

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

FORM 10-Q

(Mark one)

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

For the quarterly period ended **June 30, 2016**

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)

100 Throckmorton Street, Suite 1200

Fort Worth, Texas
(Address of Principal Executive Offices)

34-1312571
(IRS Employer
Identification No.)

76102
(Zip Code)

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

Former Name, Former Address and Former Fiscal Year, if changed since last report: Not applicable

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 and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for shorter period that the registrant was required to submit and post such files).

Yes No

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

Large Accelerated Filer Accelerated Filer

Non-Accelerated Filer (Do not check if smaller reporting company) Smaller Reporting Company

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

Yes No

170,090,371 Common Shares were outstanding on July 25, 2016

RANGE RESOURCES CORPORATION
FORM 10-Q
Quarter Ended June 30, 2016

Unless the context otherwise indicates, all references in this report to “Range,” “we,” “us,” or “our” are to Range Resources Corporation and its directly and indirectly owned subsidiaries and its ownership interests in equity method investments.

TABLE OF CONTENTS

	<u>Page</u>
<u>PART I – FINANCIAL INFORMATION</u>	
ITEM 1.	3
<u>Financial Statements</u>	3
<u>Consolidated Balance Sheets (Unaudited)</u>	3
<u>Consolidated Statements of Operations (Unaudited)</u>	4
<u>Consolidated Statements of Cash Flows (Unaudited)</u>	5
<u>Selected Notes to Consolidated Financial Statements (Unaudited)</u>	6
ITEM 2.	22
<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	22
ITEM 3.	35
<u>Quantitative and Qualitative Disclosures about Market Risk</u>	35
ITEM 4.	37
<u>Controls and Procedures</u>	37
<u>PART II – OTHER INFORMATION</u>	
ITEM 1.	38
<u>Legal Proceedings</u>	38
ITEM 1A.	38
<u>Risk Factors</u>	38
ITEM 6.	43
<u>Exhibits</u>	43
<u>SIGNATURES</u>	44

PART I – FINANCIAL INFORMATION

ITEM 1. Financial Statements

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

	June 30, 2016	December 31, 2015
	<u>(Unaudited)</u>	
Assets		
Current assets:		
Cash and cash equivalents	\$ 382	\$ 471
Accounts receivable, less allowance for doubtful accounts of \$4,722 and \$4,994	81,418	123,842
Derivative assets	43,250	281,544
Inventory and other	20,662	33,217
Total current assets	<u>145,712</u>	<u>439,074</u>
Derivative assets	813	7,218
Natural gas and oil properties, successful efforts method	9,005,011	8,996,336
Accumulated depletion and depreciation	<u>(2,864,358)</u>	<u>(2,635,031)</u>
	<u>6,140,653</u>	<u>6,361,305</u>
Other property and equipment	111,095	110,013
Accumulated depreciation and amortization	<u>(94,606)</u>	<u>(90,558)</u>
	<u>16,489</u>	<u>19,455</u>
Other assets	76,512	72,979
Total assets	<u>\$ 6,380,179</u>	<u>\$ 6,900,031</u>
Liabilities		
Current liabilities:		
Accounts payable	\$ 92,081	\$ 117,346
Asset retirement obligations	15,071	15,071
Accrued liabilities	179,812	188,028
Accrued interest	32,000	30,139
Derivative liabilities	20,649	1,136
Total current liabilities	<u>339,613</u>	<u>351,720</u>
Bank debt	—	86,427
Senior notes	738,616	738,101
Senior subordinated notes	1,828,345	1,826,775
Deferred tax liabilities	606,482	777,947
Derivative liabilities	19,243	21
Deferred compensation liabilities	127,090	104,792
Asset retirement obligations and other liabilities	<u>255,863</u>	<u>254,590</u>
Total liabilities	<u>3,915,252</u>	<u>4,140,373</u>
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, 170,081,406 issued at June 30, 2016 and 169,375,743 issued at December 31, 2015	1,701	1,693
Common stock held in treasury, 45,511 shares at June 30, 2016 and 59,283 shares at December 31, 2015	(1,733)	(2,245)
Additional paid-in capital	2,470,814	2,442,623
Retained earnings (deficit)	<u>(5,855)</u>	<u>317,587</u>
Total stockholders' equity	<u>2,464,927</u>	<u>2,759,658</u>
Total liabilities and stockholders' equity	<u>\$ 6,380,179</u>	<u>\$ 6,900,031</u>

See accompanying notes.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Revenues and other income:				
Natural gas, NGLs and oil sales	\$ 224,606	\$ 258,053	\$ 434,093	\$ 583,536
Derivative fair value (loss) income	(162,798)	(34,791)	(75,890)	88,048
Brokered natural gas, marketing and other	39,989	21,339	75,007	35,824
Total revenues and other income	101,797	244,601	433,210	707,408
Costs and expenses:				
Direct operating	20,671	34,780	44,725	71,917
Transportation, gathering and compression	136,844	95,198	262,107	184,624
Production and ad valorem taxes	6,049	9,242	11,936	19,170
Brokered natural gas and marketing	40,925	27,031	77,483	48,593
Exploration	6,785	5,025	11,698	12,911
Abandonment and impairment of unproved properties	7,059	12,330	17,687	23,821
General and administrative	46,064	55,964	86,721	104,293
Memorial merger expenses	2,621	—	2,621	—
Termination costs	5	417	167	6,367
Deferred compensation plan	25,746	(7,282)	41,802	(12,906)
Interest	37,758	43,479	75,497	82,686
Depletion, depreciation and amortization	122,390	151,895	242,951	299,185
Impairment of proved properties	—	—	43,040	—
Loss (gain) on the sale of assets	3,304	(2,909)	4,947	(2,734)
Total costs and expenses	456,221	425,170	923,382	837,927
Loss before income taxes	(354,424)	(180,569)	(490,172)	(130,519)
Income tax benefit:				
Current	—	—	—	—
Deferred	(129,488)	(61,975)	(173,526)	(39,609)
	(129,488)	(61,975)	(173,526)	(39,609)
Net loss	\$ (224,936)	\$ (118,594)	\$ (316,646)	\$ (90,910)
Net loss per common share:				
Basic	\$ (1.35)	\$ (0.71)	\$ (1.90)	\$ (0.55)
Diluted	\$ (1.35)	\$ (0.71)	\$ (1.90)	\$ (0.55)
Dividends paid per common share	\$ 0.02	\$ 0.04	\$ 0.04	\$ 0.08
Weighted average common shares outstanding:				
Basic	167,126	166,421	166,964	166,230
Diluted	167,126	166,421	166,964	166,230

See accompanying notes.

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

	Six Months Ended June 30,	
	2016	2015
Operating activities:		
Net loss	\$ (316,646)	\$ (90,910)
Adjustments to reconcile net loss to net cash provided from operating activities:		
Deferred income tax benefit	(173,526)	(39,609)
Depletion, depreciation and amortization and impairment	285,991	299,185
Exploration dry hole costs	—	106
Abandonment and impairment of unproved properties	17,687	23,821
Derivative fair value loss (income)	75,890	(88,048)
Cash settlements on derivative financial instruments	207,544	222,716
Allowance for bad debt	450	250
Amortization of deferred financing costs, loss on extinguishment of debt and other	3,437	3,090
Deferred and stock-based compensation	71,718	19,792
Loss (gain) on the sale of assets	4,947	(2,734)
Changes in working capital:		
Accounts receivable	41,955	73,695
Inventory and other	10,500	(3,749)
Accounts payable	(19,194)	3,492
Accrued liabilities and other	(41,149)	(50,955)
Net cash provided from operating activities	169,604	370,142
Investing activities:		
Additions to natural gas and oil properties	(241,109)	(671,166)
Additions to field service assets	(1,304)	(1,574)
Acreage purchases	(23,554)	(51,450)
Other	—	(75)
Proceeds from disposal of assets	190,803	14,301
Purchases of marketable securities held by the deferred compensation plan	(22,115)	(19,897)
Proceeds from the sales of marketable securities held by the deferred compensation plan	22,997	24,992
Net cash used in investing activities	(74,282)	(704,869)
Financing activities:		
Borrowings on credit facilities	647,000	1,009,000
Repayments on credit facilities	(739,000)	(1,368,000)
Issuance of senior notes	—	750,000
Debt issuance costs	(124)	(13,929)
Dividends paid	(6,796)	(13,534)
Change in cash overdrafts	(6,804)	(35,921)
Proceeds from the sales of common stock held by the deferred compensation plan	10,313	7,184
Net cash (used in) provided from financing activities	(95,411)	334,800
(Decrease) increase in cash and cash equivalents	(89)	73
Cash and cash equivalents at beginning of period	471	448
Cash and cash equivalents at end of period	\$ 382	\$ 521

See accompanying notes.

(1) SUMMARY OF ORGANIZATION AND NATURE OF BUSINESS

Range Resources Corporation (“Range,” “we,” “us,” or “our”) is a Fort Worth, Texas-based independent natural gas, natural gas liquids (“NGLs”) and oil company primarily engaged in the exploration, development and acquisition of natural gas and oil properties in the Appalachian region of the United States. Our objective is to build stockholder value through consistent growth in reserves and production on a cost-efficient basis. 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 interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Range Resources Corporation 2015 Annual Report on Form 10-K filed with the Securities and Exchange Commission (the “SEC”) on February 25, 2016. The results of operations for the second quarter and the six months ended June 30, 2016 are not necessarily indicative of the results to be expected for the full year. These consolidated financial statements are unaudited but, in the opinion of management, reflect all adjustments necessary for fair presentation of the results for the periods presented. 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.

(3) NEW ACCOUNTING STANDARDS**Not Yet Adopted**

In May 2014, an accounting standards update was issued that supersedes the existing revenue recognition requirements. This standard includes a five-step revenue recognition model to depict the transfer of goods or services to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. Among other things, the standard also eliminates industry-specific revenue guidance, requires enhanced disclosures about revenue, provides guidance for transactions that were not previously addressed comprehensively and improves guidance for multiple-element arrangements. This standard is effective for us in first quarter 2018 and will be applied retrospectively to each prior reporting period presented or with the cumulative effect of initially applying the update recognized at the date of initial application. Early adoption is permitted with an effective date no earlier than first quarter 2017. We are evaluating the provisions of this accounting standards update and assessing the impact, if any, it may have on our consolidated results of operations, financial position or cash flows.

In August 2014, an accounting standards update was issued that requires management to assess an entity’s ability to continue as a going concern by incorporating and expanding upon certain principles that are currently in United States auditing standards. This standard is effective for us in fourth quarter 2016 and early adoption is permitted. We do not expect the adoption of this standard to have a significant impact on our consolidated results of operations, financial position or cash flows.

In February 2016, an accounting standards update was issued that requires an entity to recognize a right-of-use asset and lease liability for all leases with terms of more than 12 months. Classification of leases as either a finance or operating lease will determine the recognition, measurement and presentation of expenses. This accounting standards update also requires certain quantitative and qualitative disclosures about leasing arrangements. This standard is effective for us in first quarter 2019 and should be applied using a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements and early adoption is permitted. We are evaluating the provisions of this accounting standards update and assessing the impact it may have, if any, on our consolidated results of operations, financial position or cash flows.

In March 2016, an accounting standards update was issued that simplifies several aspects of the accounting for share-based payment award transactions. Among other things, this new guidance will require all income tax effects of share-based awards to be recognized in the statement of operations when the awards vest or are settled, will allow an employer to repurchase more of an employee’s shares for tax withholding purposes than it can today without triggering liability accounting and will allow a policy election to account for forfeitures as they occur. This standard is effective for us in first quarter 2017 with prospective application and early adoption is permitted. We are evaluating the provisions of this accounting standards update and assessing the impact it may have, if any, on our consolidated results of operations, financial position or cash flows.

Recently Adopted

In April 2015, an accounting standards update was issued that requires debt issuance costs to be presented in the balance sheet as a direct reduction from the associated debt liability. This standard was effective for the reporting period beginning on January 1, 2016 with early adoption permitted. As of December 31, 2015, we adopted this standard retrospectively and have accounted for the debt issuance costs as a reduction of the associated debt liability. This adoption only affected our consolidated balance sheets and did not have an impact on our consolidated results of operations or cash flows. As of June 30, 2016, unamortized debt issuance costs

related to our bank credit facility exceeded our credit facility balance. The amount of debt issuance costs which exceeded the credit facility balance has been presented in other assets on our consolidated balance sheet.

In November 2015, an accounting standards update was issued which requires entities to classify all deferred tax assets and liabilities as noncurrent on the balance sheet instead of separating deferred taxes into current and noncurrent amounts. This standard is effective for the reporting period beginning January 1, 2017 with early adoption permitted. As of December 31, 2015, we adopted this standard retrospectively and reclassified our current deferred tax assets and liabilities into non-current deferred tax assets and liabilities. This adoption only affected our consolidated balance sheets and did not have an impact on our consolidated results of operations or cash flows.

(4) DISPOSITIONS AND ACQUISITIONS

2016 Dispositions

We recognized a pretax net loss on the sale of assets of \$3.3 million in second quarter 2016 compared to a pretax net gain of \$2.9 million in the same period of the prior year and a pretax net loss on the sale of assets of \$4.9 million in the six months ended June 30, 2016 compared to a pretax net gain of \$2.7 million in the same period of the prior year.

