ended December 31, 2019
	(in thousands)	
Acquisitions:		
Acreage purchases	$ 11,864	$ 57,324
Development	283,354	666,984
Exploration:		
Expense	22,296	35,117
Stock-based compensation expense	895	1,566
Gas gathering facilities:		
Development	2,764	3,583
Subtotal	321,173	764,574
Asset retirement obligations	4,587	11,193
Total costs incurred	$ 325,760	$ 775,767

(a) Includes costs incurred whether capitalized or expensed.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview of Our Business

We are a Fort Worth, Texas-based independent natural gas and natural gas liquids ("NGLs") company primarily engaged in the exploration, development and acquisition of natural gas properties in the Appalachian region of the United States. We operate in one segment and have a single company-wide management team that administers all properties as a whole rather than by discrete operating segments. We track only basic operational data by area. We do not maintain complete separate financial statement information by area. We measure financial performance as a single enterprise and not on a geographical or an area-by-area basis.

Our overarching business objective is to build stockholder value through returns-focused development, measured on a per share debt adjusted basis. Our strategy to achieve our business objective is to generate consistent cash flows from reserves and production through internally generated drilling projects occasionally coupled with complementary acquisitions and divestitures of non-core or, at times, core assets. Our revenues, profitability and future growth depend substantially on prevailing prices for natural gas and NGLs and on our ability to economically find, develop, acquire, produce and market natural gas and NGLs reserves. Commodity prices have been and are expected to remain volatile. We believe that we are well-positioned to manage the challenges presented in a volatile pricing environment by:

- exercising discipline in our capital program as we target capital spending within operating cash flows and, if required, with borrowing under our bank credit facility;
- continuing to optimize drilling, completion and operational efficiencies;
- continuing to focus on improving our cost structure;
- continuing to pursue asset sales to reduce debt;
- continuing to manage price risk by hedging our production; and
- continuing to manage our balance sheet.

We prepare our financial statements in conformity with U.S. GAAP which requires us to make estimates and assumptions that affect our reported results of operations and the amount of our reported assets, liabilities and proved natural gas and NGLs reserves. We use the successful efforts method of accounting for our natural gas and NGLs activities.

Prices for natural gas, NGLs and oil fluctuate widely and affect:

- revenues, profitability and cash flow;
- the quantity of natural gas, NGLs and oil we can economically produce;
- the quantity of natural gas, NGLs and oil shown as proved reserves;
- the amount of cash flows available for capital expenditures; and
- our ability to borrow and raise additional capital.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the preceding consolidated financial statements and notes in Item 1.

Impact of the COVID-19 Pandemic

The COVID-19 pandemic has resulted in a worldwide economic downturn and there continues to be considerable uncertainty with respect to the economic effects the pandemic will have on financial and commodity markets. One of the impacts of COVID-19 has been a significant decline in the demand for crude oil, and to a lesser extent, natural gas.

We have three priorities while navigating through this continuing period of volatility and uncertainty:

- First, to ensure the health and safety of our employees and the contractors which provide services to us;
- Second, to continue to monitor the impact this pandemic has on demand for our products and related commodity prices impacts; and
- Third, to ensure Range adapts and emerges from this event in as strong of a position as possible. Our objective and focus when the pandemic comes to an end is to emerge as a better company as we continue to drive our long-term strategies.

This pandemic could affect our operations, major facilities or employees' health; however, as of the date of this filing, we have not experienced a significant disruption to our operations and we have implemented pre-existing contingency planning, with many employees working remotely where possible in compliance with governmental restrictions and CDC best practices. We have a crisis team in place monitoring the rapidly evolving situation and recommending risk mitigation actions; we have implemented travel restrictions as well as visitor protocols; and we are following masking and social distancing practices in our offices and other work sites. There has been no material impact on supply for most of our sourced materials and to the extent such an impact has been realized or anticipated, continuity plans have been activated. We are also working closely with our processing and pipeline transportation partners to anticipate possible impacts on our continued operations. Our efforts to respond to the challenges presented by this pandemic have helped to minimize the impact of the pandemic to our business and operations.

The impact that COVID-19 will have on our business, cash flows, liquidity, financial condition and results of operations will depend on future developments, including, among others, the ultimate geographic spread and severity of the virus, any resurgence in COVID-19 transmission and infection, the consequences of governmental and other measures designed to mitigate the spread of the virus and alleviate strain on the healthcare system, the development of effective treatments, actions taken by customers, suppliers and other third parties, workforce availability and the timing and extent to which normal economic and operating conditions resume.

Market Conditions

Prices for natural gas, NGLs and oil that we produce significantly impact our revenues and cash flows. Prices for commodities, such as hydrocarbons, are inherently volatile. Natural gas and oil benchmarks decreased in third quarter 2020 when compared to the same period in 2019 and, as a result, we experienced decreased price realizations. In March 2020, Saudi Arabia and Russia engaged in a dispute over production levels that caused global oil prices to decline at a historic rate. On April 9, 2020, OPEC and Russia reached an agreement to reduce crude oil production by 9.7 MMbbl per day. As we continue to monitor the impact of the actions of OPEC and other large producing nations, the dispute over production levels between Russia and Saudi Arabia and the level of demand impacted by COVID-19, we expect prices for some or all of the commodities we produce to remain volatile and could decline further from current levels.

While crude oil prices have recovered from the lows experienced in April 2020, they remain at depressed levels. NYMEX natural gas futures have shown some improvements based on market expectations that declines in future natural gas supplies due to a substantial reduction of associated gas related to the curtailment of operations in oil basins throughout the United States will more than offset the lower demand experienced with the COVID-19 pandemic. The following table lists related benchmarks for natural gas, oil and NGLs composite prices for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Benchmarks:				
Average NYMEX prices [(a)]				
Natural gas (per mcf)	$ 1.95	$ 2.23	$ 1.87	$ 2.67
Oil (per bbl)	40.90	56.42	38.87	57.33
Mont Belvieu NGLs composite (per gallon) [(b)]	0.40	0.38	0.35	0.46

(a) Based on weighted average of bid week prompt month prices on the New York Mercantile Exchange ("NYMEX").
(b) Based on our estimated NGLs product composition per barrel.

Our price realizations (not including the impact of our derivatives) may differ from the benchmarks for many reasons, including quality, location or production being sold at different indices.

Consolidated Results of Operations

Overview of Third Quarter 2020 Results

Our financial results are significantly impacted by commodity prices. For third quarter 2020, we experienced a decrease in revenue from the sale of natural gas, NGLs and oil due to a 21% decrease in net realized prices (average prices including all derivative settlements and third-party transportation costs paid by us) and slightly lower production volumes when compared to the same quarter of 2019. Daily production averaged 2.2 Bcfe in both the third quarter 2020 and in the same period of the prior year. Reduced operating costs offset a portion of these price declines when compared to the same period of 2019.

During third quarter 2020, we recognized a net loss of $680.0 million, or $2.83 per diluted common share compared to net loss of $27.6 million, or $0.11 per diluted common share, during third quarter 2019. The decrease in net income for third quarter 2020 from third quarter 2019 is primarily due to the accrual of a divestiture contract obligation associated with the sale of our North Louisiana assets, reduced derivative fair value income (or the non-cash fair value adjustment related to our derivatives) and lower net realized prices partially offset by lower operating costs.

Our third quarter 2020 financial and operating performance included the following results:

- extended our debt maturities by issuing $300.0 million of additional new senior notes and used the proceeds, along with proceeds received from the sale of our North Louisiana assets, to redeem $500.0 million principal amount of certain senior and senior subordinated notes due in 2021, 2022 and 2023;
- repurchased in the open market $2.9 million face value of certain of our senior and senior subordinated notes at a discount and recorded a gain on early extinguishment of debt;
- reduced transportation, gathering, processing and compression on a per mcfe basis 7%, and on an absolute basis 9%, when compared to the same period of 2019;
- direct operating expense per mcfe was 41% lower from the same period of 2019 (see discussion on page 38);
- reduced general and administrative expense on a per mcfe basis 5%, and on an absolute basis 7%, when compared to the same period of 2019 (see discussion on page 38);
- reduced our depletion, depreciation and amortization (“DD&A”) rate per mcfe by 28% from the same period of 2019;
- revenue from the sale of natural gas, NGLs and oil decreased 20% from the same period of 2019 with an 18% decrease in average realized prices (before cash settlements on our derivatives) and slightly lower production volumes;
- revenue from the sale of natural gas, NGLs and oil (including cash settlements on our derivatives) decreased 16% from the same period of 2019; and
- entered into additional derivative contracts for 2020 through 2024.

Our cash flow from operating activities in third quarter 2020 was a negative $24.3 million, a decrease of $128.2 million from third quarter 2019. The third quarter 2020 cash flow from operating activities includes the $28.5 million one-time minimum volume commitment payment paid to a midstream company to lower our financial commitment related to minimum volume commitments retained in the sale of our North Louisiana assets, approximately $28.5 million of closing adjustments related to the sale of our North Louisiana assets, lower net realized prices and higher comparative working capital outflows partially offset by lower operating expenses. We continue to repurchase in the open market our senior and senior subordinated notes at a discount. Since August 2019, we have repurchased $362.6 million principal amount of various senior and senior subordinated notes at a discount of $47.4 million.

Overview of First Nine Months 2020 Results

For first nine months 2020, we experienced a decrease in revenue from the sale of natural gas, NGLs and oil due to a 34% decrease in net realized prices (average prices including all derivative settlements and third-party transportation costs paid by us) partially offset by slightly higher production volumes when compared to first nine months 2019. Daily production averaged 2.3 Bcfe in both the first nine month periods of 2020 and 2019. Operating costs were lower when compared to the same period of the prior year which partially offset the significant declines in realized prices.

During first nine months 2020, we recognized a net loss of $681.6 million, or $2.82 per diluted common share compared to net income of $89.0 million, or $0.35 per diluted common share, during first nine months 2019. The decline in net income for first nine months 2020 from first nine months 2019 is primarily due to the accrual of a divestiture contract obligation associated with the sale of our North Louisiana assets, reduced derivative fair value income (or the non-cash fair value adjustments related to our derivatives), higher impairment charges and lower net realized prices partially offset by lower operating costs, slightly higher production volumes and a gain on sale of assets.

Our first nine months 2020 financial and operating performance included the following results:

- issued $850.0 million of new senior notes and used those proceeds, along with the proceeds from the sale of our North Louisiana assets, to redeem $1.0 billion of senior and senior subordinated notes due in 2021, 2022 and 2023;
- repurchased in the open market $161.0 million face value of certain of our senior and senior subordinated notes at a discount and recorded a gain on early extinguishment of debt;
- maintained liquidity under the bank credit facility with the reaffirmation of a $3.0 billion borrowing base and $2.4 billion in lender commitments;
- repurchased 8.2 million shares of common stock in the open market;
- realized $179.0 million of cash flow from operating activities;
- revenue from the sale of natural gas, NGLs and oil decreased 32% from the same period of 2019 with a 33% decrease in average realized prices (before cash settlements on our derivatives) partially offset by an increase in production volumes;
- revenue from the sale of natural gas, NGLs and oil (including cash settlements on our derivatives) decreased 21% from the same period of 2019;
- reduced transportation, gathering, processing and compression on a per mcfe basis 9%, and on an absolute basis 8%, when compared to the same period of 2019;
- reduced direct operating expenses per mcfe 29% from the same period of 2019 (see discussion on page 38);
- reduced general and administrative expense per mcfe 14% from the same period of 2019 (see discussion on page 38);
- reduced interest expense per mcfe 4% from the same period of 2019;
- reduced our DD&A rate per mcfe by 28% from the same period of 2019; and
- entered into additional derivative contracts for 2020 through 2024.

We generated $179.0 million of cash flow from operating activities in first nine months 2020, a decrease of $370.5 million from first nine months 2019, which reflects significantly lower net realized prices, the one-time $28.5 million minimum volume commitment payment paid to a midstream company to lower our financial commitment related to the minimum volume commitments retained on the sale of our North Louisiana assets and approximately $28.5 million of closing adjustments related to the sale of our North Louisiana assets partially offset by lower operating expenses and slightly higher production volumes.

Natural Gas, NGLs and Oil Sales, Production and Realized Price Calculations

Our revenues vary primarily as a result of changes in realized commodity prices and production volumes. Our revenues are generally recognized when control of the product is transferred to the customer and collectability is reasonably assured. In third quarter 2020, natural gas, NGLs and oil sales decreased 20% compared to third quarter 2019 with an 18% decrease in average realized prices (before cash settlements on our derivatives). In first nine months 2020, natural gas, NGLs and oil sales decreased 32% compared to the same period of 2019 with a 33% decrease in average realized prices (before cash settlements on derivatives) partially offset by a slight increase in production. The following table illustrates the primary components of natural gas, NGLs, oil and condensate sales for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Natural gas, NGLs and oil sales								
Natural gas	$ 211,638	$ 284,980	$ (73,342)	(26%)	$ 679,094	$ 1,063,323	$ (384,229)	(36%)
NGLs	149,263	143,195	6,068	4%	416,885	508,035	(91,150)	(18%)
Oil	20,652	46,579	(25,927)	(56%)	66,928	138,629	(71,701)	(52%)
Total natural gas, NGLs and oil sales	$ 381,553	$ 474,754	$ (93,201)	(20%)	$ 1,162,907	$ 1,709,987	$ (547,080)	(32%)

Our production is determined by drilling success which offsets the natural decline of our natural gas and oil reserves through production and asset sales. Third quarter 2020 production volumes from the Marcellus Shale were 2.1 Bcfe per day, an increase of 5% when compared to the same period of 2019. Third quarter 2020 production volumes from our North Louisiana properties were approximately 72.5 Mmcfe per day. Our North Louisiana assets were sold in third quarter 2020. Production volumes for first nine months 2020 for Marcellus shale properties were 2.1 Bcfe per day, an increase of 5% compared to the same period of 2019. Production volumes for the first nine months 2020 for our North Louisiana properties were approximately 139.0 Mmcfe per day. Our production for the three and nine months ended September 30, 2020 and 2019 is set forth in the following table:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Production (a)								
Natural gas (mcf)	142,876,351	143,721,265	(844,914)	(1%)	439,764,525	427,405,931	12,358,594	3%
NGLs (bbls)	9,176,553	9,511,234	(334,681)	(4%)	28,525,849	28,971,049	(445,200)	(2%)
Crude oil (bbls)	656,319	939,541	(283,222)	(30%)	2,244,741	2,727,415	(482,674)	(18%)
Total (mcfe) (b)	201,873,583	206,425,915	(4,552,332)	(2%)	624,388,065	617,596,715	6,791,350	1%
Average daily production (a)								
Natural gas (mcf)	1,553,004	1,562,188	(9,184)	(1%)	1,604,980	1,565,589	39,391	3%
NGLs (bbls)	99,745	103,383	(3,638)	(4%)	104,109	106,121	(2,012)	(2%)
Crude oil (bbls)	7,134	10,212	(3,078)	(30%)	8,192	9,991	(1,799)	(18%)
Total (mcfe) (b)	2,194,278	2,243,760	(49,482)	(2%)	2,278,789	2,262,259	16,530	1%

(a) Represents volumes sold regardless of when produced.

(b) Oil and NGLs volumes are converted to mcfe at the rate of one barrel equals six mcf based upon the approximate relative energy content of oil to natural gas, which is not indicative of the relationship between oil and natural gas prices.

Our average realized price received (including all derivative settlements and third-party transportation costs) during third quarter 2020 was $0.99 per mcfe compared to $1.25 per mcfe in third quarter 2019. Our average realized price during first nine months 2020 was $1.02 per mcfe compared to $1.54 per mcfe in the same period of 2019. We believe computed final realized prices should include the total impact of transportation, gathering, processing and compression expense. Our average realized price (including all derivative settlements and third-party transportation costs) calculation also includes all cash settlements for derivatives. Average realized prices (excluding derivative settlements) do not include derivative settlements or third-party transportation costs which are reported in transportation, gathering, processing and compression expense in the accompanying consolidated statements of operations. Average realized prices (excluding derivative settlements) do include transportation costs where we receive net revenue proceeds from purchasers. Average realized price calculations for three and nine months ended September 30, 2020 and 2019 are shown below:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Average Prices								
Average realized prices (excluding derivative settlements):								
Natural gas (per mcf)	$ 1.48	$ 1.98	$ (0.50)	(25%)	$ 1.54	$ 2.49	$ (0.95)	(38%)
NGLs (per bbl)	16.27	15.06	1.21	8%	14.61	17.54	(2.93)	(17%)
Crude oil and condensate (per bbl)	31.47	49.58	(18.11)	(37%)	29.82	50.83	(21.01)	(41%)
Total (per mcfe) (a)	1.89	2.30	(0.41)	(18%)	1.86	2.77	(0.91)	(33%)
Average realized prices (including all derivative settlements):								
Natural gas (per mcf)	$ 2.00	$ 2.49	$ (0.49)	(20%)	$ 2.10	$ 2.70	$ (0.60)	(22%)
NGLs (per bbl)	16.17	15.80	0.37	2%	15.18	19.19	(4.01)	(21%)
Crude oil and condensate (per bbl)	50.81	49.73	1.08	2%	49.49	50.16	(0.67)	(1%)
Total (per mcfe) (a)	2.32	2.69	(0.37)	(14%)	2.35	2.99	(0.64)	(21%)
Average realized prices (including all derivative settlements and third-party transportation costs paid by Range):								
Natural gas (per mcf)	$ 0.90	$ 1.23	$ (0.33)	(27%)	$ 0.98	$ 1.41	$ (0.43)	(30%)
NGLs (per bbl)	4.09	3.65	0.44	12%	3.38	7.28	(3.90)	(54%)
Crude oil and condensate (per bbl)	50.56	49.73	0.83	2%	49.07	50.16	(1.09)	(2%)
Total (per mcfe) (a)	0.99	1.25	(0.26)	(21%)	1.02	1.54	(0.52)	(34%)

(a) Oil and NGLs volumes are converted to mcfe at the rate of one barrel equals six mcf based upon the approximate relative energy content of oil to natural gas, which is not indicative of the relationship between oil and natural gas prices.