Western Oklahoma. In second quarter 2016, we sold certain properties in Western Oklahoma for proceeds of \$77.7 million and we recorded a \$2.7 million loss related to this sale, after closing adjustments.

Pennsylvania. In first quarter 2016, we sold our non-operated interest in certain wells and gathering facilities in northeast Pennsylvania for proceeds of \$111.5 million. After closing adjustments, we recorded a loss of \$2.1 million related to this sale.

Other. In the second quarter 2016, we sold miscellaneous inventory and surface property for proceeds of \$74,000 resulting in a loss of \$640,000. In first quarter 2016, we sold miscellaneous proved and unproved properties, inventory, other assets and surface acreage for proceeds of \$1.6 million resulting in a gain of \$443,000. Included in the \$1.6 million of proceeds is \$1.2 million received from the sale of proved properties in Mississippi and South Texas.

2015 Dispositions

In second quarter 2015, we sold miscellaneous unproved properties and inventory for proceeds of \$3.6 million resulting in a gain of \$2.9 million. In first quarter 2015, we sold miscellaneous unproved property, proved property and inventory for proceeds of \$10.7 million resulting in a loss of \$175,000. Included in the \$10.7 million of proceeds is \$10.5 million received from the sale of certain West Texas properties which closed in February 2015.

Proposed Memorial Merger

On May 15, 2016, Range and Memorial Resource Development Corp. (“Memorial”) entered into an Agreement and Plan of Merger (the “Merger Agreement”) which provides for the Merger of Memorial and Range. Pursuant to the terms of the Merger Agreement, a wholly-owned subsidiary of Range will merge with and into Memorial, with Memorial surviving as a wholly-owned subsidiary of Range (the “Merger”). In order to complete the Merger, among other conditions, Range stockholders must approve the issuance of Range common stock to Memorial stockholders in connection with the Merger and Memorial stockholders must approve and adopt the Merger Agreement and the transactions contemplated by the Merger Agreement.

If the Merger is completed, each share of Memorial common stock outstanding immediately before that time (including outstanding shares of restricted Memorial common stock, all of which will become fully vested and unrestricted under the terms of the Merger Agreement) will automatically be converted into the right to receive 0.375 of a share of Range common stock. This exchange ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. Based on the closing price of Range common stock on the NYSE on May 13, 2016, the last trading day before public announcement of the Merger, the aggregate equity value of the Merger consideration payable to Memorial stockholders was approximately \$3.2 billion. We may choose to use the availability under our current bank credit facility to complete the proposed Merger which includes the repayment of Memorial’s credit facility and the redemption of Memorial’s senior notes.

Based on the estimated number of shares of Range and Memorial common stock that will be outstanding immediately prior to the closing of the Merger, we estimate that, upon such closing, existing Range stockholders will own approximately 69% of Range’s outstanding shares and former Memorial stockholders will own approximately 31% of Range’s outstanding shares.

At a special meeting of Range stockholders, which is currently expected to be held on September 15, 2016, Range stockholders will be asked to vote on the proposal to approve the issuance of shares of Range common stock to Memorial stockholders in connection with the Merger. Approval of this proposal requires the affirmative vote of a majority of the shares of Range common stock, present in person or represented by proxy at the Range special meeting and entitled to vote thereon, assuming a quorum is present. The record date for the special meeting is expected to be August 10, 2016.

At a special meeting of Memorial stockholders, Memorial stockholders will be asked to vote on a proposal to approve and adopt the Merger Agreement and the transactions contemplated by the Merger Agreement, including the Merger. Approval of this proposal requires the affirmative vote of a majority of the outstanding shares of Memorial common stock entitled to vote thereon, assuming a quorum is present. At the special meeting, Memorial stockholders will also be asked to approve, on an advisory (non-binding) basis, the compensation that may be paid or become payable to Memorial's named executive officers in connection with the Merger.

The foregoing description of the Merger Agreement is only a summary, does not purport to be complete and is qualified in its entirety by reference to the Merger Agreement, which is filed hereto as Exhibit 2.1 and is incorporated herein by reference.

(5) INCOME TAXES

Income tax benefit was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Income tax benefit	\$ (129,488)	\$ (61,975)	\$ (173,526)	\$ (39,609)
Effective tax rate	36.5%	34.3%	35.4%	30.3%

We compute our quarterly taxes under the effective tax rate method based on applying an anticipated annual effective rate to our year-to-date income, except for discrete items. Income taxes for discrete items are computed and recorded in the period that the specific transaction occurs. For second quarter and the six months ended June 30, 2016 and 2015, our overall effective tax rate was different than the federal statutory rate of 35% due primarily to state income taxes, valuation allowances and other permanent differences. The three months ended June 30, 2016 includes \$3.2 million and the six months ended June 30, 2016 includes \$7.7 million of tax expense related to an increase in our valuation allowance for state net operating loss carryforwards that we do not believe are realizable. The three months ended June 30, 2016 includes an income tax expense of \$2.6 million and the six months ended June 30, 2016 includes an income tax expense of \$2.5 million to adjust the valuation allowance on our deferred tax asset related to future deferred compensation plan distributions of our senior executives. In addition, for the six months ended June 30, 2016, we recorded income tax expense of \$3.7 million related to equity compensation because we no longer have a hypothetical additional paid-in capital pool ("APIC Pool") available to offset reduced tax benefits for the excess of financial accounting compensation expense over the corporate income tax deduction. The hypothetical APIC Pool represents the tax benefit of the cumulative excess of corporate income tax deductions over financial accounting compensation expense recognized for equity-based compensation awards which have fully vested. The APIC Pool will increase or decrease each year as equity awards vest. Shortfalls generated by the excess of compensation expense for financial accounting purposes over the corresponding corporate income tax deduction are charged to the APIC Pool rather than income tax expense. Once the APIC Pool is fully depleted, the tax effect of any excess of financial accounting expense over the corresponding corporate income tax deduction is recorded as income tax expense. The three months ended June 30, 2015 includes income tax expense of \$6.1 million and the six months ended June 30, 2015 includes income tax expense of \$11.3 million related to increases in our valuation allowances for state net operating loss carryforwards and credit carryforwards. The three months ended June 30, 2015 also includes income tax expense of \$1.1 million and the six months ended June 30, 2015 includes income tax benefit of \$874,000 adjusting our valuation allowance for our deferred tax asset related to future deferred compensation plan distributions of our senior executives.

(6) 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 tables set 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 June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Net loss, as reported	\$ (224,936)	\$ (118,594)	\$ (316,646)	\$ (90,910)
Participating earnings (a)	(56)	(111)	(111)	(224)
Basic net loss attributed to common shareholders	(224,992)	(118,705)	(316,757)	(91,134)
Reallocation of participating earnings (a)	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Diluted net loss attributed to common shareholders	\$ (224,992)	\$ (118,705)	\$ (316,757)	\$ (91,134)
Net loss per common share:				
Basic	\$ (1.35)	\$ (0.71)	\$ (1.90)	\$ (0.55)
Diluted	\$ (1.35)	\$ (0.71)	\$ (1.90)	\$ (0.55)

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Weighted average common shares outstanding – basic	167,126	166,421	166,964	166,230
Effect of dilutive securities:				
Director and employee SARs	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Weighted average common shares outstanding – diluted	<u>167,126</u>	<u>166,421</u>	<u>166,964</u>	<u>166,230</u>

Weighted average common shares outstanding-basic for both the three months ended June 30, 2016 and the three months ended June 30, 2015 excludes 2.8 million shares of restricted stock held in our deferred compensation plan (although all awards are issued and outstanding upon grant). Weighted average common shares outstanding-basic for both the six months ended June 30, 2016 and the six months ended June 31, 2015 also exclude 2.8 million shares of restricted stock held in our deferred compensation plan. Due to our net loss from operations for the three months and six months ended June 30, 2016 and 2015, we excluded all outstanding stock appreciation rights (“SARs”) and restricted stock from the computation of diluted net loss per share because the effect would have been anti-dilutive.

(7) SUSPENDED EXPLORATORY WELL COSTS

We capitalize exploratory well costs until a determination is made that the well has either found proved reserves or that it is impaired. Capitalized exploratory well costs are included in natural gas and oil properties in the accompanying consolidated balance sheets. If an exploratory well is determined to be impaired, the well costs are charged to exploration expense in the accompanying consolidated statements of operations. We did not have any exploratory well costs that have been capitalized for a period greater than one year as of June 30, 2016. The following table reflects the change in capitalized exploratory well costs for the six months ended June 30, 2016 and the year ended December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Balance at beginning of period	\$ 4,161	\$ 2,996
Additions to capitalized exploratory well costs pending the determination of proved reserves	1,556	1,165
Reclassifications to wells, facilities and equipment based on determination of proved reserves	(5,717)	$\frac{3}{4}$
Divested wells	$\frac{3}{4}$	$\frac{3}{4}$
Balance at end of period	<u>$\frac{3}{4}$</u>	<u>4,161</u>
Less exploratory well costs that have been capitalized for a period of one year or less	<u>$\frac{3}{4}$</u>	<u>(1,165)</u>
Capitalized exploratory well costs that have been capitalized for a period greater than one year	\$ $\frac{3}{4}$	\$ 2,996
Number of projects that have exploration well costs that have been capitalized greater than one year	<u>$\frac{3}{4}$</u>	<u>1</u>

(8) INDEBTEDNESS

We had the following debt outstanding as of the dates shown below which are net of debt issuance costs (bank debt interest rate at June 30, 2016 is shown parenthetically) (in thousands). No interest was capitalized during the three or six months ended June 30, 2016 or the year ended December 31, 2015.

	June 30, 2016	December 31, 2015
Bank debt (3.8%), net of unamortized debt issuance costs of \$3,000 and \$8,573 ^(a)	\$ —	\$ 86,427
Senior notes:		
4.875% senior notes due 2025, net of unamortized debt issuance costs of \$11,384 and \$11,899	738,616	738,101
Senior subordinated notes:		
5.75% senior subordinated notes due 2021, net of unamortized debt issuance costs of \$5,435 and \$5,905	494,565	494,095
5.00% senior subordinated notes due 2022, net of unamortized debt issuance costs of \$7,234 and \$7,777	592,766	592,223
5.00% senior subordinated notes due 2023, net of unamortized debt issuance costs of \$8,986 and \$9,543	741,014	740,457
Total debt	<u>\$ 2,566,961</u>	<u>\$ 2,651,303</u>

^(a) As of June 30, 2016, there were unamortized debt issuance costs of \$4.1 million which exceeded our credit facility balance which were reclassified to other assets on our consolidated balance sheet.

Bank Debt

In October 2014, 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 October 16, 2019. The bank credit facility provides for a maximum facility amount of \$4.0 billion. The bank credit facility provides for a borrowing base subject to redeterminations annually by May and for event-driven unscheduled redeterminations. As part of our annual redetermination completed on March 17, 2016, our borrowing base was reaffirmed at \$3.0 billion and our bank commitment was also reaffirmed at \$2.0 billion. As of June 30, 2016, our bank group was composed of twenty-nine financial institutions with no one bank holding more than 5.8% 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. As of June 30, 2016, the outstanding balance under our bank credit facility was \$3.0 million, before deducting debt issuance costs. Additionally, we had \$232.1 million of undrawn letters of credit leaving \$1.8 billion of committed borrowing capacity available under the facility. During a non-investment grade period, 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 2.8% for the three months ended June 30, 2016 compared to 1.7% for the three months ended June 30, 2015. The weighted average interest rate was 2.4% for the six months ended June 30, 2016 compared to 1.7% for the six months ended June 30, 2015. A commitment fee is paid on the undrawn balance based on an annual rate of 0.30% to 0.375%. At June 30, 2016, the commitment fee was 0.30% and the interest rate margin was 1.25% on our LIBOR loans and 0.25% on our base rate loans.

At any time during which we have an investment grade debt rating from Moody's Investors Service, Inc. or Standard & Poor's Ratings Services and we have elected, at our discretion, to effect the investment grade rating period, certain collateral security requirements, including the borrowing base requirement and restrictive covenants, will cease to apply and an additional financial covenant (as defined in the bank credit facility) will be imposed. During the investment grade period, borrowings under the credit facility can either be at the ABR plus a spread ranging from 0.125% to 0.75% or at the LIBOR Rate plus a spread ranging from 1.125% to 1.75% depending on our debt rating. The commitment fee paid on the undrawn balance would range from 0.15% to 0.30%. We currently do not have an investment grade debt rating.

Senior Notes

In May 2015, we issued \$750.0 million aggregate principal amount of 4.875% senior notes due 2025 (the "Outstanding Notes") for net proceeds of \$737.4 million after underwriting discounts and commissions of \$12.6 million. The notes were issued at par and were offered to qualified institutional buyers and non-U.S. persons outside the United States in compliance with Rule 144A and Regulation S under the Securities Act of 1933, as amended (the "Securities Act"). On April 8, 2016, all of the Outstanding Notes were exchanged for an equal principal amount of registered 4.875% senior notes due 2025 pursuant to an effective registration statement on Form S-4 filed with the SEC on February 29, 2016 under the Securities Act (the "Exchange Notes"). The Exchange Notes are identical to the Outstanding Notes except the Exchange Notes are registered under the Securities Act and do not have restrictions on transfer, registration rights or provisions for additional interest. Under certain circumstances, if we experience a change of control, noteholders may require us to repurchase all of our senior notes at 101% of the aggregate principal amount plus accrued and unpaid interest, if any.