Realized prices include the impact of basis differentials and gains or losses realized from our basis hedging. The prices we receive for our natural gas can be more or less than the NYMEX price because of adjustments for delivery location, relative quality and other factors. The following table provides this impact on a per mcf basis:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Average natural gas differentials below NYMEX	$ (0.47)	$ (0.25)	$ (0.33)	$ (0.18)
Realized gains (losses) on basis hedging	$ 0.05	$ (0.01)	$ 0.04	$ 0.03

The following tables reflect our production and average realized commodity prices (excluding derivative settlements and third-party transportation costs paid by Range) (in thousands, except prices):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019	Price Variance	Volume Variance	2020	2019	Price Variance	Volume Variance	2020
Natural gas								
Price (per mcf)	$ 1.98	$ (0.50)	$ —	$ 1.48	$ 2.49	$ (0.95)	$ —	$ 1.54
Production (Mmcf)	143,721	—	(845)	142,876	427,406	—	12,359	439,765
Natural gas sales	$ 284,980	$ (71,667)	$ (1,675)	$ 211,638	$ 1,063,323	$ (414,975)	$ 30,746	$ 679,094

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019	Price Variance	Volume Variance	2020	2019	Price Variance	Volume Variance	2020
NGLs								
Price (per bbl)	$ 15.06	$ 1.21	$ —	$ 16.27	$ 17.54	$ (2.93)	$ —	$ 14.61
Production (Mbbls)	9,511	—	(334)	9,177	28,971	—	(445)	28,526
NGLs sales	$ 143,195	$ 11,107	$ (5,039)	$ 149,263	$ 508,035	$ (83,343)	$ (7,807)	$ 416,885

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019	Price Variance	Volume Variance	2020	2019	Price Variance	Volume Variance	2020
Crude oil								
Price (per bbl)	$ 49.58	$ (18.11)	$ —	$ 31.47	$ 50.83	$ (21.01)	$ —	$ 29.82
Production (Mbbls)	940	—	(284)	656	2,727	—	(482)	2,245
Crude oil sales	$ 46,579	$ (11,886)	$ (14,041)	$ 20,652	$ 138,629	$ (47,168)	$ (24,533)	$ 66,928

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019	Price Variance	Volume Variance	2020	2019	Price Variance	Volume Variance	2020
Consolidated								
Price (per mcfe)	$ 2.30	$ (0.41)	$ —	$ 1.89	$ 2.77	$ (0.91)	$ —	$ 1.86
Production (Mmcfe)	206,426	—	(4,552)	201,874	617,597	—	6,791	624,388
Total natural gas, NGLs and oil sales	$ 474,754	$ (82,731)	$ (10,470)	$ 381,553	$ 1,709,987	$ (565,883)	$ 18,803	$ 1,162,907

Transportation, gathering, processing and compression expense was $268.1 million in third quarter 2020 compared to $295.9 million in third quarter 2019. These third-party costs are lower in third quarter 2020 when compared to third quarter

2019 due to certain midstream contract provisions in North Louisiana being met late last year, transportation capacity releases in Pennsylvania and the impact of the sale of our North Louisiana assets in mid-third quarter 2020.

Transportation, gathering, processing and compression expense was $831.7 million in first nine months 2020 compared to $899.8 million in first nine months 2019. These third-party costs are lower when compared to the same period of the prior year due to certain midstream contract provisions in North Louisiana being met late last year, transportation capacity releases in Pennsylvania, the impact of lower NGLs prices on our processing costs and the sale of our North Louisiana assets. We have included these costs in the calculation of average realized prices (including all derivative settlements and third-party transportation expenses paid by Range). The following table summarizes transportation, gathering, processing and compression expense for the three and nine months ended September 30, 2020 and 2019 on a per mcf and per barrel basis (in thousands, except for costs per unit):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Transportation, gathering, processing and compression								
Natural gas	$ 157,097	$ 180,353	$ (23,256)	(13%)	$ 494,305	$ 554,789	$ (60,484)	(11%)
NGLs	110,849	115,559	(4,710)	(4%)	336,491	344,997	(8,506)	(2%)
Oil	162	—	162	100%	952	—	952	100%
Total	$ 268,108	$ 295,912	$ (27,804)	(9%)	$ 831,748	$ 899,786	$ (68,038)	(8%)
Natural gas (per mcf)	$ 1.10	$ 1.25	$ (0.15)	(12%)	$ 1.12	$ 1.30	$ (0.18)	(14%)
NGLs (per bbl)	$ 12.08	$ 12.15	$ (0.07)	(1%)	$ 11.80	$ 11.91	$ (0.11)	(1%)
Oil (per bbl)	$ 0.25	$ —	$ 0.25	100%	$ 0.42	$ —	$ 0.42	100%

Derivative fair value (loss) income was a loss of $124.7 million in third quarter 2020 compared to income of $74.7 million in third quarter 2019. Derivative fair value income was $102.2 million in first nine months 2020 compared to $208.2 million in first nine months 2019. All of our derivatives are accounted for using the mark-to-market accounting method. Mark-to-market accounting treatment can result in more volatility of our revenues as the change in the fair value of our commodity derivative positions is included in total revenue. As commodity prices increase or decrease, such changes will have an opposite effect on the mark-to-market value of our derivatives. Gains on our derivatives generally indicate potentially lower wellhead revenues in the future while losses indicate potentially higher future wellhead revenues. The following table summarizes the impact of our commodity derivatives for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Derivative fair value (loss) income per consolidated statements of operations	$ (124,690)	$ 74,676	$ 102,182	$ 208,190
Non-cash fair value (loss) gain: (1)				
Natural gas derivatives	$ (197,028)	$ (17,345)	$ (231,805)	$ 126,296
Oil derivatives	(15,145)	15,925	17,589	(11,857)
NGLs derivatives	(2,329)	(3,849)	13,642	(46,598)
Freight derivatives	3,568	(63)	(2,917)	2,000
Divestiture contingent consideration	430	—	430	—
Total non-cash fair value (loss) gain (1)	$ (210,504)	$ (5,332)	$ (203,061)	$ 69,841
Net cash receipt (payment) on derivative settlements:				
Natural gas derivatives	$ 74,035	$ 72,809	$ 245,044	$ 92,333
Oil derivatives	12,694	146	44,166	(1,819)
NGLs derivatives	(915)	7,053	16,033	47,835
Total net cash receipt (payment)	$ 85,814	$ 80,008	$ 305,243	$ 138,349

(1) Non-cash fair value adjustments on commodity derivatives is a non-U.S. GAAP measure. Non-cash fair value adjustments on commodity derivatives only represent the net change between periods of the fair market values of commodity derivative positions and exclude the impact of settlements on commodity derivatives during the period. We believe that non-cash fair value adjustments on commodity derivatives is a useful supplemental disclosure to differentiate non-cash fair market value adjustments from settlements on commodity derivatives during the period. Non-cash fair value adjustments on commodity derivatives is not a measure of financial or operating performance under U.S. GAAP, nor should it be considered a substitute for derivative fair value income or loss as reported in our consolidated statements of operations.

Brokered natural gas, marketing and other revenue in third quarter 2020 was $42.5 million compared to $73.0 million in third quarter 2019 which is the result of significantly lower broker sales volumes (volumes not related to our production) and lower broker sales prices. Brokered natural gas, marketing and other revenue was $104.7 million in first nine months 2020 compared to $303.8 million in first nine months 2019 which is the result of significantly lower broker sales volumes and broker sale prices. We continue to optimize our transportation portfolio using these volumes. See also *Brokered natural gas and marketing* expense below for more information on our net brokered margin.

Operating Costs per Mcfe

We believe some of our expense fluctuations are best analyzed on a unit-of-production or per mcfe basis. The following presents information about certain of our expenses on a per mcfe basis for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Direct operating expense	$ 0.10	$ 0.17	$ (0.07)	(41%)	$ 0.12	$ 0.17	$ (0.05)	(29%)
Production and ad valorem tax expense	0.03	0.04	(0.01)	(25%)	0.03	0.05	(0.02)	(40%)
General and administrative expense	0.19	0.20	(0.01)	(5%)	0.19	0.22	(0.03)	(14%)
Interest expense	0.24	0.23	0.01	4%	0.23	0.24	(0.01)	(4%)
Depletion, depreciation and amortization expense	0.48	0.67	(0.19)	(28%)	0.49	0.68	(0.19)	(28%)

Direct operating expense was $19.5 million in third quarter 2020 compared to $35.3 million in third quarter 2019. Direct operating expenses include normally recurring expenses to operate and produce our wells, non-recurring well workovers and repair-related expenses. Our direct operating costs decreased in third quarter 2020 primarily due to the impact of the sale of our North Louisiana properties and various higher operating cost legacy properties in Pennsylvania in the current year and late in the prior year and lower workover costs. Our production volumes decreased 2% in third quarter 2020. We incurred $856,000 of workover costs in third quarter 2020 compared to $7.8 million in third quarter 2019. On a per mcfe basis, direct operating expense in third quarter 2020 decreased 41% to $0.10 from $0.17 in the same period of 2019, with the decrease primarily due to the impact of the sale of our North Louisiana properties and various higher operating cost legacy properties in Pennsylvania and lower workover costs.

Direct operating expense was $75.9 million in first nine months 2020 compared to $102.5 million in the same period of 2019. Our direct operating costs decreased in first nine months 2020 compared to the same period of 2019 due to the sale of higher operating cost properties (including our North Louisiana properties) and lower workover costs. We incurred $6.4 million of workover costs in first nine months 2020 compared to $16.2 million in first nine months 2019. On a per mcfe basis, direct operating costs decreased 29% from $0.17 to $0.12 in the same period of 2019 with the decrease resulting from the impact of the sale of various higher operating cost properties and lower workover costs. The following table summarizes direct operating expense per mcfe for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Direct operating								
Lease operating expense	$ 0.10	$ 0.13	$ (0.03)	(23%)	$ 0.11	$ 0.14	$ (0.03)	(21%)
Workovers	—	0.04	(0.04)	(100%)	0.01	0.03	(0.02)	(67%)
Stock-based compensation	—	—	—	—%	—	—	—	—%
Total direct operating expense	$ 0.10	$ 0.17	$ (0.07)	(41%)	$ 0.12	$ 0.17	$ (0.05)	(29%)

Production and ad valorem taxes are paid based on market prices rather than hedged prices. This expense category is predominately comprised of the Pennsylvania impact fee. In February 2012, the Commonwealth of Pennsylvania enacted an “impact fee” which functions as a tax on unconventional natural gas and oil production from the Marcellus Shale in Pennsylvania. This impact fee was $4.5 million in third quarter 2020 compared to $4.7 million in third quarter 2019. Production and ad valorem taxes (excluding the impact fee) were $1.6 million in third quarter 2020 compared to $3.1 million in third quarter 2019 with the decrease due to lower natural gas prices and an increase in production not subject to production taxes.

Production and ad valorem taxes (excluding the impact fee) were $7.4 million in first nine months 2020 compared to $9.0 million in the same period of 2019. Included in first nine months 2020 is a $13.3 million impact fee compared to $20.0 million in the same period of 2019 with the decrease due to lower natural gas prices. The following table summarizes production and ad valorem taxes per mcfe for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Production and ad valorem taxes								
Production taxes	$ 0.01	$ 0.01	$ —	—%	$ 0.01	$ 0.01	$ —	—%
Ad valorem taxes	—	0.01	(0.01)	(100%)	—	—	—	—%
Impact fee	0.02	0.02	—	—%	0.02	0.04	(0.02)	(50%)
Total production and ad valorem taxes	$ 0.03	$ 0.04	$ (0.01)	(25%)	$ 0.03	$ 0.05	$ (0.02)	(40%)

General and administrative (“G&A”) expense was $38.2 million in third quarter 2020 compared to $41.0 million in third quarter 2019. The third quarter 2020 decrease of $2.8 million when compared to the same period of 2019 is primarily due to lower stock-based compensation of $1.6 million and lower travel and office expenses, including technology costs. At September 30, 2020, the number of G&A employees decreased 16% when compared to September 30, 2019. On a per mcfe basis, third quarter 2020 G&A expense decreased 5% when compared to the same period of 2019 due to lower travel and office expenses, including technology costs.

G&A expense for first nine months 2020 decreased $19.6 million when compared to the same period of 2019 due to lower salaries and benefits of $7.5 million, lower stock-based compensation of $3.5 million, lower franchise and other taxes of $1.5 million, lower rig release penalties of $1.4 million, lower consulting costs of $2.9 million and lower travel and general office expenses, including technology costs. On a per mcfe basis, first nine months 2020 G&A expense decreased 14% from first nine months 2019 due to lower salaries and benefits, lower rig release penalties, lower consulting costs and lower travel and general office expenses. The following table summarizes G&A expenses on a per mcfe basis for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
General and administrative								
General and administrative	$ 0.15	$ 0.16	$ (0.01)	(6%)	$ 0.15	$ 0.18	$ (0.03)	(17%)
Stock-based compensation (non-cash)	0.04	0.04	—	—%	0.04	0.04	—	—%
Total general and administrative expense	$ 0.19	$ 0.20	$ (0.01)	(5%)	$ 0.19	$ 0.22	$ (0.03)	(14%)

Interest expense was $48.0 million in third quarter 2020 compared to $47.0 million in third quarter 2019. Interest expense was $144.1 million for first nine months 2020 compared to $150.3 million in the same period of 2019. The following table presents information about interest expense per mcfe for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Bank credit facility	$ 0.04	$ 0.04	$ —	—%	$ 0.03	$ 0.05	$ (0.02)	(40%)
Senior notes	0.19	0.18	0.01	6%	0.19	0.18	0.01	6%
Subordinated notes	—	—	—	—%	—	—	—	—%
Amortization of deferred financing costs and other	0.01	0.01	—	—%	0.01	0.01	—	—%
Total interest expense	$ 0.24	$ 0.23	$ 0.01	4%	$ 0.23	$ 0.24	$ (0.01)	(4%)
Average debt outstanding ($000's)	$ 3,237,459	$ 3,478,408	$ (240,949)	(7%)	$ 3,268,227	$ 3,773,783	$ (505,556)	(13%)
Average interest rate (a)	5.7%	5.2%	0.05%	10%	5.6%	5.1%	0.05%	10%

(a) Includes commitment fees but excludes debt issue costs and amortization of discounts and premiums.

On an absolute basis, the increase in interest expense for third quarter 2020 from the same period of 2019 was primarily due to higher average interest rates partially offset by lower overall average outstanding debt balances. Average debt outstanding on the bank credit facility for third quarter 2020 was $684.6 million compared to $592.7 million in third quarter 2019 and the weighted average interest rate on the bank credit facility was 2.4% in third quarter 2020 compared to 3.8% in third quarter 2019.

On an absolute basis, the decrease in interest expense for first nine months 2020 from the same period of 2019 was primarily due to lower overall average outstanding debt balances partially offset by higher overall average interest rates. Average debt outstanding on the bank credit facility was $628.6 million for first nine months 2020 compared to $861.0 million in the same period of 2019 and the weighted average interest rates were 2.7% in first nine months 2020 compared to 4.0% in first nine months 2019.

Depletion, depreciation and amortization expense was $96.2 million in third quarter 2020 compared to $137.8 million in third quarter 2019. This decrease is due to a 27% decrease in depletion rates and a 2% decrease in production volumes. Depletion expense, the largest component of DD&A expense, was $0.47 per mcfe in third quarter 2020 compared to $0.64 per mcfe in third quarter 2019. We have historically adjusted our depletion rates in the fourth quarter of each year based on the year-end reserve report and at other times during the year when circumstances indicate there has been a significant change in reserves or costs. Our depletion rate per mcfe continues to decline due to the mix of production from our properties with lower depletion rates, asset sales and the impairment of our North Louisiana properties at the end of 2019.

DD&A expense was $303.8 million in first nine months 2020 compared to $418.0 million in the same period of 2019. This is due to a 26% decrease in depletion rates partially offset by a 1% increase in production volumes. Depletion expense per mcfe was $0.48 in first nine months 2020 compared to $0.65 per mcfe in the same period of 2019. The following table summarizes DD&A expense per mcfe for the three and nine months ended September 30, 2020 and 2019:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
DD&A								
Depletion and amortization	$ 0.47	$ 0.64	$ (0.17)	(27%)	$ 0.48	$ 0.65	$ (0.17)	(26%)
Depreciation	—	0.01	(0.01)	(100%)	—	0.01	(0.01)	(100%)
Accretion and other	0.01	0.02	(0.01)	(50%)	0.01	0.02	(0.01)	(50%)
Total DD&A expense	$ 0.48	$ 0.67	$ (0.19)	(28%)	$ 0.49	$ 0.68	$ (0.19)	(28%)

Other Operating Expenses

Our total operating expenses also include other expenses that generally do not trend with production. These expenses include stock-based compensation, brokered natural gas and marketing expense, exploration expense, abandonment and impairment of unproved properties, exit and termination costs, deferred compensation plan expenses, gain on early extinguishment of debt, impairment of proved properties and gain or loss on sale of assets. Stock-based compensation includes the amortization of restricted stock grants and PSUs. The following table details the allocation of stock-based compensation to functional expense categories for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Direct operating expense	$ (74)	$ 319	$ 810	$ 1,459
Brokered natural gas and marketing expense	324	522	905	1,523
Exploration expense	189	496	891	1,372
General and administrative expense	6,863	8,423	24,071	27,561
Termination costs	2,020	(1)	2,020	25
Total stock-based compensation	$ 9,322	$ 9,759	$ 28,697	$ 31,940

Brokered natural gas and marketing expense was $48.0 million in third quarter 2020 compared to $79.9 million in third quarter 2019 due to significantly lower broker purchase volumes (volumes not related to our production) and lower prices. Brokered natural gas and marketing expense was $118.8 million in first nine months 2020 compared to $313.4 million in first nine months 2019 due to significantly lower broker purchase volumes and significantly lower prices. The following table details our brokered natural gas, marketing and other net margin for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Brokered natural gas and marketing								
Brokered natural gas sales	$ 39,180	$ 70,404	$ (31,224)	(44%)	$ 94,364	$ 293,209	$ (198,845)	(68%)
Brokered NGLs sales	1,084	(183)	1,267	692%	3,230	1,425	1,805	127%
Other marketing revenue	2,218	2,794	(576)	(21%)	7,128	9,200	(2,072)	(23%)
Brokered natural gas purchases (1)	(44,690)	(76,722)	32,032	42%	(108,061)	(303,275)	195,214	64%
Brokered NGLs purchases	(1,219)	208	(1,427)	(686%)	(4,030)	(1,321)	(2,709)	(205%)
Other marketing expense	(2,058)	(3,424)	1,366	40%	(6,661)	(8,764)	2,103	24%
Net brokered natural gas and marketing margin	$ (5,485)	$ (6,923)	$ 1,438	21%	$ (14,030)	$ (9,526)	$ (4,504)	(47%)

(1) Includes transportation costs.