Senior Subordinated Notes

If we experience a change of control, noteholders may require us to repurchase all or a portion of our 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 will be subordinated to existing and future senior debt that we or our subsidiary guarantors are permitted to incur under the bank credit facility and the indentures governing the subordinated notes.

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 credit 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 June 30, 2016.

The indentures governing our senior subordinated notes contain various restrictive covenants that are substantially identical to each other and may limit our ability to, among other things, pay cash dividends, incur additional indebtedness, sell assets, enter into transactions with affiliates, or change the nature of our business. At June 30, 2016, we were in compliance with these covenants. Our senior subordinated notes also include a limitation on the amount of credit facility debt we can incur. Certain thresholds, as set forth in the indenture debt incurrence test, may limit our ability to incur debt under our bank credit facility in excess of a \$1.5 billion floor amount based on levels of commodity prices of natural gas, NGLs and crude oil used in the annual calculation of discounted future cash flows relating to proved oil and gas reserves (as further defined in the indenture). Based on our current discounted future net cash flows, our bank credit facility usage is limited to \$1.5 billion until higher prices or proved reserve additions increase discounted future net cash flows.

(9) 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 six months ended June 30, 2016 is as follows (in thousands):

	Six Months Ended June 30, 2016
Beginning of period	\$ 264,137
Liabilities incurred	921
Liabilities settled	(5,700)
Disposition of wells	(4,731)
Accretion expense	8,172
Change in estimate	2,819
End of period	265,618
Less current portion	(15,071)
Long-term asset retirement obligations	<u>\$ 250,547</u>

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

(10) 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 2015:

	Six Months Ended June 30, 2016	Year Ended December 31, 2015
Beginning balance	169,316,460	168,628,177
SARs exercised	—	77,002
Restricted stock grants	459,099	335,103
Restricted stock units vested	246,564	252,507
Treasury shares issued	13,772	23,671
Ending balance	170,035,895	169,316,460

(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 do not utilize complex derivatives, as we typically utilize commodity swaps or collars 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 asset of \$4.1 million at June 30, 2016. These contracts expire monthly through December 2018. The following table sets forth our commodity-based derivative volumes by year as of June 30, 2016, excluding our basis and freight swaps which are discussed separately below:

Period	Contract Type	Volume Hedged	Weighted Average Hedge Price
Natural Gas			
2016	Swaps	788,315 Mmbtu/day	\$ 3.22
2017	Swaps	300,000 Mmbtu/day	\$ 2.91
2018	Swaps	70,000 Mmbtu/day	\$ 2.92
Crude Oil			
2016	Swaps	6,000 bbls/day	\$ 58.40
2017	Swaps	2,496 bbls/day	\$ 51.29
NGLs (C2-Ethane)			
2016	Swaps	500 bbls/day	\$ 0.22/gallon
2017	Swaps	3,000 bbls/day	\$ 0.27/gallon
NGLs (C3-Propane)			
2016	Swaps	5,500 bbls/day	\$ 0.60/gallon
2017	Swaps	3,966 bbls/day	\$ 0.53/gallon
NGLs (NC4-Normal Butane)			
2016	Swaps	4,750 bbls/day	\$ 0.66/gallon
2017	Swaps	500 bbls/day	\$ 0.61/gallon
NGLs (C5-Natural Gasoline)			
2016	Swaps	3,500 bbls/day	\$ 1.11/gallon
2017	Swaps	1,750 bbls/day	\$ 0.97/gallon

Every derivative instrument is required to be recorded on the balance sheet as either an asset or a liability measured at its fair value. If the derivative does not qualify as a hedge or is not designated as a hedge, changes in fair value of these non-hedge derivatives are recognized in earnings as derivative fair value income or loss.

Basis Swap Contracts

In addition to the swaps above, at June 30, 2016, we had natural gas basis swap contracts which lock in the differential between NYMEX and certain of our physical pricing indices primarily in Appalachia. These contracts settle monthly through December 2017 and include a total volume of 64,125,000 Mmbtu. The fair value of these contracts was a loss of \$3.8 million on June 30, 2016.

At June 30, 2016, we also had propane spread swap contracts which lock in the differential between Mont Belvieu and international propane indices. The contracts settle monthly through December 2017 and include a total volume of 1,162,500 barrels in 2016 and 1,650,000 barrels in 2017. The fair value of these contracts was a gain of \$4.0 million on June 30, 2016.

Freight Swap Contracts

In connection with our international propane spread swaps, at June 30, 2016, we had freight swap contracts which lock in the freight rate for a specific trade route on the Baltic Exchange. These contracts settle monthly in fourth quarter 2016 and cover 5,000 metric tons per month with a fair value loss of \$34,000 on June 30, 2016. These contracts use observable third-party pricing inputs that we consider to be a level 2 fair value classification.

Derivative Assets and Liabilities

The combined fair value of derivatives included in the accompanying consolidated balance sheets as of June 30, 2016 and December 31, 2015 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):

		June 30, 2016		
		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	\$ 48,702	\$ (14,875)	\$ 33,827
	–basis swaps	3,621	(6,942)	(3,321)
Crude oil	–swaps	12,472	(5,312)	7,160
NGLs	–C2 ethane swaps	51	(201)	(150)
	–C3 propane swaps	1,999	(1,391)	608
	–C3 propane spread swaps	11,964	(8,394)	3,570
	–NC4 butane swaps	522	(86)	436
	–C5 natural gasoline swaps	4,281	(2,314)	1,967
Freight	–swaps	34	(34)	(34)
		<u>\$ 83,612</u>	<u>\$ (39,549)</u>	<u>\$ 44,063</u>

		June 30, 2016		
		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	\$ (50,780)	\$ 14,875	\$ (35,905)
	–basis swaps	(7,446)	6,942	(504)
Crude oil	–swaps	(4,108)	5,312	1,204
NGLs	–C2 ethane swaps	(1,252)	201	(1,051)
	–C3 propane swaps	(2,101)	1,391	(710)
	–C3 propane spread swaps	(7,988)	8,394	406
	–NC4 butane swaps	(2,567)	86	(2,481)
	–C5 natural gasoline swaps	(3,165)	2,314	(851)
Freight	–swaps	(34)	34	34
		<u>\$ (79,441)</u>	<u>\$ 39,549</u>	<u>\$ (39,892)</u>

		December 31, 2015		
		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	\$ 219,357	\$ (10,245)	\$ 209,112
	–basis swaps	8,251	(2,765)	5,486
Crude oil	–swaps	38,699	¾	38,699
NGLs	–C3 propane swaps	15,884	¾	15,884
	–C3 propane spread swaps	2,497	(2,497)	¾
	–NC4 butane swaps	6,968	¾	6,968
	–C5 natural gasoline swaps	12,694	(81)	12,613
		<u>\$ 304,350</u>	<u>\$ (15,588)</u>	<u>\$ 288,762</u>

		December 31, 2015		
		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	\$ (10,245)	\$ 10,245	\$ ¾
	–basis swaps	(2,786)	2,765	(21)
NGLs	–C3 propane spread swap	(3,633)	2,497	(1,136)
	–C5 natural gasoline swaps	(81)	81	¾
		<u>\$ (16,745)</u>	<u>\$ 15,588</u>	<u>\$ (1,157)</u>

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

		Three Months Ended June 30,	
		Derivative Fair Value Income (Loss)	
		2016	2015
Commodity swaps		\$ (158,576)	\$ (42,100)
Collars		¾	(1,650)
Basis swaps		(4,199)	8,959
Freight swaps		(23)	¾
Total		<u>\$ (162,798)</u>	<u>\$ (34,791)</u>

		Six Months Ended June 30,	
		Derivative Fair Value Income (Loss)	
		2016	2015
Commodity swaps		\$ (78,931)	\$ 83,676
Collars		¾	6,765
Basis swaps		3,075	(2,393)
Freight swaps		(34)	¾
Total		<u>\$ (75,890)</u>	<u>\$ 88,048</u>

(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 do 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 that are not corroborated by market data and may be used with internally developed methodologies that result in management’s best estimate of 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.

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 table for assets and liabilities measured at fair value, on a recurring basis (in thousands):

	Fair Value Measurements at June 30, 2016 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 June 30, 2016
Trading securities held in the deferred compensation plans	\$ 62,194	\$ —	\$ —	\$ 62,194
Derivatives –swaps	—	4,054	—	4,054
–basis swaps	—	151	—	151
–freight swaps	—	(34)	—	(34)

	Fair Value Measurements at December 31, 2015 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, 2015
Trading securities held in the deferred compensation plans	\$ 62,376	\$ —	\$ —	\$ 62,376
Derivatives –swaps	—	283,276	—	283,276
–basis swaps	—	4,329	—	4,329

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.

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 second quarter 2016, interest and dividends were \$181,000 and the mark-to-market adjustment was a gain of \$1.2 million compared to interest and dividends of \$139,000 and a mark-to-market loss of \$576,000 in second quarter 2015. For the six months ended June 30, 2016, interest and dividends were \$317,000 and the mark-to-market gain was \$1.4 million compared to interest and dividends of \$248,000 and mark-to-market adjustment of a gain of \$832,000 in the same period of 2015.

Fair Values—Non-recurring

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. In the six months ended June 30, 2016, due to declines in commodity prices, there were indicators that the carrying value of certain of our oil and gas properties may be impaired and undiscounted future cash flows attributed to these assets indicated their carrying amounts were not expected to be recovered. Their remaining fair value was measured using an income approach based upon internal estimates of future production levels, prices, drilling and operating costs and discount rates, which are Level 3 measurements. We also considered the potential sale of certain of these properties. We recorded non-cash impairment charges during the six months ended June 30, 2016 of \$43.0 million related to our natural gas and oil properties in Western Oklahoma. Our estimates of future cash flows attributable to our natural gas and oil properties could decline further with commodity prices which may result in additional impairment charges. The following table presents the value of these assets measured at fair value on a non-recurring basis at the time impairment was recorded (in thousands):

	Six Months Ended June 30,			
	2016		2015	
	Fair Value	Impairment	Fair Value	Impairment
Natural gas and oil properties	\$ 90,150	\$ 43,040	\$ ¾	\$ ¾

Fair Values—Reported

The following table presents the carrying amounts and the fair values of our financial instruments as of June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016		December 31, 2015	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Commodity swaps and basis swaps	\$ 44,063	\$ 44,063	\$ 288,762	\$ 288,762
Marketable securities (a)	62,194	62,194	62,376	62,376
(Liabilities):				
Commodity swaps and basis swaps	(39,892)	(39,892)	(1,157)	(1,157)
Bank credit facility (b)	(3,000)	(3,000)	(95,000)	(95,000)
Deferred compensation plan (c)	(158,669)	(158,669)	(122,918)	(122,918)
4.875% senior notes due 2025 (b)	(750,000)	(713,438)	(750,000)	(572,813)
5.75% senior subordinated notes due 2021 (b)	(500,000)	(488,750)	(500,000)	(396,250)
5.00% senior subordinated notes due 2022 (b)	(600,000)	(562,500)	(600,000)	(447,000)
5.00% senior subordinated notes due 2023 (b)	(750,000)	(704,063)	(750,000)	(551,250)

(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 at the closing price on the balance sheet date which is a Level 1 input.

Our current assets and liabilities contain 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. For additional information, see Note 10.

Concentrations of Credit Risk

As of June 30, 2016, 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 security are obtained as deemed necessary to limit our risk of loss. Our allowance for uncollectable receivables was \$4.7 million at June 30, 2016 and \$5.0 million at December 31, 2015. As of June 30, 2016, our derivative contracts consist of swaps. 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 June 30, 2016, our derivative counterparties include twenty-one financial institutions, of which all but five are secured lenders in our bank credit facility. At June 30, 2016, our net derivative assets include a net receivable from these five counterparties that are not included in our bank credit facility of \$1.9 million.

(13) STOCK-BASED COMPENSATION PLANS

Stock-Based Awards

We have one active equity-based stock plan, our Amended and Restated 2005 Equity-Based Incentive Compensation Plan, which we refer to as the 2005 Plan. Under this plan, incentive and non-qualified stock options, SARs, and various other awards may be issued to non-employee directors and employees pursuant to decisions of the Compensation Committee, which is comprised of only non-employee, independent directors. In 2005, we began granting SARs which represent the right to receive a payment equal to the excess of the fair market value of shares of our common stock on the date the right is exercised over the value of the stock on the date of grant. All SARs granted under the 2005 Plan will be settled in shares of stock, vest over a three-year period and have a maximum term of five years from the date they are granted. In 2011, the Compensation Committee of the Board of Directors began granting restricted stock units under our equity-based stock compensation plans. These restricted stock units, which we refer to as restricted stock Equity Awards, vest over a three-year period. All awards granted have been issued at prevailing market prices at the time of grant and the vesting of these shares is based upon an employee's continued employment with us, with the exception of employment termination due to death, disability or retirement.

In first quarter 2014, the Compensation Committee began granting performance share unit ("PSU") awards under our 2005 Plan. The number of shares to be issued is determined by our total shareholder return compared to the total shareholder return of a predetermined group of peer companies over the performance period. The grant date fair value of the PSU awards is determined using a Monte Carlo simulation and is recognized as stock-based compensation expense over the three-year performance period. The actual payout of shares granted depends on our total shareholder return compared to our peer companies and will be between zero and 150%.