Exploration expense was $8.1 million in third quarter 2020 compared to $11.0 million in third quarter 2019 due to lower delay rentals and other expenses and lower personnel costs. Exploration expense was $23.2 million in first nine months 2020 compared to $27.3 million in first nine months 2019 due to lower delay rentals and other expenses and lower personnel costs. The following table details our exploration expense for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2020	2019	Change	%	2020	2019	Change	%
Exploration								
Delay rentals and other	$ 6,737	$ 8,746	$ (2,009)	(23%)	$ 17,711	$ 20,613	$ (2,902)	(14%)
Personnel expense	1,152	1,769	(617)	(35%)	4,580	5,833	(1,253)	(21%)
Stock-based compensation expense	189	496	(307)	(62%)	891	1,372	(481)	(35%)
Seismic	8	2	6	300%	8	(485)	493	102%
Total exploration expense	$ 8,086	$ 11,013	$ (2,927)	(27%)	$ 23,190	$ 27,333	$ (4,143)	(15%)

Abandonment and impairment of unproved properties was $5.7 million in third quarter 2020 compared to $16.2 million in third quarter 2019. Abandonment and impairment of unproved properties was $16.6 million in first nine months 2020 compared to $41.6 million in the same period of 2019. The unproved property value in North Louisiana was fully impaired in fourth quarter 2019. As a result, abandonment and impairment of unproved properties for third quarter and first nine months 2020 declined when compared to the same periods of 2019.

Exit and termination costs were $521.6 million in third quarter 2020 compared to $819,000 in third quarter 2019. In third quarter 2020, we sold our North Louisiana assets and retained certain gathering, transportation and processing obligations which extend into 2030. The fair value of our estimated obligations was recorded at closing as an exit cost which totaled $479.8 million. As part of retaining these contract obligations, we paid $28.5 million to a midstream company to reduce these financial commitments. Also related to the sale of this asset, we recorded an accrual of $2.5 million for employee related expenses. During third quarter 2020, we also announced an additional general reduction in our work force and recorded $3.7 million of severance and stock-based compensation for this reduction in force. In second quarter 2020, we negotiated capacity releases on certain transportation pipelines in Pennsylvania and recorded termination costs of $10.4 million which represents the discounted present value of our remaining obligation to the third party. In first quarter 2020, we completed the sale of our legacy assets in Northwest Pennsylvania and recorded $1.6 million employee related expenses which were primarily related to the sale of this asset. In third quarter 2019, we sold various non-core assets in Pennsylvania and accrued $819,000 of severance costs. In second quarter 2019, we announced a general reduction in our work force and recorded $2.2 million of severance costs related to this work force reduction.

Deferred compensation plan expense was a loss of $6.2 million in third quarter 2020 compared to a gain of $8.9 million in third quarter 2019. This non-cash item relates to the increase or decrease in value of the liability associated with our common stock that is vested and held in our deferred compensation plan. The deferred compensation liability is adjusted to fair value by a charge or a credit to deferred compensation plan expense. Our stock price increased from $5.63 at June 30, 2020 to $6.62 at September 30, 2020. In the same period of the prior year, our stock price decreased from $6.98 at June 30, 2019 to $3.82 at September 30, 2019. During first nine months 2020, deferred compensation was a loss of $10.3 million compared to a gain of $16.4 million in the same period of 2019. Our stock price increased from $4.85 at December 31, 2019 to $6.62 at September 30, 2020. In the same period of 2019, our stock price decreased from $9.57 at December 31, 2018 to $3.82 at September 30, 2019.

Loss (gain) on early extinguishment of debt was a loss of $7.8 million in third quarter 2020 and a gain of $14.1 million in first nine months 2020 compared to a gain of $3.0 million in both the third quarter and first nine months 2019. In third quarter 2020, we purchased for cash $500.0 million aggregate principal amount of various senior and senior subordinated notes due 2021, 2022 and 2023. We recorded a loss on early extinguishment of debt of $8.0 million, net of transaction call premium costs and expensing the remaining deferred financing costs. In addition, we purchased in the open market $2.7 million aggregate principal amounts of various senior and senior subordinated notes where we recorded a gain on early extinguishment of debt of $200,000, net of transaction costs and expensing the remaining deferred financing costs on the repurchased debt. In third quarter and first nine months 2019, we purchased in the open market $93.6 million aggregate principal amount of various senior notes and recognized a gain on early extinguishment of debt of $3.0 million, net of transaction costs and expensing of the remaining deferred financing costs on the repurchased debt.

Impairment of proved properties and other assets was $2.0 million in third quarter 2020 and $79.0 million in first nine months 2020. There were no proved property impairments in third quarter 2019 or first nine months 2019. In third quarter 2020, as part of our continued effort to reduce general and administrative expense, we vacated one floor in our corporate office and recorded an impairment related to this lease of $2.0 million. In fourth quarter 2019, we recorded impairment expense related to our oil and gas properties in North Louisiana due to a shift in business strategy and the possibility of a divestiture of those assets. In first quarter 2020, additional impairment of $77.0 million was recorded related to these North Louisiana assets based on market indications of fair value for these assets.

Loss (gain) on the sale of assets was a loss of $9.2 million in third quarter 2020 compared to a loss of $36.3 million in the same period of 2019. Loss (gain) on the sale of assets was a gain of $112.4 million for first nine months 2020 compared to a loss of $30.7 million in the same period of 2019. Third quarter 2020 includes the sale of our North Louisiana assets for estimated fair value of $260.0 million consisting of cash proceeds of $245.0 million and $15.0 million of contingent consideration which was the estimated fair value of contingent consideration we are entitled to receive in the future, as of August 14, 2020. We recorded a pretax loss of $8.1 million on this sale, after closing adjustments. Third quarter 2019 included the sale of a proportionately reduced 2.5% overriding royalty in three separate transactions primarily covering our Washington County, Pennsylvania assets for gross proceeds of $750.0 million for which we recognized a loss of $36.5 million which represents closing adjustments and transaction fees. In first quarter 2020, we received approval from state governmental authorities for a change in operatorship for our shallow Northwest Pennsylvania properties and we recorded a gain on the sale of these legacy assets of $122.5 million. We did retain the deeper Utica rights on this acreage as part of this transaction.

Income tax benefit was $105.3 million in third quarter 2020 compared to a benefit of $47.2 million in third quarter 2019. Income tax benefit was $98.3 million in first nine months 2020 compared to a benefit of $1.4 million in first nine months 2019. For third quarter 2020, the effective tax rate was 13.4% compared to 63.1% in the same period of 2019. For first nine months 2020, the effective tax rate was 12.6% compared to (1.6%) in the same period of 2019. The 2020 and 2019 effective tax rates were different than the statutory tax rate due to state income taxes, equity compensation, valuation allowances and other discrete tax items.

Management's Discussion and Analysis of Financial Condition, Capital Resources and Liquidity

Cash Flow

Cash flows from operations are primarily affected by production volumes and commodity prices, net of the effects of settlements of our derivatives. Our cash flows from operations are also impacted by changes in working capital. We generally maintain low cash and cash equivalent balances because we use available funds to reduce our bank debt. Short-term liquidity needs are satisfied by borrowings under our bank credit facility. Because of this, and because our principal source of operating cash flows (proved reserves to be produced in future years) cannot be reported as working capital, we often have low or negative working capital. From time to time, we enter into various derivative contracts to provide an economic hedge of our exposure to commodity price risk associated with anticipated future natural gas, NGLs and oil production. The production we hedge has varied and will continue to vary from year to year depending on, among other things, our expectation of future commodity prices. Any payments due to counterparties under our derivative contracts should ultimately be funded by prices received from the sale of our production. Production receipts, however, often lag payments to the counterparties. As of September 30, 2020, we have entered into derivative agreements covering 117.8 Bcfe for the remainder of 2020 and 380.0 Bcfe for 2021, not including our basis swaps.

The following table presents sources and uses of cash and cash equivalents for the nine months ended September 30, 2020 and 2019 (in thousands):

	Nine Months Ended September 30,	
	2020	2019
Sources of cash and cash equivalents		
Operating activities	$ 178,974	$ 549,431
Disposal of assets	246,083	784,527
Issuance of senior notes	850,000	—
Borrowing on credit facility	1,676,000	1,730,000
Other	21,664	22,011
Total sources of cash and cash equivalents	$ 2,972,721	$ 3,085,969
Uses of cash and cash equivalents		
Additions to natural gas and oil properties	$ (321,849)	$ (550,355)
Repayment on credit facility	(1,447,000)	(2,345,000)
Acreage purchases	(18,554)	(39,795)
Additions to field service assets	(2,493)	(803)
Repayment of senior and senior subordinated notes	(1,120,634)	(90,274)
Treasury stock purchases	(22,992)	—
Dividends paid	—	(15,077)
Debt issuance costs	(12,735)	—
Other	(26,493)	(44,856)
Total uses of cash and cash equivalents	$ (2,972,750)	$ (3,086,160)

Sources of Cash and Cash Equivalents

Cash flows provided from operating activities in first nine months 2020 was $179.0 million compared to $549.4 million in first nine months 2019. Cash provided from operating activities is largely dependent upon commodity prices and production volumes, net of the effects of settlement of our derivative contracts. The decrease in cash provided from operating activities from first nine months 2019 to first nine months 2020 reflects significantly lower net realized prices (a decrease of 34%), the impact of our asset sales and lower working capital cash inflow partially offset by slightly higher production volumes and lower operating expenses. As of September 30, 2020, we have hedged more than 65% of our projected total production for the remainder of 2020, with more than 80% of our projected natural gas production hedged. Net cash provided from operating activities was affected by a 1% increase in production and working capital changes or the timing of cash receipts and disbursements. Changes in working capital (as reflected in our consolidated statements of cash flows) for first nine months 2020 were negative $47.8 million compared to a positive $29.3 million for first nine months 2019 which includes the impact of the closing adjustments related to the sale of our North Louisiana assets.

Uses of Cash and Cash Equivalents

Additions to natural gas and oil properties for first nine months 2020 were consistent with expectations relative to our $430.0 million 2020 capital budget.

Repayment of senior and senior subordinated notes for first nine months 2020 includes purchases in the open market of $1.1 million principal amount of our 5.75% senior subordinated notes due 2021, $1.0 million principal amount of our 5.00% senior subordinated notes due 2022, $12.5 million principal amount of our 5.75% senior notes due 2021, $51.3 million principal amount of our 5.00% senior notes due 2022, $8.1 million principal amount of our 5.875% senior notes due 2022 and $86.9 million principal amount of our 5.00% senior notes due 2023. In addition, in conjunction with the issuance of our new $850.0 million aggregate principal amount 9.25% senior notes due 2026, we used the proceeds from this issuance and proceeds from the sale of our North Louisiana assets to redeem $336.2 million of our 5.75% senior notes due 2021, $241.0 million of our 5.875% senior notes due 2022, $291.0 million of our 5.00% senior notes due 2022, $122.3 million of our 5.00% senior notes due 2023, $1.2 million of our 5.75% senior subordinated notes due 2021 and $8.3 million of our 5.00% senior subordinated notes due 2022. From time to time, we may continue to repurchase our senior notes based upon prevailing market or other conditions at the time.

Liquidity and Capital Resources

Our main sources of liquidity and capital resources are internally generated cash flow from operating activities, a bank credit facility with uncommitted and committed availability, access to the debt and equity capital markets and asset sales. We must find new reserves and develop existing reserves to maintain and grow our production and cash flows. We accomplish this primarily through successful drilling programs which require substantial capital expenditures. We continue to take steps to ensure we have adequate capital resources and liquidity to fund our capital expenditure program. In first nine months 2020, we entered into additional commodity derivative contracts for 2020 through 2024 to protect future cash flows. Additionally, we suspended the payment of our common stock dividend in January 2020.

During first nine months 2020, our net cash provided from operating activities of $179.0 million, proceeds from asset sales and borrowings under our bank credit facility were used to fund approximately $342.9 million of capital expenditures (including acreage acquisitions). At September 30, 2020, we had $517,000 in cash and total assets of $6.0 billion.

Long-term debt at September 30, 2020 totaled $3.1 billion, including $706.0 million outstanding on our bank credit facility and $2.4 billion of senior and senior subordinated notes. Our available committed borrowing capacity at September 30, 2020 was $1.4 billion, with an additional $600.0 million in borrowing base capacity available for increased liquidity potential. Cash is required to fund capital expenditures necessary to offset inherent declines in production and reserves that are typical in the oil and natural gas industry. Future success in maintaining or growing reserves and production will be highly dependent on capital resources available and the success of finding or acquiring additional reserves. We currently believe that net cash generated from operating activities, unused committed borrowing capacity under the bank credit facility and proceeds from asset sales combined with our natural gas, NGLs and oil derivatives contracts currently in place will be adequate to satisfy near-term financial obligations and liquidity needs. While our expectation is to operate within our internally generated cash flow, to the extent our capital requirements exceed our internally generated cash flow and proceeds from asset sales, debt or equity securities may be issued to fund these requirements. Long-term cash flows are subject to a number of variables including the level of production and prices as well as various economic conditions that have historically affected the oil and natural gas business. A material decline in natural gas, NGLs and oil prices or a reduction in production and reserves would reduce our ability to fund capital expenditures, meet financial obligations and operate profitably. We establish a capital budget at the beginning of each calendar year and review it during the course of the year, taking into account various factors including the commodity price environment. Our initial 2020 capital budget was announced in early January at $520.0 million which was subsequently reduced $90.0 million to $430.0 million based on the lower commodity price environment. We currently estimate our spending for 2020 will not be more than $415.0 million.

Commodity prices have remained highly volatile and have declined during first nine months 2020 compared to fourth quarter 2019. We have adjusted and must continue to adjust our business through efficiencies and cost reductions to compete in the current price environment which also requires reductions in overall debt levels over time. We plan to continue to work towards profitable growth within cash flows. We would expect to monitor the market and look for opportunities to refinance or reduce debt based on market conditions. We believe we are well-positioned to manage the challenges presented in a low commodity price environment and that we can endure continued volatility in current and future commodity prices by:

- exercising discipline in our capital program with the expectation of funding our capital expenditures with operating cash flow and, if required, with borrowings under our bank credit facility;
- continuing to optimize our drilling, completion and operational efficiencies;
- continuing to focus on improving our cost structure;
- continuing to pursue asset sales to reduce debt;
- continuing to manage price risk by hedging our production volumes; and
- continuing to manage our balance sheet.

Credit Arrangements

As of September 30, 2020, we maintained a revolving credit facility with a borrowing base of $3.0 billion and aggregate lender commitments of $2.4 billion, which we refer to as our bank credit facility or bank debt. The bank credit facility is secured by substantially all of our assets and has a maturity date of April 13, 2023. See Note 9 to our unaudited consolidated financial statements for additional information regarding our bank debt. Availability under the bank credit facility is subject to a borrowing base set by the lenders. As of September 30, 2020, the outstanding balance under our bank credit facility was $706.0 million. Additionally, we had $332.0 million of undrawn letters of credit leaving $1.4 billion of committed borrowing capacity available under the bank credit facility at the end of third quarter 2020, with an additional $600.0 million in borrowing base capacity for potential increases in lender commitments.

Our bank credit facility imposes limitations on the payment of dividends and other restricted payments (as defined under our bank credit facility). The bank credit facility also contains customary covenants relating to debt incurrence, liens, investments and financial ratios. We were in compliance with all covenants at September 30, 2020. See Note 9 to our unaudited consolidated financial statements for additional information regarding our bank debt.

Cash Dividend Payments

In January 2020, we announced that the Board of Directors suspended the dividend on our common stock. The determination of the amount of future dividends, if any, to be declared and paid is at the sole discretion of the Board of Directors and primarily depends on earnings, capital expenditures, debt covenants and various other factors.

Cash Contractual Obligations

Our contractual obligations include long-term debt, operating leases, derivative obligations, asset retirement obligations and transportation, processing and gathering commitments including the divestiture contractual commitment. As of September 30, 2020, we do not have any significant off-balance sheet debt or other such unrecorded obligations and we have not guaranteed any debt of any unrelated party. As of September 30, 2020, we had a total of $332.0 million of undrawn letters of credit under our bank credit facility.

Since December 31, 2019, there have been no material changes to our contractual obligations other than the changes to our indebtedness as discussed further in Note 9 and our transportation, gathering and processing contracts as further discussed in Note 17.

Interest Rates

At September 30, 2020, we had approximately $3.1 billion of debt outstanding. Of this amount, $2.4 billion bore interest at fixed rates averaging 6.5%. Bank debt totaling $706.0 million bears interest at a floating rate, which was 2.2% at September 30, 2020. The 30-day LIBOR Rate on September 30, 2020 was approximately 0.1%. A 1% increase in short-term interest rates on the floating-rate debt outstanding on September 30, 2020 would result in approximately $7.1 million in additional annual interest expense.