The Compensation Committee also grants restricted stock to certain employees and non-employee directors of the Board of Directors as part of their compensation. Upon grant of these restricted shares, which we refer to as restricted stock Liability Awards, the shares generally are placed in our deferred compensation plan and, upon vesting, employees are allowed to take withdrawals either in cash or in stock based on their distribution elections. Compensation expense is recognized over the vesting period, which is typically three years for employee grants and immediate vesting for non-employee directors. All restricted stock awards are issued at prevailing market prices at the time of the grant and vesting is based upon an employee's continued employment with us, with the exception of employment termination due to death, disability or retirement. Prior to vesting, all restricted stock awards have the right to vote such shares and receive dividends thereon. These Liability Awards are classified as a liability and are remeasured at fair value each reporting period. This mark-to-market adjustment is reported as deferred compensation plan expense in the accompanying consolidated statements of operations.

Total Stock-Based Compensation Expense

Stock-based compensation represents amortization of restricted stock, PSUs and SARs expense. 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 table details the allocation of stock-based compensation to functional expense categories (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Direct operating expense	\$ 696	\$ 654	\$ 1,284	\$ 1,540
Brokered natural gas and marketing expense	378	619	894	1,125
Exploration expense	371	751	1,061	1,483
General and administrative expense	15,443	15,953	26,556	27,033
Termination costs	$\frac{3}{4}$	434	$\frac{3}{4}$	1,721
Total stock-based compensation	<u>\$ 16,888</u>	<u>\$ 18,411</u>	<u>\$ 29,795</u>	<u>\$ 32,902</u>

Performance Share Unit Awards

The following is a summary of our non-vested PSU awards outstanding at June 30, 2016:

	Number of Units	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2015	262,124	\$ 64.77
Units granted ^(a)	413,959	36.64
Units vested	(113,041)	52.88
Units forfeited	(42,603)	46.09
Outstanding at June 30, 2016	<u>520,439</u>	<u>\$ 46.51</u>

^(a) Amounts granted reflect the number of performance units granted; however, the actual payout of shares will be between zero percent and 150% of the performance units granted depending on the total shareholder return ranking compared to the peer companies at the end of the three-year performance period.

The following assumptions were used to estimate the fair value of PSUs granted during first six months 2016 and 2015:

	Six Months Ended June 30,	
	2016	2015
Risk-free interest rate	0.94%	1.0%
Expected annual volatility	49%	33%
Weighted average grant date fair value per unit	\$ 36.64	\$ 56.78

We recorded PSU compensation expense of \$5.6 million in first six months 2016 compared to \$4.1 million in the same period of 2015.

Restricted Stock Awards

Equity Awards

In first six months 2016, we granted 940,000 restricted stock Equity Awards to employees at an average grant price of \$28.18 compared to 583,000 restricted stock Equity Awards granted to employees at an average grant price of \$52.45 in first six months 2015. These awards generally vest over a three-year period. We recorded compensation expense for these Equity Awards of \$11.5 million in first six months 2016 compared to \$14.0 million in the same period of 2015. Equity Awards are not issued to employees until they are vested. Employees do not have the option to receive cash.

Liability Awards

In first six months 2016, we granted 456,000 shares of restricted stock Liability Awards as compensation to employees at an average price of \$35.70 with vesting over a three-year period and 52,000 shares were granted to non-employee directors at an average price of \$38.73 with immediate vesting. In first six months 2015, we granted 294,000 shares of Liability Awards as compensation to employees at an average price of \$56.20 with vesting over a three-year period and 39,000 shares were granted to non-employee directors at an average price of \$58.35 with immediate vesting. We recorded compensation expense for Liability Awards of \$11.3 million in first six months 2016 compared to \$11.7 million in the same period of 2015. Substantially all of these awards are held in our deferred compensation plan, are classified as a liability and are remeasured at fair value at the end of each reporting period. This mark-to-market adjustment 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 June 30, 2016:

	Equity Awards		Liability Awards	
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2015	436,764	\$ 59.74	308,737	\$ 65.80
Granted	940,491	28.18	508,206	36.01
Vested	(255,270)	45.79	(214,406)	52.91
Forfeited	(106,120)	43.45	(49,519)	40.33
Outstanding at June 30, 2016	<u>1,015,865</u>	<u>\$ 35.73</u>	<u>553,018</u>	<u>\$ 45.70</u>

Stock Appreciation Right Awards

There were 1.0 million SARs outstanding at June 30, 2016. Information with respect to SARs activity in the six months ended June 30, 2016 is summarized below:

	Shares	Weighted Average Exercise Price
Outstanding at December 31, 2015	1,510,977	\$ 63.73
Exercised	—	—
Expired/forfeited	(507,377)	53.16
Outstanding at June 30, 2016	<u>1,003,600</u>	<u>\$ 69.08</u>

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 mark-to-market loss of \$25.7 million in second quarter 2016 compared to mark-to-market gain of \$7.3 million in second quarter 2015. We recorded a mark-to-market loss of \$41.8 million in first six months 2016 compared to a gain of \$12.9 million in first six months 2015. The Rabbi Trust held 2.8 million shares (2.3 million of which were vested) of Range stock at June 30, 2016 compared to 2.8 million shares (2.5 million of which were vested) at December 31, 2015.

(14) SUPPLEMENTAL CASH FLOW INFORMATION

	Six Months Ended June 30,	
	2016	2015
	(in thousands)	
Net cash provided from operating activities included:		
Income taxes refunded from taxing authorities	\$ (101)	\$ —
Interest paid	69,991	73,189
Non-cash investing and financing activities included:		
Increase in asset retirement costs capitalized	3,740	18,684
Decrease in accrued capital expenditures	(4,741)	(156,897)

(15) COMMITMENTS AND CONTINGENCIES

Litigation

We are the subject of, or party to, a number of pending or threatened legal actions, administrative proceedings and claims arising in the ordinary course of our business. 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. We estimate and provide for potential losses that may arise out of litigation and regulatory proceedings to the extent that such losses are probable and can be reasonably estimated. We will continue to evaluate our litigation and regulatory proceedings quarterly and will establish and adjust any estimated liability as appropriate to reflect our assessment of the then current status of litigation and regulatory proceedings. Significant judgment is required in making these estimates and our final liabilities may ultimately be materially different.

Transportation and Gathering Contracts

In first six months 2016, our transportation and gathering commitments increased by approximately \$1.5 billion over the next sixteen years primarily due to firm transportation contracts for both ethane and propane in connection with the start-up of the Mariner East pipeline and other pricing changes to current contracts. As of June 30, 2016, the increase to future minimum transportation and gathering fees is as follows (in thousands):

	Transportation and Gathering Contracts
2016	\$ 47,668
2017	102,729
2018	103,345
2019	103,905
2020	104,627
Thereafter	1,040,075
	<u>\$ 1,502,349</u>

Delivery Commitments

In first six months 2016, we entered into new agreements with several pipeline companies and end users to deliver natural gas volumes from our production. The new agreements are to deliver from 1,500 to 40,500 Mmbtu per day of natural gas and the commitments are between one and five years and began as early as second quarter 2016.

In the first six months 2016, in connection with the startup of Mariner East, we have contracted to deliver ethane production volumes from our Marcellus Shale wells of 20,000 bbls per day for 15 years.

(16) OFFICE CLOSING AND TERMINATION COSTS

In first quarter 2015, we announced the closing of our Oklahoma City administrative and operational office to reduce our general and administrative expenses, due in part to the impact of lower commodity prices on our operations. In fourth quarter 2014, we initially accrued an estimated \$8.4 million of termination costs relating to the closure of this office as it was probable of occurring. In early 2015, those plans and personnel involved were finalized which resulted in additional accruals in 2015 for severance and other personnel costs of \$275,000, additional accelerated vesting of stock-based compensation of \$608,000 and \$3.2 million of building lease costs. The following summarizes our termination costs for the six months ended June 30, 2016 and 2015 (in thousands):

	Six Months Ended June 30,	
	2016	2015
Termination costs	\$ —	\$ 1,414
Building lease	167	3,232
Stock-based compensation	—	1,721
Total termination costs	<u>\$ 167</u>	<u>\$ 6,367</u>

The following details our accrued liability as of June 30, 2016 (in thousands):

	June 30, 2016
Beginning balance at December 31, 2015	\$ 11,630
Accrued building rent	167
Payments	(7,901)
Ending balance at June 30, 2016	<u>\$ 3,896</u>

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

	June 30, 2016	December 31, 2015
	(in thousands)	
Natural gas and oil properties:		
Properties subject to depletion	\$ 8,074,869	\$ 8,047,181
Unproved properties	930,142	949,155
Total	9,005,011	8,996,336
Accumulated depreciation, depletion and amortization	(2,864,358)	(2,635,031)
Net capitalized costs	<u>\$ 6,140,653</u>	<u>\$ 6,361,305</u>

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

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

	Six Months Ended June 30, 2016	Year Ended December 31, 2015
	(in thousands)	
Acreage purchases	\$ 8,873	\$ 73,025
Development	219,386	708,268
Exploration:		
Drilling	30,914	87,505
Expense	10,637	18,421
Stock-based compensation expense	1,061	2,985
Gas gathering facilities:		
Development	1,054	13,337
Subtotal	271,925	903,541
Asset retirement obligations	3,740	22,184
Total costs incurred	<u>\$ 275,665</u>	<u>\$ 925,725</u>

(a) Includes costs incurred whether capitalized or expensed.

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

The following discussion is intended to assist you in understanding our business and results of operations together with our present financial condition. 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, 2015, as filed with the SEC on February 25, 2016.

Overview of Our Business

We are a Fort Worth, Texas-based independent natural gas, natural gas liquids ("NGLs") and oil company engaged in the exploration, development and acquisition of natural gas and oil properties primarily 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 an area-by-area basis. Our overarching business objective is to build stockholder value through consistent growth in reserves and production on a cost-efficient basis. Our strategy to achieve our business objective is to increase reserves and production through internally generated drilling projects occasionally coupled with complementary acquisitions and divestitures of non-core assets. Our revenues, profitability and future growth depend substantially on prevailing prices for natural gas, NGLs, crude oil and condensate and on our ability to economically find, develop, acquire and produce natural gas, NGLs and crude oil reserves. Natural gas and crude oil prices continue to be depressed. 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 amount of cash flows available for capital expenditures; and
- our ability to borrow and raise additional capital.

We prepare our financial statements in conformity with generally accepted accounting principles, which require 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, NGLs and oil reserves. We use the successful efforts method of accounting for our natural gas, NGLs and oil activities.

Market Conditions

Prices for our products significantly impact our revenue, net income and cash flow. Natural gas, NGLs and oil are commodities and prices for these commodities are inherently volatile. Since year-end 2015, prices have remained under pressure given the current oversupply of such commodities. The following table lists average New York Mercantile Exchange ("NYMEX") prices for natural gas and oil and the Mont Belvieu NGL composite price for the three months ended and six months ended June 30, 2016 and 2015:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Average NYMEX prices (a)				
Natural gas (per mcf)	\$ 1.95	\$ 2.64	\$ 2.02	\$ 2.81
Oil (per bbl)	45.31	57.88	39.45	53.14
Mont Belvieu NGLs composite (per gallon) (b)	0.41	0.41	0.37	0.42

(a) Based on weighted average of bid week prompt month prices.

(b) Based on our estimated NGLs product component per barrel.

Proposed Memorial Merger

On May 15, 2016, Range and Memorial Resource Development Corp. (“Memorial”) entered into an Agreement and Plan of Merger (the “Merger Agreement”) which provides for the Merger of Memorial and Range. Pursuant to the terms of the Merger Agreement, a wholly-owned subsidiary of Range will merge with and into Memorial, with Memorial surviving as a wholly-owned subsidiary of Range (the “Merger”). In order to complete the Merger, among other conditions, Range stockholders must approve the issuance of Range common stock to Memorial stockholders in connection with the Merger and Memorial stockholders must approve and adopt the Merger Agreement and the transactions contemplated by the Merger Agreement.

If the Merger is completed, each share of Memorial common stock outstanding immediately before that time (including outstanding shares of restricted Memorial common stock, all of which will become fully vested and unrestricted under the terms of the Merger Agreement) will automatically be converted into the right to receive 0.375 of a share of Range common stock. This exchange ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. Based on the closing price of Range common stock on the NYSE on May 13, 2016, the last trading day before public announcement of the Merger, the aggregate equity value of the Merger consideration payable to Memorial stockholders was approximately \$3.2 billion. We may choose to use the availability under our current bank credit facility to complete the proposed Merger which includes the repayment of Memorial’s credit facility and the redemption of Memorial’s senior notes.

Based on the estimated number of shares of Range and Memorial common stock that will be outstanding immediately prior to the closing of the Merger, we estimate that, upon such closing, existing Range stockholders will own approximately 69% of Range’s outstanding shares and former Memorial stockholders will own approximately 31% of Range’s outstanding shares.

At a special meeting of Range stockholders, which is currently expected to be held on September 15, 2016, Range stockholders will be asked to vote on the proposal to approve the issuance of shares of Range common stock to Memorial stockholders in connection with the Merger. Approval of this proposal requires the affirmative vote of a majority of the shares of Range common stock, present in person or represented by proxy at the Range special meeting and entitled to vote thereon, assuming a quorum is present, assuming a quorum is present. The record date for the special meeting is expected to be August 10, 2016.