Off-Balance Sheet Arrangements

We do not currently utilize any significant off-balance sheet arrangements with unconsolidated entities to enhance our liquidity or capital resource position, or for any other purpose. However, as is customary in the oil and gas industry, we have various contractual work commitments, some of which are described above under *Cash Contractual Obligations*.

Inflation and Changes in Prices

Our revenues, the value of our assets and our ability to obtain bank loans or additional capital on attractive terms have been and will continue to be affected by changes in natural gas, NGLs and oil prices and the costs to produce our reserves. Natural gas, NGLs and oil prices are subject to significant fluctuations that are beyond our ability to control or predict. Although certain of our costs and expenses are affected by general inflation, inflation does not normally have a significant effect on our business. We expect costs for the remainder of 2020 to continue to be a function of supply and demand.

Forward-Looking Statements

Certain sections of Management’s Discussion and Analysis of Financial Condition and Results of Operations include forward-looking statements concerning trends or events potentially affecting our business. These statements contain words such as “anticipates,” “believes,” “expects,” “targets,” “plans,” “projects,” “could,” “may,” “should,” “would” or similar words indicating that future outcomes are uncertain. In accordance with “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, these statements are accompanied by cautionary language identifying important factors, though not necessarily all such factors, which could cause future outcomes to differ materially from those set forth in the forward-looking statements. These forward-looking statements are based on our current expectations and beliefs concerning future developments and their potential effect on us. While management believes that these forward-looking statements are reasonable when made, there can be no assurance that future developments affecting us will be those that we anticipate. All comments concerning our expectations for future revenues and operating results are based on our current forecasts for our existing operations and do not include the potential impact of any future events. We undertake no obligation to publicly update or revise any forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise. For additional risk factors affecting our business, see Item 1A. Risk Factors as set forth in our Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on February 27, 2020.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The primary objective of the following information is to provide forward-looking quantitative and qualitative information about our potential exposure to market risks. The term “market risk” refers to the risk of loss arising from adverse changes in natural gas, NGLs and oil prices and interest rates. The disclosures are not meant to be precise indicators of expected future losses, but rather indicators of reasonably possible losses. This forward-looking information provides indicators of how we view and manage our ongoing market-risk exposure. All of our market-risk sensitive instruments were entered into for purposes other than trading. All accounts are U.S. dollar denominated.

Market Risk

We are exposed to market risks related to the volatility of natural gas, NGLs and oil prices. We employ various strategies, including the use of commodity derivative instruments, to manage the risks related to these price fluctuations. These derivative instruments apply to a varying portion of our production and provide only partial price protection. These arrangements limit the benefit to us of increases in prices but offer protection in the event of price declines. Further, if our counterparties defaulted, this protection might be limited as we might not receive the benefits of the derivatives. Realized prices are primarily driven by worldwide prices for oil and spot market prices for North American natural gas production. Natural gas and oil prices have been volatile and unpredictable for many years. Changes in natural gas prices affect us more than changes in oil prices because approximately 67% of our December 31, 2019 proved reserves are natural gas and 2% of proved reserves are oil. We are also exposed to market risks related to changes in interest rates. These risks did not change materially from December 31, 2019 to September 30, 2020.

Commodity Price Risk

We use commodity-based derivative contracts to manage exposures to commodity price fluctuations. We do not enter into these arrangements for speculative or trading purposes. At times, certain of our derivatives are swaps where we receive a fixed price for our production and pay market prices to the counterparty. Our derivatives program can also include collars, which establish a minimum floor price and a predetermined ceiling price. We have also entered into natural gas derivative instruments containing a fixed price swap and a sold option (which we refer to as a swaption). At September 30, 2020, our derivative program includes swaps, collars, three-way collars and swaptions. The fair value of these contracts, represented by the estimated amount that would be realized upon immediate liquidation based on a comparison of the contract price and a reference price, generally NYMEX for natural gas and crude oil or Mont Belvieu for NGLs, as of September 30, 2020, approximated a net unrealized pretax loss of $83.5 million. These contracts expire monthly through December 2021. At September 30, 2020, the following commodity derivative contracts were outstanding, excluding our basis swaps which are discussed below:

Period	Contract Type	Volume Hedged	Weighted Average Hedge Price				Fair Market Value
			Swap	Sold Put	Floor	Ceiling	(in thousands)
Natural Gas [1]							
2020	Swaps	1,133,587 Mmbtu/day	$ 2.63				$ 2,687
2021	Swaps	510,000 Mmbtu/day	$ 2.77				$ (25,963)
2020	Collars	5,041 Mmbtu/day			$ 2.00	$ 2.50	$ —
January – October 2021	Collars	342,237 Mmbtu/day			$ 2.51	$ 3.00	$ (14,169)
2020	Three-way Collars	79,891 Mmbtu/day		$ 2.23	$ 2.58	$ 3.19	$ 227
2021	Three-way Collars	240,000 Mmbtu/day		$ 1.99	$ 2.33	$ 2.60	$ (40,110)
Crude Oil							
2020	Swaps	6,000 bbls/day	$ 58.02				$ 9,576
2021	Swaps	1,000 bbls/day	$ 55.00				$ 4,489
NGLs (C3-Propane)							
2020	Swaps	6,000 bbls/day	$ 0.51/gallon				$ 101
NGLs (NC4-Normal Butane)							
2020	Swaps	1,000 bbls/day	$ 0.60/gallon				$ 17
NGLs (C5-Natural Gasoline)							
2020	Swaps	2,000 bbls/day	$ 0.89/gallon				$ 25

(1) We also sold natural gas call swaptions of 140,000 Mmbtu/day for 2021 at a weighted average price of $2.88. In addition, we sold natural gas call swaptions of 280,000 Mmbtu/day per day for 2022 at a weighted average price of $2.81. The fair market value of these swaptions at September 30, 2020 was a net derivative liability of $20.4 million.

In the future, we expect our NGLs production to continue to increase. We believe NGLs prices are somewhat seasonal, particularly for propane. Therefore, the relationship of NGLs prices to NYMEX WTI (or West Texas Intermediate) will vary due to product components, seasonality and geographic supply and demand. We sell NGLs in several regional and international markets. If we are not able to sell or store NGLs, we may be required to curtail production or shift our drilling activities to dry gas areas.

Currently, the Appalachian region has limited local demand and infrastructure to accommodate ethane. We have agreements where we have contracted to either sell or transport ethane from our Marcellus Shale area. We cannot ensure that these facilities will remain available. If we are not able to sell ethane under at least one of these agreements, we may be required to curtail production or, as we have done in the past, purchase or divert natural gas to blend with our rich residue gas.

Other Commodity Risk

We are impacted by basis risk, caused by factors that affect the relationship between commodity futures prices reflected in derivative commodity instruments and the cash market price of the underlying commodity. Natural gas transaction prices are frequently based on industry reference prices that may vary from prices experienced in local markets. If commodity price changes in one region are not reflected in other regions, derivative commodity instruments may no longer provide the expected hedge, resulting in increased basis risk. Therefore, in addition to the swaps, collars and calls discussed above, we have entered into natural gas basis swap agreements. The price we receive for our gas production can be more or less than the NYMEX Henry Hub price because of basis adjustments, relative quality and other factors. Basis swap agreements effectively fix the basis adjustments. The fair value of the natural gas basis swaps was a gain of $5.4 million at September 30, 2020 and they settle monthly through December 2024.

At September 30, 2020, we also had propane basis contracts which lock in the differential between Mont Belvieu and international propane indices. These contracts settle monthly in 2020 and include a total volume of 312,500 barrels. The fair value of these contracts was a loss of $529,000 at September 30, 2020.

At September 30, 2020, we have contingent divestiture consideration associated with the sale of our North Louisiana assets where we are entitled to receive contingent consideration, annually through 2023, of up to $90.0 million based on future achievement of certain natural gas and oil prices based on published indexes along with the realized NGLs prices of the buyer. The fair value at September 30, 2020 was gain of $15.4 million.

The following table shows the fair value of our derivatives and the hypothetical changes in fair value that would result from a 10% and a 25% change in commodity prices at September 30, 2020. We remain at risk for possible changes in the market value of commodity derivative instruments; however, such risks should be mitigated by price changes in the underlying physical commodity (in thousands):

		Hypothetical Change in Fair Value		Hypothetical Change in Fair Value	
		Increase in Commodity Price of		Decrease in Commodity Price of	
	Fair Value	10%	25%	10%	25%
Swaps	$ (9,068)	$ (85,281)	$ (213,200)	$ 85,281	$ 213,203
Collars	(14,169)	(23,530)	(62,083)	22,437	56,852
Three-way collars	(39,883)	(22,017)	(57,582)	19,770	44,403
Swaptions	(20,368)	(23,315)	(72,837)	13,104	19,374
Basis swaps	4,871	2,587	6,469	(2,587)	(6,469)
Freight swaps	(1,388)	664	1,659	(664)	(1,659)
Divestiture contingent consideration	15,420	4,480	11,570	(3,950)	(8,890)

Our commodity-based derivative contracts expose us to the credit risk of non-performance by the counterparty to the contracts. Our exposure is diversified primarily among major investment grade financial institutions and we have master netting agreements with our counterparties that provide for offsetting payables against receivables from separate derivative contracts. Our derivative contracts are with multiple counterparties to minimize our exposure to any individual counterparty. At September 30, 2020, our derivative counterparties include twenty-one financial institutions, of which all but five are secured lenders in our bank credit facility. Counterparty credit risk is considered when determining the fair value of our derivative contracts. While our counterparties are primarily major investment grade financial institutions, the fair value of our derivative contracts has been adjusted to account for the risk of non-performance by certain of our counterparties, which was immaterial. Our propane sales from the Marcus Hook facility near Philadelphia are short-term and are to a single purchaser. Our ethane sales from Marcus Hook are to a single international customer.

Interest Rate Risk

We are exposed to interest rate risk on our bank debt. We attempt to balance variable rate debt, fixed rate debt and debt maturities to manage interest costs, interest rate volatility and financing risk. This is accomplished through a mix of fixed rate senior and senior subordinated debt and variable rate bank debt. At September 30, 2020, we had $3.1 billion of debt outstanding. Of this amount, $2.4 billion bears interest at fixed rates averaging 6.5%. Bank debt totaling $706.0 million bears interest at floating rates, which was 2.2% on September 30, 2020. On September 30, 2020, the 30-day LIBOR Rate was approximately 0.1%. A 1% increase in short-term interest rates on the floating-rate debt outstanding on September 30, 2020, would result in approximately $7.1 million in additional annual interest expense.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), we have evaluated, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed by us in reports that we file under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure and is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. Based upon the evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of September 30, 2020 at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There was no change in our system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended September 30, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 17 to our unaudited consolidated financial statements entitled "Commitments and Contingencies" included in Part I Item 1 above for a summary of our legal proceedings, such information being incorporated herein by reference.

Environmental Proceedings

Our subsidiary, Range Resources – Appalachia, LLC, was ordered in January 2020 by the Pennsylvania Department of Environmental Protection ("DEP"), to take remedial actions pursuant to the Pennsylvania Clean Streams Law and Oil and Gas Act with respect to one well in Lycoming County. While Range has undertaken remedial efforts in the past at the direction of the DEP regarding this well, Range has and continues to vigorously dispute the allegations that this well is the source of methane in surrounding groundwater and water wells as contended by DEP. Range has considerable evidence to the contrary, including that methane had existed in the groundwater before commencement of our operations. Range appealed the January 2020 order to the Environmental Hearing Board. While we intend to vigorously defend against allegations in the Order, nonetheless, resolution of this matter may result in penalties of more than $100,000.

From time to time, we receive notices of violation from governmental and regulatory authorities in areas in which we operate relating to alleged violations of environmental statutes or the rules and regulations promulgated thereunder. While we cannot predict with certainty whether these notices of violation will result in fines and/or penalties, if fines and/or penalties are imposed, they may result in monetary sanctions, individually or in the aggregate, in excess of $100,000.

ITEM 1A. RISK FACTORS

We are subject to various risks and uncertainties in the course of our business. In addition to the factors discussed elsewhere in this report, you should carefully consider the risks and uncertainties described under Item 1A. Risk Factors filed in our Annual Report on Form 10-K for the year ended December 31, 2019 and disclosed in our first quarter 10-Q for the quarter ended March 31, 2020.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table provides information about purchases by Range during the quarter ended September 30, 2020 of equity securities that are registered pursuant to Section 12 of the Securities Exchange Act of 1934:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (a)
7/1/20 – 7/31/20	—	$ —	—	$ 70,099,593
8/1/20 – 8/31/20	—	—	—	$ 70,099,593
9/1/20 – 9/30/20	—	—	—	$ 70,099,593
Total	—	$ —	—	

(a) In October 2019, we announced a $100.0 million share repurchase program. As of September 30, 2020, we have repurchased 10.0 million shares of common stock at a cost of approximately $29.7 million, excluding fees and commissions. Shares repurchased as of September 30, 2020 are held as treasury stock.

ITEM 6. EXHIBITS

Exhibit index

Exhibit Number	Exhibit Description
3.1	Restated Certificate of Incorporation of Range Resources Corporation (incorporated by reference to Exhibit 3.1.1 to our Form 10-Q (File No. 0(12209) as filed with the SEC on May 5, 2004, as amended by the Certificate of Third Amendment to Restated Certificate of Incorporation of Ra Resources Corporation (incorporated by reference to Exhibit 3.1 to our Form 10-Q (File No. 001-12209) as filed with the SEC on July 28, 2005 and the Certificate of Second Amendment to Restated Certificate of Incorporation of Range Resources Corporation (incorporated by reference t Exhibit 3.1 to our Form 10-Q (File No. 001-12209) as filed with the SEC on July 24, 2008)
3.2	Amended and Restated By-laws of Range Resources Corporation (incorporated by reference to Exhibit 3.1 to our Form 8-K (File No. 001-1220 as filed with the SEC on May 19, 2016)
10.1	Sixth Amended and Restated Credit Agreement, dated April 13, 2018 among Range Resources Corporation (as borrower) and JPMorgan Chase Bank, N.A. as administrative agent and the other lenders and agents party thereto (incorporated by reference to Exhibit 10.1 to our Form 8-K (F No. 001-12209) as filed with the SEC on April 16, 2018)
10.2	First Amendment to the Sixth Amended and Restated Credit Agreement, dated as of October 18, 2019 among Range Resources Corporation (as borrower) and JPMorgan Chase Bank, N.A. as administrative agent and the other lenders and agents party thereto (incorporated by reference to Exhibit 10.2 to our Form 10-Q (File No. 001-12209) as filed with the SEC on October 23, 2019)
10.3	Second Amendment to the Sixth Amended and Restated Credit Agreement, dated as of March 27, 2020 among Range Resources Corporation (a borrower) and JPMorgan Chase Bank N.A. as administrative agent and the other lenders and agents party thereto (incorporated by reference to Exhibit 10.1 to our Form 8-K (File No. 001-12209) as filed with the SEC on April 1, 2020)
10.4	Range Resources Corporation 2019 Equity-Based Compensation Plan (incorporated by reference to Exhibit 10.1 to our Current Report on Form K (File No. 001-12209) as filed with the SEC on May 16, 2019)
10.5	Range Resources Corporation Amended and Restated 2019 Equity & Based Compensation Plan (incorporated by reference to Exhibit A to our Definitive Proxy Statement for the 2020 Annual Meeting of Stockholders. (File No. 001-12209, as filed with the SEC on April 3, 2020)
10.6	Purchase Agreement, dated as of August 18, 2020, by and among Range Resources Corporation and JPMorgan Securities LLC (as representativ the several initial purchasers identified therein) (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K (File No. 001-122 as filed with the SEC on August 19, 2020)
31.1*	Certification by the President and Chief Executive Officer of Range Resources Corporation Pursuant to Section 302 of the Sarbanes-Oxley Act 2002
31.2*	Certification by the Chief Financial Officer of Range Resources Corporation Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification by the President and Chief Executive Officer of Range Resources Corporation Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification by the Chief Financial Officer of Range Resources Corporation Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Sectic 906 of the Sarbanes-Oxley Act of 2002
101. INS*	Inline XBRL Instance Document – the XBRL Instance Document does not appear in the Interactive Data file because its XBRL tags are embed within the Inline XBRL document
101. SCH*	Inline XBRL Taxonomy Extension Schema
101. CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document

Exhibit Number	Exhibit Description
101. DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101. LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101. PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104 *	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

* 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.

Date: October 29, 2020

RANGE RESOURCES CORPORATION

By: /s/ MARK S. SCUCCHI

Mark S. Scucchi
Senior Vice President and
Chief Financial Officer

Date: October 29, 2020

RANGE RESOURCES CORPORATION

By: /s/ DORI A. GINN

Dori A. Ginn
Senior Vice President – Controller and
Principal Accounting Officer

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Jeff L. Ventura, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Range Resources Corporation (the “registrant”);

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: October 29, 2020

/s/ JEFF L. VENTURA

Jeff L. Ventura

President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Mark S. Scucchi, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Range Resources Corporation (the "registrant");

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: October 29, 2020

/s/ Mark S. Scucchi

Mark S. Scucchi
Senior Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF
PRESIDENT AND CHIEF EXECUTIVE OFFICER
OF RANGE RESOURCES CORPORATION
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 on Form 10-Q for the period ending September 30, 2020 and filed with the Securities and Exchange Commission on the date hereof (the "Report") and pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Jeff L. Ventura, President and Chief Executive Officer of Range Resources Corporation (the "Company"), hereby certify that, to my knowledge:

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.

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.

By: /s/ JEFF L. VENTURA
Jeff L. Ventura

October 29, 2020

CERTIFICATION OF
CHIEF FINANCIAL OFFICER
OF RANGE RESOURCES CORPORATION
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 on Form 10-Q for the period ending September 30, 2020 and filed with the Securities and Exchange Commission on the date hereof (the "Report") and pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Mark S. Scucchi, Senior Vice President - Chief Financial Officer of Range Resources Corporation (the "Company"), hereby certify that, to my knowledge:

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.

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.

By: /s/ MARK S. SCUCCHI
Mark S. Scucchi

October 29, 2020