At a special meeting of Memorial stockholders, Memorial stockholders will be asked to vote on a proposal to approve and adopt the Merger Agreement and the transactions contemplated by the Merger Agreement, including the Merger. Approval of this proposal requires the affirmative vote of a majority of the outstanding shares of Memorial common stock entitled to vote thereon, assuming a quorum is present. At the special meeting, Memorial stockholders will also be asked to approve, on an advisory (non-binding) basis, the compensation that may be paid or become payable to Memorial’s named executive officers in connection with the Merger.

The foregoing description of the Merger Agreement is only a summary, does not purport to be complete and is qualified in its entirety by reference to the Merger Agreement, which is filed hereto as Exhibit 2.1 and is incorporated herein by reference.

Consolidated Results of Operations

Overview of Second Quarter 2016 Results

During second quarter 2016, we achieved the following financial and operating results:

- 4% production growth over the same period of 2015;
- revenue from the sale of natural gas, NGLs and oil decreased 13% from the same period of 2015 with a 38% decline in average realized prices partially offset by an increase in production volumes;
- revenue realized from the sale of natural gas, NGLs and oil including cash settlements on our derivatives declined 16% from the same period of 2015;
- continued expansion of our activities in the Marcellus Shale in Pennsylvania by growing production, proving up acreage and acquiring additional unproved acreage;
- reduced direct operating expenses per mcf by 43% from the same period of 2015;
- reduced general and administrative expense per mcf 20% from the same period of 2015;
- reduced interest expense per mcf 17% from the same period of 2015;
- reduced our depletion, depreciation and amortization (“DD&A”) rate per mcf by 22% from the same period of 2015;
- entered into additional derivative contracts for 2016, 2017 and 2018; and
- realized \$82.2 million of cash flow from operating activities.

Our financial results have been significantly impacted by lower commodity prices. We experienced a decrease in revenue from the sale of natural gas, NGLs and oil due to a 38% decrease in realized prices (average prices including all derivative settlements and

third party transportation costs paid by us) partially offset by 4% higher production volumes when compared to second quarter 2015. During second quarter 2016, we recognized a net loss of \$224.9 million, or \$1.35 per diluted common share, compared to net loss of \$118.6 million, or \$0.71 per diluted common share, during second quarter 2015.

Overview of the First Six Months 2016 Results

During the six months ended June 30, 2016, we achieved the following financial and operating results:

- 4% production growth from the same period of 2015;
- revenue from the sale of natural gas, NGLs and oil decreased 26% from the same period of 2015 with a 41% decline in average sale prices partially offset by our increase in production volumes;
- revenue from the sale of natural gas, NGLs and oil including cash settlements on our derivatives limited the decline to 20% from the same period of 2015;
- reduced direct operating expense per mcf by 38% from the same period of 2015;
- reduced general and administrative expense per mcf 21% from the same period of 2015;
- reduced interest expense per mcf 12% from the same period of 2015;
- reduced our DD&A rate by 22% from the same period of 2015;
- entered into additional derivative contracts for 2016, 2017 and 2018; and
- realized \$169.6 million of cash flow from operating activities.

For the six months ended June 30, 2016, we recognized a net loss of \$316.6 million, or \$1.90 per diluted common share compared to net loss of \$90.9 million or \$0.55 per diluted common share in the same period of 2015. In the first six months 2016, we experienced a decrease in revenue from the sale of natural gas, NGLs and oil due to a 41% decrease in realized prices partially offset by 4% 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. We generally sell natural gas, NGLs and oil under two types of agreements, which are common in our industry. Both types include transportation charges. One type of agreement is a netback agreement, under which we sell natural gas or oil at the wellhead and collect a price, net of transportation costs incurred by the purchaser. In this case, we record revenue at the price we receive from the purchaser. In the case of NGLs, in some cases, we receive a net price from the purchaser (which is net of processing costs) which is also recorded as revenue at the net price we receive from the purchaser. Under the other type of agreement, we sell natural gas, NGLs or oil at a specific delivery point, pay transportation to a third party and receive proceeds from the purchaser with no transportation cost deduction. In that case, we record transportation costs we pay to third parties as transportation, gathering and compression expense.

In second quarter 2016, natural gas, NGLs and oil sales decreased 13% compared to second quarter 2015 with a 16% decrease in average realized prices partially offset by a 4% increase in production. In the six months ended June 30, 2016 natural gas, NGLs and oil sales decreased 26% compared to the same period 2015 with a 29% decrease in average realized prices partially offset by a 4% increase in production. The following table illustrates the primary components of natural gas, NGLs, oil and condensate sales for the three and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Natural gas, NGLs and oil sales								
Gas	\$ 124,187	\$ 171,664	\$ (47,477)	(28%)	\$ 266,622	\$ 400,404	\$ (133,782)	(33%)
NGLs	73,456	40,945	32,511	79%	123,618	100,756	22,862	23%
Oil	26,963	45,444	(18,481)	(41%)	43,853	82,376	(38,523)	(47%)
Total natural gas, NGLs and oil sales	<u>\$ 224,606</u>	<u>\$ 258,053</u>	<u>\$ (33,447)</u>	(13%)	<u>\$ 434,093</u>	<u>\$ 583,536</u>	<u>\$ (149,443)</u>	(26%)

Our production continues to grow through drilling success as we place new wells on production but is partially offset by the natural production decline of our natural gas and oil wells and non-core asset sales. When compared to the same period of 2015, our second quarter 2016 production volumes increased 6% in our Appalachian region, despite the sale of our Virginia and West Virginia properties at the end of 2015. Production volumes from the Marcellus Shale in second quarter 2016 were 1.4 Bcfe per day. When compared to the same period of 2015, our Marcellus production volumes increased 16% for second quarter 2016. For the six months ended June 30, 2016, our production volumes increased 7% in our Appalachian region when compared to the same period of 2015. Production volumes from the Marcellus Shale for the six months ended June 30, 2016 were 1.3 Bcfe per day. When compared to the same period of 2015, our Marcellus production volumes increased 17%. Our production for the three months ended and six months ended June 30, 2016 and 2015 is set forth in the following table:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Production (a)								
Natural gas (mcf)	82,997,371	87,737,330	(4,739,959)	(5%)	167,864,741	168,237,366	(372,625)	¾%
NGLs (bbls)	6,865,948	5,105,127	1,760,821	34%	12,840,682	10,464,403	2,376,279	23%
Crude oil (bbls)	849,538	1,089,417	(239,879)	(22%)	1,693,879	2,228,377	(534,498)	(24%)
Total (mcfe) (b)	129,290,287	124,904,594	4,385,693	4%	255,072,107	244,394,046	10,678,061	4%
Average daily production (a)								
Natural gas (mcf)	912,059	964,146	(52,087)	(5%)	922,334	929,488	(7,154)	(1%)
NGLs (bbls)	75,450	56,100	19,350	34%	70,553	57,814	12,739	22%
Crude oil (bbls)	9,336	11,972	(2,636)	(22%)	9,307	12,311	(3,004)	(24%)
Total (mcfe) (b)	1,420,772	1,372,578	48,194	4%	1,401,495	1,350,243	51,252	4%

(a) Represents volumes sold regardless of when produced.

(b) Oil and NGLs 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 second quarter 2016 was \$1.44 per mcfe compared to \$2.31 per mcfe in second quarter 2015. Our average realized price received (including all derivative settlements and third party transportation costs) was \$1.49 per mcfe in the six months ended June 30, 2016 compared to \$2.54 per mcfe in the same period of the prior year. Although we record transportation costs on two separate bases, as required by U.S. GAAP, we believe computed final realized prices should include the total impact of transportation, gathering 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 and compression expense on the accompanying consolidated statements of operations. Average realized prices (excluding derivative settlements) do include transportation costs where we receive net revenue proceeds from purchasers.

Realized prices include the impact of basis differentials. The price 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. Average natural gas differentials were \$0.45 per mcf below NYMEX in second quarter 2016 compared to \$0.68 per mcf below NYMEX in second quarter 2015. We also realized losses on our basis hedging in second quarter 2016 of \$0.03 per mcf compared to a realized gain of \$0.02 per mcf in second quarter 2015. Average natural gas differentials were \$0.43 per mcf below NYMEX in both the first six months of 2016 and 2015. We also realized gains on basis hedging of \$0.04 per mcf in the first six months of 2016 compared to a loss of \$0.04 per mcf in the first six months of 2015. Average realized price calculations for the three months ended and six months June 30, 2016 and 2015 are shown below:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Average Prices								
Average realized prices (excluding derivative settlements):								
Natural gas (per mcf)	\$ 1.50	\$ 1.96	\$ (0.46)	(23%)	\$ 1.59	\$ 2.38	\$ (0.79)	(33%)
NGLs (per bbl)	10.70	8.02	2.68	33%	9.63	9.63	¾	¾
Crude oil and condensate (per bbl)	31.74	41.71	(9.97)	(24%)	25.89	36.97	(11.08)	(30%)
Total (per mcfe) ^(a)	1.74	2.07	(0.33)	(16%)	1.70	2.39	(0.69)	(29%)
Average realized prices (including all derivative settlements):								
Natural gas (per mcf)	\$ 2.52	\$ 2.95	\$ (0.43)	(15%)	\$ 2.60	\$ 3.23	\$ (0.63)	(20%)
NGLs (per bbl)	11.57	9.97	1.60	16%	10.94	11.12	(0.18)	(2%)
Crude oil and condensate (per bbl)	40.48	67.60	(27.12)	(40%)	37.99	65.79	(27.80)	(42%)
Total (per mcfe) ^(a)	2.50	3.07	(0.57)	(19%)	2.52	3.30	(0.78)	(24%)
Average realized prices (including all derivative settlements and third party transportation costs paid by Range):								
Natural gas (per mcf)	\$ 1.36	\$ 2.00	\$ (0.64)	(32%)	\$ 1.48	\$ 2.28	\$ (0.80)	(35%)
NGLs (per bbl)	5.67	7.65	(1.98)	(26%)	5.24	8.75	(3.51)	(40%)
Crude oil and condensate (per bbl)	40.48	67.60	(27.12)	(40%)	37.99	65.79	(27.80)	(42%)
Total (per mcfe) ^(a)	1.44	2.31	(0.87)	(38%)	1.49	2.54	(1.05)	(41%)

(a) Oil and NGLs 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.

Transportation, gathering and compression expense was \$136.8 million in second quarter 2016 compared to \$95.2 million in second quarter 2015. Transportation, gathering, and compression expense was \$262.1 million in the six months ended June 30, 2016 compared to \$184.6 million in the same period of 2015. These third party costs are higher than 2015 due to our production growth in the Marcellus Shale where we have third party gathering, compression and transportation agreements. In addition, first six months 2016 includes additional expenses related the commencement of a new NGL pipeline project where we are able to sell both ethane and propane for export internationally. Also included are additional ethane pipeline capacity charges for ethane transportation to the Gulf Coast. 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 and compression expense for the three months and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Natural gas	\$ 96,298	\$ 83,331	\$ 12,967	16%	\$ 188,890	\$ 159,858	\$ 29,032	18%
NGLs	40,546	11,867	28,679	242%	73,217	24,766	48,451	196%
	<u>\$ 136,844</u>	<u>\$ 95,198</u>	<u>\$ 41,646</u>	44%	<u>\$ 262,107</u>	<u>\$ 184,624</u>	<u>\$ 77,483</u>	42%

Derivative fair value (loss) income was a loss of \$162.8 million in second quarter 2016 compared to a loss of \$34.8 million in second quarter 2015. Derivative fair value (loss) income was a loss of \$75.9 million compared to a gain of \$88.0 million in the same period of 2015. 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 lower wellhead revenues in the future while losses indicate higher future wellhead revenues. The following table summarizes the impact of our commodity derivatives for the three months and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Derivative fair value (loss) income per consolidated statements of operations	\$ (162,798)	\$ (34,791)	\$ (75,890)	\$ 88,048
Non-cash fair value (loss) gain: ⁽¹⁾				
Natural gas derivatives	\$ (217,534)	\$ (99,274)	\$ (220,480)	\$ (64,984)
Oil derivatives	(20,828)	(51,734)	(30,335)	(66,620)
NGL derivatives	(22,491)	(9,009)	(32,585)	(3,064)
Freight derivatives	(23)	34	(34)	34
Total non-cash fair value (loss) gain ⁽¹⁾	\$ (260,876)	\$ (160,017)	\$ (283,434)	\$ (134,668)
Net cash receipt on derivative settlements:				
Natural gas derivatives	\$ 84,648	\$ 87,059	\$ 170,163	\$ 142,928
Oil derivatives	7,427	28,201	20,500	64,227
NGL derivatives	6,003	9,966	16,881	15,561
Total net cash receipt (payment)	\$ 98,078	\$ 125,226	\$ 207,544	\$ 222,716

(1) Non-cash fair value adjustments on commodity derivatives is a non-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 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 second quarter 2016 was \$40.0 million compared to \$21.3 million in second quarter 2015 with significantly higher brokered natural gas volumes and slightly higher average sales prices. In second quarter 2016, we also received \$5.8 million from the sale of brokered propane and ethane volumes compared to no revenue from such sales in the same period of the prior year. The second quarter 2015 included \$2.1 million of gathering, marketing and broker revenue from our Virginia and West Virginia properties which we sold in fourth quarter 2015. Brokered natural gas, marketing and other revenues in the first six months 2016 was \$75.0 million compared to \$35.8 million in the same period of the prior year with significantly higher brokered natural gas volumes offset by slightly lower average sales prices. In the six months ended June 30, 2016, we also received \$8.9 million from the sale of brokered propane and ethane compared to no revenue from such sales in the same period of 2015. The six months ended June 30, 2015 included \$4.2 million of gathering, marketing and broker revenue from our Virginia and West Virginia properties we sold in fourth quarter 2015.

Operating Costs Per mcf

We believe some of our expense fluctuations are best analyzed on a unit-of-production, or per mcf, basis. The following presents information about certain of our expenses on a per mcf basis for the three months and six months ended June 30, 2016 and 2015:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Direct operating expense	\$ 0.16	\$ 0.28	\$ (0.12)	(43%)	\$ 0.18	\$ 0.29	\$ (0.11)	(38%)
Production and ad valorem tax expense	0.05	0.07	(0.02)	(29%)	0.05	0.08	(0.03)	(38%)
General and administrative expense	0.36	0.45	(0.09)	(20%)	0.34	0.43	(0.09)	(21%)
Interest expense	0.29	0.35	(0.06)	(17%)	0.30	0.34	(0.04)	(12%)
Depletion, depreciation and amortization expense	0.95	1.22	(0.27)	(22%)	0.95	1.22	(0.27)	(22%)

Direct operating expense was \$20.7 million in second quarter 2016 compared to \$34.8 million in second quarter 2015. Direct operating expenses include normally recurring expenses to operate and produce our wells, non-recurring well workovers and repair-related expenses. Our production volumes increased 4% but, on an absolute basis, our spending for direct operating expenses for second quarter 2016 declined 41% from the prior year quarter. Our direct operating costs have declined as a result of our cost reduction efforts and the sale of non-core assets. We have experienced cost decreases in most categories of direct operating expenses including lower well service costs, lower personnel expenses, lower water handling and disposal costs, lower workover costs and lower utilities. We incurred \$55,000 of workover costs in second quarter 2016 compared to \$1.4 million in second quarter 2015.

On a per mcf basis, direct operating expense in second quarter 2016 decreased 43% from the same period of 2015 with the decrease consisting of lower well service costs, lower water handling and disposal costs, lower personnel costs and lower workovers. We expect to experience lower costs per mcf as we increase production from our Marcellus Shale wells due to their lower operating cost, especially in the dry area of the play, relative to our other operating areas.

Direct operating expense was \$44.7 million in the six months ended June 30, 2016 compared to \$71.9 million in the same period of 2015. Our production volumes increased 4% but, on an absolute basis, our spending for direct operating expenses decreased 38% from the same period of the prior year. We have experienced cost decreases in most categories of direct operating expenses due to our cost cutting measures and the sale of certain non-core assets. We incurred \$1.4 million of workover costs in the six months ended June 30, 2016 compared to \$2.5 million in the same period of 2015.

On a per mcfe basis, direct operating expense in the six months ended June 30, 2016 decreased 38% to \$0.18 from \$0.29 in the same period of 2015, with the decrease consisting of lower well service costs, lower water handling and disposal costs and lower field personnel costs. Stock-based compensation expense represents the amortization of restricted stock grants as part of the compensation of field employees.

The following table summarizes direct operating expenses per mcfe for the three months ended and six months ended June 30, 2016 and 2015:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Lease operating expense	\$ 0.15	\$ 0.26	\$ (0.11)	(42%)	\$ 0.16	\$ 0.27	\$ (0.11)	(41%)
Workovers	$\frac{3}{4}$	0.01	(0.01)	(100%)	0.01	0.01	$\frac{3}{4}$	$\frac{3}{4}$ %
Stock-based compensation (non-cash)	0.01	0.01	$\frac{3}{4}$	$\frac{3}{4}$	0.01	0.01	$\frac{3}{4}$	$\frac{3}{4}$ %
Total direct operating expense	<u>\$ 0.16</u>	<u>\$ 0.28</u>	<u>\$ (0.12)</u>	<u>(43%)</u>	<u>\$ 0.18</u>	<u>\$ 0.29</u>	<u>\$ (0.11)</u>	<u>(38%)</u>

Production and ad valorem taxes are paid based on market prices, not hedged prices. This expense category also includes the Pennsylvania impact fee. Production and ad valorem taxes (excluding the impact fee) were \$426,000 in second quarter 2016 compared to \$2.8 million in second quarter 2015. On a per mcfe basis, production and ad valorem taxes (excluding the impact fee) were \$0.01 in second quarter 2016 compared to \$0.02 in second quarter 2015 due to an increase in volumes not subject to production or ad valorem taxes and lower prices. 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. Included in second quarter 2016 is a \$5.6 million impact fee (\$0.04 per mcfe) compared to \$6.5 million (\$0.05 per mcfe) in second quarter 2015.

Production and ad valorem taxes (excluding the impact fee) were \$952,000 (\$0.01 per mcfe) in the first six months 2016 compared to \$6.6 million (\$0.03 per mcfe) in the same period of 2015 due to lower prices and an increase in volumes not subject to production taxes. Included in the first six months 2016 is \$11.0 million (\$0.04 per mcfe) impact fee compared to \$12.6 million (\$0.05 per mcfe) in the same period of 2015.

General and administrative ("G&A") expense was \$46.1 million in second quarter 2016 compared to \$56.0 million for second quarter 2015. The second quarter 2016 decrease of \$9.9 million when compared to the same period of 2015 is primarily due to lower salaries and benefits, lower stock-based compensation, lower legal expenses, lower public relations costs and lower office expenses. At June 30, 2016, the number of G&A employees declined 19% when compared to June 30, 2015. G&A expense for the six months ended June 30, 2016 decreased \$17.6 million when compared to the same period prior year due to lower salaries and benefits, lower stock-based compensation, lower public relations costs and lower legal expenses. On a per mcfe basis, second quarter 2016 G&A expense decreased 20% from second quarter 2015 and 21% from the six months ended June 30, 2015. The following table summarizes G&A expenses per mcfe for the three months ended and six months ended June 30, 2016 and 2015:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
General and administrative	\$ 0.24	\$ 0.32	\$ (0.08)	(25%)	\$ 0.24	\$ 0.32	\$ (0.08)	(25%)
Stock-based compensation (non-cash)	0.12	0.13	(0.01)	(8%)	0.10	0.11	(0.01)	(9%)
Total general and administrative expense	<u>\$ 0.36</u>	<u>\$ 0.45</u>	<u>\$ (0.09)</u>	<u>(20%)</u>	<u>\$ 0.34</u>	<u>\$ 0.43</u>	<u>\$ (0.09)</u>	<u>(21%)</u>

Interest expense was \$37.8 million for second quarter 2016 compared to \$43.5 million for second quarter 2015 and was \$75.5 million in the six months ended 2016 compared to \$82.7 million in the six months ended June 30, 2015. The following table presents information about interest expense per mcfe for the three months and six months ended June 30, 2016 and 2015:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Bank credit facility	\$ 0.02	\$ 0.03	\$ (0.01)	(33%)	\$ 0.02	\$ 0.04	\$ (0.02)	(50%)
Senior notes	0.07	0.04	0.03	75%	0.07	0.02	0.05	250%
Subordinated notes	0.19	0.26	(0.07)	(27%)	0.19	0.27	(0.08)	(30%)
Amortization of deferred financing costs and other	0.01	0.02	(0.01)	(50%)	0.02	0.01	0.01	100%
Total interest expense	\$ 0.29	\$ 0.35	\$ (0.06)	(17%)	\$ 0.30	\$ 0.34	\$ (0.04)	(12%)
Average debt outstanding (in thousands)	\$ 2,691,758	\$ 3,427,857	\$ (736,099)	(21%)	\$ 2,714,725	\$ 3,328,331	\$ (613,606)	(18%)
Average interest rate ^(a)	5.3%	4.9%	0.6%	12%	5.3%	4.8%	0.5%	10%

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

On an absolute basis, the decrease in interest expense for second quarter 2016 from the same period of 2015 was primarily due to lower average outstanding debt balances somewhat offset by higher average interest rates. In August 2015, we redeemed all of our \$500.0 million 6.75% senior subordinated notes due 2020. In May 2015, we issued \$750.0 million of 4.875% senior notes due 2025. Average debt outstanding on the bank credit facility for second quarter 2016 was \$91.7 million compared to \$682.8 million in second quarter 2015 and the weighted average interest rate on the bank credit facility was 2.8% in second quarter 2016 compared to 1.7% in second quarter 2015.

On an absolute basis, the decrease in interest expense for the six months ended June 30, 2016 from the same period of 2015 was primarily due to lower average outstanding debt balances somewhat offset by higher average interest rates. Average debt outstanding on the bank credit facility was \$114.7 million for the six months ended June 30, 2016 compared to \$780.3 million for the same period of 2015 and the weighted average interest rate on the bank credit facility was 2.4% in the six months ended June 30, 2016 compared to 1.7% in the same period of 2015.

Depletion, depreciation and amortization (“DD&A”) expense was \$122.4 million in second quarter 2016 compared to \$151.9 million in second quarter 2015. This decrease is due to a 22% decrease in depletion rates somewhat offset by a 4% increase in production volumes. Depletion expense, the largest component of DD&A expense, was \$0.90 per mcfe in second quarter 2016 compared to \$1.15 per mcfe in second quarter 2015. 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 our production from our properties with lower depletion rates, impairment of properties in 2015 and early 2016 which reduced our carrying values and asset sales.

DD&A expense was \$243.0 million in the six months ended June 30, 2016 compared to \$299.2 million in the same period of 2015. This decrease is due to a 22% decrease in depletion rates somewhat offset by a 4% increase in production volumes. Depletion expense was \$0.91 per mcfe in the six months ended June 30, 2016 compared to \$1.16 per mcfe in the same period of 2015. The following table summarizes DD&A expense per mcfe for the three months and the six months ended June 30, 2016 and 2015:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Depletion and amortization	\$ 0.90	\$ 1.15	\$ (0.25)	(22%)	\$ 0.90	\$ 1.16	\$ (0.26)	(22%)
Depreciation	0.02	0.03	(0.01)	(33%)	0.02	0.02	¾	¾%
Accretion and other	0.03	0.04	(0.01)	(25%)	0.03	0.04	(0.01)	(25%)
Total DD&A expense	\$ 0.95	\$ 1.22	\$ (0.27)	(22%)	\$ 0.95	\$ 1.22	\$ (0.27)	(22%)

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, Memorial merger expenses, termination costs, deferred compensation plan expenses and impairment of proved properties. Stock-based compensation includes the amortization of restricted stock grants, PSUs and SARs grants. The following table details the allocation of stock-based compensation to functional expense categories for the three months and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Direct operating expense	\$ 696	\$ 654	\$ 1,284	\$ 1,540
Brokered natural gas and marketing expense	378	619	894	1,125
Exploration expense	371	751	1,061	1,483
General and administrative expense	15,443	15,953	26,556	27,033
Termination costs	¾	434	¾	1,721
Total stock-based compensation	<u>\$ 16,888</u>	<u>\$ 18,411</u>	<u>\$ 29,795</u>	<u>\$ 32,902</u>

Brokered natural gas and marketing expense was \$40.9 million in second quarter 2016 compared to \$27.0 million in second quarter 2015. The increase reflects significantly higher brokered natural gas volumes, higher purchase prices and \$5.5 million of brokered propane and ethane purchases somewhat offset by lower expenses related to company owned gathering lines (which were sold in fourth quarter 2015). Brokered natural gas and marketing expense was \$77.5 million for the six months ended June 30, 2016 compared to \$48.6 million in the same period of 2015. The increase reflects significantly higher brokered natural gas volumes and \$8.5 million of brokered propane and ethane purchases somewhat offset by lower expenses related to company owned gathering lines (which were sold in fourth quarter 2015) and lower purchase prices.

Exploration expense was \$6.8 million in second quarter 2016 compared to \$5.0 million in second quarter 2015 due to higher seismic and delay rental costs. Exploration expense was \$11.7 million in the six months ended June 30, 2016 compared to \$12.9 million in the same period of 2015 due to lower personnel expense partially offset by higher delay rentals. The following table details our exploration related expenses for the three months and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2016	2015	Change	%	2016	2015	Change	%
Seismic	\$ 1,030	\$ 151	\$ 879	582%	\$ 1,181	\$ 1,575	\$ (394)	(25%)
Delay rentals and other	2,803	1,026	1,777	173%	4,628	2,758	1,870	(68%)
Personnel expense	2,581	3,094	(513)	(17%)	4,828	6,989	(2,161)	(31%)
Stock-based compensation expense	371	751	(380)	(51%)	1,061	1,483	(422)	(28%)
Dry hole expense	¾	3	(3)	100%	¾	106	(106)	(100%)
Total exploration expense	<u>\$ 6,785</u>	<u>\$ 5,025</u>	<u>\$ 1,760</u>	35%	<u>\$ 11,698</u>	<u>\$ 12,911</u>	<u>\$ (1,213)</u>	(9%)

Abandonment and impairment of unproved properties was \$7.1 million in second quarter 2016 compared to \$12.3 million in second quarter 2015. Abandonment and impairment of unproved properties was \$17.7 million in the six months ended June 30, 2016 compared to \$23.8 million in the same period of 2015. We assess individually significant unproved properties for impairment on a quarterly basis and recognize a loss where circumstances indicate impairment in value. In determining whether a significant unproved property is impaired we consider numerous factors including, but not limited to, current exploration plans, favorable or unfavorable activity on the property being evaluated and/or adjacent properties, our geologists' evaluation of the property and the remaining months in the lease term for the property. Impairment of individually insignificant unproved properties is assessed and amortized on an aggregate basis based on our average holding period, expected forfeiture rate and anticipated drilling success. As we continue to review our acreage positions and high grade our drilling inventory based on the current price environment, additional leasehold impairments and abandonments may be recorded.

Memorial merger expenses of \$2.6 million represents amounts paid through June 30, 2016 in connection with the proposed merger with Memorial Resources including consulting, investment banking, advisory, legal and other merger-related fees. See "Proposed Memorial Merger."

Termination costs were \$5,000 for the three months ended June 30, 2016 compared to \$417,000 in the same period of 2015. Termination costs were \$167,000 for six months ended June 30, 2016 compared to \$6.4 million in the same period of 2015. In the six months ended June 30, 2016, these costs represent additional building lease costs related to the closing of our Oklahoma City office. In 2015, these costs included \$3.2 million of accrued building lease costs for our Oklahoma City office, additional severance and stock-based compensation or accelerated vesting of restricted stock grants for both our Oklahoma City office employees and other areas where we determined a need to reduce personnel due to the commodity price environment.

Deferred compensation plan expense was a loss of \$25.7 million in second quarter 2016 compared to a gain of \$7.3 million in second quarter 2015. 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 \$32.38 at March 31, 2016 to \$43.14 at June 30, 2016. In the same quarter of the prior year, our stock price decreased from \$52.04 at March 31, 2015 to \$49.38 at June 30, 2015. During the six months ended June 30, 2016, deferred compensation was a loss of \$41.8 million compared to a gain of \$12.9 million in the same period of 2015. Our stock price increased from \$24.61 at December 31, 2015 to \$43.14 at June 30, 2016. In the same period of 2015, our stock price decreased from \$53.45 at December 31, 2014 to \$49.38 at June 30, 2015.

Impairment of proved properties was \$43.0 million in the six months ended June 30, 2016. We assess our proved natural gas and oil properties whenever events or circumstances indicate the carrying value of these assets may not be recoverable. The cash flows we use to assess proved property impairment includes numerous assumptions including (1) future reserve adjustments, both positive and negative, to proved reserves and appropriate risk-adjusted probable and possible reserves (2) results of future drilling activities (3) future commodity prices and (4) increases or decreases in production and capital costs. All inputs are evaluated at each measurement date. In the six months ended June 30, 2016, impairment expense was recorded related to certain of our oil and gas properties in Oklahoma. Due to falling commodity prices, our analysis of these properties, which included the possibility of a sale of certain of these properties, we determined that undiscounted future cash flows were less than their carrying values.

Loss on the sale of assets was \$3.3 million in second quarter 2016 compared to a gain of \$2.9 million in second quarter 2015. Loss on the sale of assets was \$4.9 million in the six month period ending June 30, 2016 compared to a gain of \$2.7 million for the same period of 2015. In second quarter 2016, we sold certain properties in Western Oklahoma for proceeds of \$77.7 million and we recorded a \$2.7 million loss, after closing adjustments. In first quarter 2016, we sold our non-operated interest in certain wells and gathering facilities in Northeast Pennsylvania for proceeds of \$111.5 million and, after closing adjustments, we recognized a loss of \$2.1 million related to this sale. In second quarter 2015, we sold miscellaneous unproved properties and inventory for proceeds of \$3.6 million resulting in a gain of \$2.9 million. In first quarter 2015, we sold miscellaneous unproved and proved properties along with inventory for proceeds of \$10.7 million and recognized a loss of \$175,000.

Income tax benefit was \$129.5 million in second quarter 2016 compared to \$62.0 million in second quarter 2015. For the second quarter, the effective tax rate was 36.5% in 2016 compared to 34.3% in 2015. Income tax benefit was \$173.5 million in the six months ended June 30, 2016 compared to \$39.6 million in the same period of 2015. For the six months ended June 30, 2016 the effective tax rate was 35.4% compared to 30.3% in the six months ended June 30, 2015. In second quarter and the six months ended 2016, we increased our valuation allowances for state net operating loss carryforwards we do not believe are realizable, increased our valuation allowance related for our deferred tax asset related to future deferred compensation plan distributions of our senior executives and recorded additional tax expense related to the tax impact of excess financial accounting compensation expense over the corresponding corporate income tax deduction for equity compensation awards that have fully vested. There is no additional paid-in capital pool available to offset these reduced tax benefits. The 2016 and 2015 effective tax rates were different than the statutory tax rate due to state income taxes, permanent differences, changes in our valuation allowances related to deferred tax assets associated with senior executives to the extent their estimated future compensation, which includes distributions from the deferred compensation plan, is expected to exceed the \$1.0 million annual deductible limit provided under section 162(m) of the Internal Revenue Code and changes to our valuation allowances related to state net operating loss carryforwards. We expect our effective tax rate to be approximately 39% for the remainder of 2016, before any 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 the following year) 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 June 30, 2016, we have entered into hedging agreements covering 167.4 Bcfe for the remainder of 2016, 135.1 Bcfe for 2017 and 25.6 Bcfe for 2018. We have also entered into natural gas

basis hedges for 64,125,000 Mmbtus through December 2017 and propane spread swaps for 1,162,500 barrels in 2016 and 1,650,000 barrels in 2017.

The following table presents sources and uses of cash and cash equivalents for the six months ended June 30, 2016 and 2015 (in thousands):

	Six Months Ended	
	2016	2015
Sources of cash and cash equivalents		
Operating activities	\$ 169,604	\$ 370,142
Disposal of assets	190,803	14,301
Borrowing on credit facility	647,000	1,009,000
Issuance of debt	¾	750,000
Other	33,310	32,176
Total sources of cash and cash equivalents	<u>\$ 1,040,717</u>	<u>\$ 2,175,619</u>
Uses of cash and cash equivalents		
Additions to natural gas and oil properties	\$ (241,109)	\$ (671,166)
Acreage purchases	(23,554)	(51,450)
Other property	(1,304)	(1,574)
Repayments on credit facility	(739,000)	(1,368,000)
Dividends paid	(6,796)	(13,534)
Other	(29,043)	(69,822)
Total uses of cash and cash equivalents	<u>\$ (1,040,806)</u>	<u>\$ (2,175,546)</u>

Net cash provided from operating activities in first six months 2016 was \$169.6 million compared to \$370.1 million in first six months 2015. Cash provided from continuing operations 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 2015 to 2016 reflects a 4% increase in production and lower operating costs more than offset by lower realized prices (a decline of 41%). As of June 30, 2016, we have hedged more than 69% of our projected total production for the remainder of 2016, with more than 80% of our projected natural gas production hedged. Net cash provided from continuing operations is affected by 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 the first six months 2016 were negative \$7.9 million compared to positive \$22.5 million for the first six months 2015.

Disposal of assets in the six months ended June 30, 2016 includes \$77.7 million of proceeds received from the sale of certain Western Oklahoma properties which closed in May 2016 and \$111.5 million of proceeds received from the sale of our non-operated interest in certain wells and gathering facilities in Northeast Pennsylvania which closed in March 2016. The six months ended June 30, 2015 includes \$10.5 million of proceeds received from the sale of certain of our West Texas properties which closed in February 2015.

Issuance of debt in the three months ended June 30, 2015 includes the issuance of \$750.0 million aggregate principal amount of 4.875% senior notes due 2025.

Liquidity and Capital Resources

Our main sources of liquidity and capital resources are internally generated cash flow from operations, 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 six months 2016, we significantly reduced our operating costs per unit of production and we entered into additional commodity derivative contracts for 2016, 2017 and 2018 to protect future cash flows. In March 2016, our borrowing base and credit facility commitment were reaffirmed through May 1, 2017.

During first six months 2016, our net cash provided from operating activities of \$169.6 million and the proceeds we received from asset sales were used to fund approximately \$266.0 million of capital expenditures (including acreage acquisitions). Cash payments for capital expenditures in the first six months 2016 include payments for services incurred in the prior year capital budget. At June 30, 2016, we had \$382,000 in cash and total assets of \$6.4 billion.

Long-term debt at June 30, 2016 totaled \$2.6 billion, including \$3.0 million outstanding on our bank credit facility, \$750.0 million of senior notes and \$1.9 billion of senior subordinated notes. Our available committed borrowing capacity at June 30, 2016 was \$1.8 billion. 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 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. 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 further 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 2016 capital budget is \$495.0 million. We operate in an environment with numerous financial and operating risks, including, but not limited to, the inherent risks of the search for, development and production of natural gas, NGLs and oil, the ability to buy properties and sell production at prices which provide an attractive return and the highly competitive nature of the industry. Our ability to expand our reserve base is, in part, dependent on obtaining sufficient capital through internal cash flow, bank borrowings, asset sales or the issuance of debt or equity securities. There can be no assurance that internal cash flow and other capital sources will provide sufficient funds to maintain capital expenditures that we believe are necessary to offset inherent declines in production and proven reserves.

Credit Arrangements

As of June 30, 2016, we maintained a revolving credit facility with a borrowing base of \$3.0 billion and aggregate lender commitments of \$2.0 billion, which we refer to as our bank credit facility. The bank credit facility, during a non-investment grade period, is secured by substantially all of our assets and has a maturity date of October 16, 2019. Availability under the bank credit facility is subject to a borrowing base set by the lenders annually with an option to set more often in certain circumstances. Availability under the bank credit facility, during an investment grade period, is limited to aggregate lender commitments. As of June 30, 2016, the outstanding balance under our credit facility was \$3.0 million. Additionally, we had \$232.1 million of undrawn letters of credit leaving \$1.8 billion of committed borrowing capacity available under the facility at the end of second quarter 2016.

Our bank credit facility and our senior subordinated notes impose limitations on the payment of dividends and other restricted payments (as defined under our bank credit facility and the agreements relating to our subordinated notes). These agreements also contain customary covenants relating to debt incurrence, liens, investments and financial ratios. We were in compliance with all covenants at June 30, 2016. See Note 8 for additional information regarding our bank debt.

Cash Dividend Payments

In February 2016, the Board of Directors approved a reduction of our quarterly dividend from \$0.04 per share to \$0.02 per share. On June 1, 2016, our Board of Directors declared a dividend of two cents per share (\$3.4 million) on our outstanding common stock, which was paid on June 30, 2016 to stockholders of record at the close of business on June 15, 2016. The amount of future dividends is subject to declaration by 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, drilling commitments, derivative obligations, asset retirement obligations and transportation and gathering commitments. As of June 30, 2016, we do not have any capital leases. As of June 30, 2016, 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 June 30, 2016, we had a total of \$232.1 million of undrawn letters of credit under our bank credit facility.

Since December 31, 2015, there have been no material changes to our contractual obligations other than a \$92.0 million decrease in our outstanding bank credit facility balance and additional firm transportation, gathering and new delivery commitments in connection with the start-up of Mariner East. Our contractual obligations for firm transportation and gathering contracts increased by approximately \$1.5 billion over the next sixteen years.

Hedging – Oil and Gas Prices

We use commodity-based derivative contracts to manage our exposure to commodity price fluctuations. We do not enter into these arrangements for speculative or trading purposes. We do not utilize complex derivatives, as we typically utilize commodity swap and collar contracts to (1) reduce the effect of price volatility on the commodities we produce and sell and (2) support our annual capital budget and expenditure plans. While there is a risk that the financial benefit of rising natural gas, NGLs and oil prices may not be captured, we believe the benefits of stable and predictable cash flow are more important. Among these benefits are a more efficient utilization of existing personnel and planning for future staff additions, the flexibility to enter into long-term projects requiring substantial committed capital, smoother and more efficient execution of our on-going development drilling and production

enhancement programs, more consistent returns on invested capital, and better access to bank and other credit markets. The fair value of these contracts which is represented by the estimated amount that would be realized or payable on termination is based on a comparison of the contract price and a reference price, generally NYMEX for natural gas and oil or Mont Belvieu for NGLs, approximated a pretax gain of \$4.1 million at June 30, 2016. The contracts expire monthly through December 2018. At June 30, 2016, the following commodity-based derivative contracts were outstanding, excluding our basis swaps which are discussed separately below:

Period	Contract Type	Volume Hedged	Weighted Average Hedge Price
Natural Gas			
2016	Swaps	788,315 Mmbtu/day	\$ 3.22
2017	Swaps	300,000 Mmbtu/day	\$ 2.91
2018	Swaps	70,000 Mmbtu/day	\$ 2.92
Crude Oil			
2016	Swaps	6,000 bbls/day	\$ 58.40
2017	Swaps	2,496 bbls/day	\$ 51.29
NGLs (C2-Ethane)			
2016	Swaps	500 bbls/day	\$ 0.22/gallon
2017	Swaps	3,000 bbls/day	\$0.27/gallon
NGLs (C3-Propane)			
2016	Swaps	5,500 bbls/day	\$ 0.60/gallon
2017	Swaps	3,966 bbls/day	\$ 0.53/gallon
NGLs (NC4-Normal Butane)			
2016	Swaps	4,750 bbls/day	\$ 0.66/gallon
2017	Swaps	500 bbls/day	\$ 0.61/gallon
NGLs (C5-Natural Gasoline)			
2016	Swaps	3,500 bbls/day	\$ 1.11/gallon
2017	Swaps	1,750 bbls/day	\$ 0.97/gallon

In addition to the swaps discussed above, we have entered into natural gas basis swap agreements. The price we received for our natural gas production can be more or less than the NYMEX price because of adjustments for delivery location (“basis”), relative quality and other factors; therefore, we have entered into basis swap agreements that effectively fix the basis adjustments. The fair value of the basis swaps was a loss of \$3.8 million at June 30, 2016. The volumes are for 64,125,000 Mmbtu and they expire through December 2017.

At June 30, 2016, we also had propane spread swap contracts which lock in the differential between Mont Belvieu and international propane indices. These contracts settle monthly through December 2017 and include total volume of 1,162,500 barrels in 2016 and 1,650,000 barrels in 2017. The fair value of these contracts was a gain of \$4.0 million on June 30, 2016.

Interest Rates

At June 30, 2016, we had approximately \$2.6 billion of debt outstanding. Of this amount, \$2.6 billion bore interest at fixed rates averaging 5.1%. Bank debt totaling \$3.0 million bears interest at floating rates, which averaged 3.8% at June 30, 2016. The 30-day LIBOR Rate on June 30, 2016 was approximately 0.5%. A 1% increase in short-term interest rates on the floating-rate debt outstanding on June 30, 2016 would cost us approximately \$30,000 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 2016 to continue to be a function of supply and demand and we believe, based on the lower commodity price environment, we expect to see continued cost reductions. However, the timing and amount of such cost reductions cannot be predicted.

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 63% of our December 31, 2015 proved reserves are natural gas. We are also exposed to market risks related to changes in interest rates. These risks did not change materially from December 31, 2015 to June 30, 2016.

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. We do not utilize complex derivatives such as swaptions, knockouts or extendable swaps. 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. At June 30, 2016, our derivative program includes swaps. These contracts expire monthly through December 2018. The fair value of these contracts, represented by the estimated amount that would be realized upon immediate liquidation as of June 30, 2016, approximated a net unrealized pretax gain of \$4.1 million. At June 30, 2016, 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 (in thousands)
Natural Gas				
2016	Swaps	788,315 Mmbtu/day	\$ 3.22	\$ 29,264
2017	Swaps	300,000 Mmbtu/day	\$ 2.91	\$ (28,777)
2018	Swaps	70,000 Mmbtu/day	\$ 2.92	\$ (2,565)
Crude Oil				
2016	Swaps	6,000 bbls/day	\$ 58.40	\$ 9,263
2017	Swaps	2,496 bbls/day	\$ 51.29	\$ (900)
NGLs (C2-Ethane)				
2016	Swaps	500 bbls/day	\$ 0.22/gallon	\$ (127)
2017	Swaps	3,000 bbls/day	\$ 0.27/gallon	\$ (1,073)
NGLs (C3-Propane)				
2016	Swaps	5,500 bbls/day	\$ 0.60/gallon	\$ 1,999
2017	Swaps	3,966 bbls/day	\$ 0.53/gallon	\$ (2,102)
NGLs (NC4-Normal Butane)				
2016	Swaps	4,750 bbls/day	\$ 0.66/gallon	\$ (1,488)
2017	Swaps	500 bbls/day	\$ 0.61/gallon	\$ (556)
NGLs (C5-Natural Gasoline)				
2016	Swaps	3,500 bbls/day	\$ 1.11/gallon	\$ 2,699
2017	Swaps	1,750 bbls/day	\$ 0.97/gallon	\$ (1,583)

We expect our NGLs production to continue to increase and 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 previously announced three ethane agreements wherein we have contracted to either sell or transport ethane from our Marcellus Shale area, two of which began operations in late 2013. Our Mariner East transportation agreement and our terminal/storage arrangements at Sunoco's Marcus Hook Industrial Complex facility in Pennsylvania began limited ethane operations late in first quarter 2016. We cannot assure you 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 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 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 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 loss of \$3.8 million at June 30, 2016 and they settle monthly through December 2017.

At June 30, 2016, we also had propane basis spread contracts which lock in the differential between Mont Belvieu and international propane indices. The contracts settle monthly through December 2017 and include a total volume of 1,162,500 barrels in 2016 and 1,650,000 barrels in 2017. The fair value of these contracts was a gain of \$4.0 million on June 30, 2016.

The following table shows the fair value of our swaps and basis swaps and the hypothetical changes in fair value that would result from a 10% and a 25% change in commodity prices at June 30, 2016. 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):

	Fair Value	Hypothetical Change in Fair Value Increase of		Hypothetical Change in Fair Value Decrease of	
		10%	25%	10%	25%
Swaps	\$ 4,054	\$ (103,748)	\$ (258,772)	\$ 104,195	\$ 261,049
Basis swaps	151	(392)	(923)	320	882
Freight swap	(34)	40	99	(40)	(99)

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 June 30, 2016, 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 in Philadelphia are short-term and are to a single purchaser. Ethane sales from Marcus Hook are to a single international customer bearing a credit rating similar to Range.

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 June 30, 2016, we had \$2.6 billion of debt outstanding. Of this amount, \$2.6 billion bears interest at fixed rates averaging 5.1%. Bank debt totaling \$3.0 million bears interest at floating rates, which was 3.8% on June 30, 2016. On June 30, 2016, the 30-day LIBOR Rate was approximately 0.5%. A 1% increase in short-term interest rates on the floating-rate debt outstanding on June 30, 2016, would cost us approximately \$30,000 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 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 June 30, 2016 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 June 30, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 1. LEGAL PROCEEDINGS

See Note 15 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 notified by the Pennsylvania Department of Environmental Protection (“DEP”), in the second quarter of 2015, that it intends to assess a civil penalty under the Clean Streams Law and the 2012 Oil and Gas Act in connection with one well in Lycoming County. The DEP has directed us to prevent methane and other substances from escaping from this gas well into groundwater and a stream. We have considerable evidence that this well is not leaking and pre-drill testing of surrounding water wells showed the presence of methane in the water before commencement of our operations. While we intend to vigorously assert this position with the DEP; resolution of this matter may nonetheless result in monetary sanctions of more than \$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, 2015. There have been no material changes from the risk factors previously disclosed in that Form 10-K, other than the risks described below relating to the proposed Merger with Memorial.

Risk Factors Relating to the Merger

The exchange ratio is fixed and will not be adjusted in the event of any change in either Range’s or Memorial’s stock price.

At the effective time, each share of Memorial common stock outstanding immediately prior to the effective time will be converted into the right to receive 0.375 of a share of Range common stock. This exchange ratio will not be adjusted for changes in the market price of either Range common stock or Memorial common stock between the date of signing the merger agreement and completion of the merger. Changes in the price of Range common stock prior to the merger will affect the value of Range common stock that Memorial common stockholders will receive on the date of the merger. The exchange ratio will be adjusted proportionally to reflect the effect of any stock split, reverse stock split, stock dividend, subdivision, reclassification, recapitalization, combination, exchange of shares or the like, with respect to Range common stock or Memorial common stock between the date of signing the merger agreement and completion of the merger.

The prices of Range common stock and Memorial common stock at the closing of the merger may vary from their prices on the date the merger agreement was executed and on the date of each stockholders meeting. As a result, the value represented by the exchange ratio will also vary, and you will not know or be able to calculate the market value of the merger consideration you will receive upon completion of the merger.

In addition, the merger might not be completed until a significant period of time has passed after the respective special stockholder meetings. Because the exchange ratio will not be adjusted to reflect any changes in the market value of Range common stock or Memorial common stock, the market value of the Range common stock issued in connection with the merger and the Memorial common stock surrendered in connection with the merger may be higher or lower than the values of those shares on earlier dates. Stock price changes may result from, among other things, changes in the business, operations or prospects of Range or Memorial prior to or following the merger, litigation or regulatory considerations, general business, market, industry or economic conditions and other factors both within and beyond the control of Range and Memorial. Neither Range nor Memorial is permitted to terminate the merger agreement solely because of changes in the market price of either company’s common stock.

A large portion of the shares of Range common stock to be issued to Memorial’s largest stockholder in the merger will not be subject to any lock-up provisions, which could adversely affect the post-effective time market price of the Range common stock.

Approximately 36% of the outstanding shares of Memorial common stock is held by MRD Holdco LLC, which is owned by three related private equity funds. Those private equity funds intend to distribute—after the completion of the Memorial stockholder vote but prior to the effective time of the merger—a total of approximately 26% of the outstanding shares of Memorial common stock to approximately 500 different limited partners. Under the terms of the merger, those shares of Memorial common stock to be distributed to the limited partners will be converted in the merger into a total of approximately 22.2 million shares of Range common stock, which will represent approximately 8% of the outstanding Range common stock on a pro forma basis for the merger.

Those shares will not be subject to lock-up restrictions and will be freely tradable on the open market. If those limited partners elected to sell a significant portion of those shares of Range common stock at the same time, or in close proximity with each other, that sales activity could potentially have an adverse effect on the market price for Range common stock.

Current Range stockholders will have a reduced ownership and voting interest in the combined company after the merger.

Based on the estimated number of shares of Memorial common stock that will be outstanding immediately prior to the closing of the merger, we estimate that Range will issue approximately 77.3 million shares of Range common stock to Memorial stockholders in the merger. As a result of these issuances, current Range and Memorial stockholders are expected to hold approximately 69% and 31%, respectively, of the combined company's outstanding common stock immediately following completion of the merger.

Range stockholders currently have the right to vote for their respective directors and on other matters affecting the applicable company. Each Range stockholder will remain a stockholder of Range with a percentage ownership of the combined company that will be smaller than the stockholder's percentage of Range prior to the merger. As a result of these reduced ownership percentages, Range stockholders will have less voting power in the combined company than they now have with respect to Range.

Uncertainties associated with the merger may cause a loss of management personnel and other key employees, which could adversely affect the future business and operations of the combined company.

Range and Memorial are dependent on the experience and industry knowledge of their officers and other key employees to execute their business plans. Each company's success until the merger and the combined company's success after the merger will depend in part upon the ability of Range and Memorial to retain key management personnel and other key employees. Current and prospective employees of Range and Memorial may experience uncertainty about their roles within the combined company following the merger, which may have an adverse effect on the ability of each of Range and Memorial to attract or retain key management and other key personnel. Accordingly, no assurance can be given that the combined company will be able to attract or retain key management personnel and other key employees of Range and Memorial to the same extent that Range and Memorial have previously been able to attract or retain their own employees.

The transactions are subject to conditions, including certain conditions that may not be satisfied, or completed on a timely basis, if at all.

The merger is subject to a number of other conditions beyond Range's and Memorial's control that may prevent, delay or otherwise materially adversely affect its completion. We cannot predict whether and when these other conditions will be satisfied. Any delay in completing the merger could cause the combined company not to realize some or all of the benefits that we expect to achieve if the merger is successfully completed within its expected time frame.

Failure to complete the merger could negatively impact the future business and financial results of Range and Memorial.

Neither Range nor Memorial can make any assurances that it will be able to satisfy all of the conditions to the merger or succeed in any litigation brought in connection with the merger. If the merger is not completed, the financial results of Range and/or Memorial may be adversely affected and Range and/or Memorial will be subject to several risks, including but not limited to:

- being required to pay a termination fee of either \$125,000,000 or \$300,000,000, in the case of Range, or \$75,000,000, in the case of Memorial, or a no vote expense payment of \$25,000,000, under certain circumstances provided in the merger agreement;
- payment of costs relating to the merger, such as legal, accounting, financial advisor and printing fees, regardless of whether the merger is completed;
- having had the focus of each company's management on the merger instead of on pursuing other opportunities that could have been beneficial to each company; and
- being subject to litigation related to any failure to complete the merger.

If the merger is not completed, Memorial and Range cannot assure their stockholders that these risks will not materialize and will not materially and adversely affect the business, financial results and stock prices of Memorial or Range.

The merger agreement contains provisions that limit each party's ability to pursue alternatives to the merger, could discourage a potential competing acquiror of either Range or Memorial from making a favorable alternative transaction proposal and, in specified circumstances, could require either party to pay a termination fee to the other party.

The merger agreement contains "no shop" provisions that, subject to limited exceptions, restrict Memorial's ability to solicit, initiate, or knowingly encourage or knowingly facilitate, directly or indirectly, any inquiry or proposal in respect of a competing third-

party proposal for the acquisition of Memorial's stock, business or assets. In addition, pursuant to the merger agreement, Range has agreed that, unless required by law, it will not (i) enter into, participate or engage in or continue any discussions or negotiations with respect certain transactions if such action would or would reasonably be expected to prevent, materially delay or materially impede Range's ability to consummate any of the transactions contemplated by the merger agreement or (ii) take any action that would or would reasonably be expected to prevent, materially delay or materially impede the consummation of any of the transactions contemplated by the merger agreement. In addition, in certain circumstances, Memorial may be required to pay Range a termination fee of \$75,000,000, or Range may be required to pay Memorial a termination fee of either \$125,000,000 or \$300,000,000.

These provisions could discourage a potential third-party acquiror that might have an interest in acquiring all or a significant portion of Memorial or Range from considering or proposing that acquisition, even if it were prepared to pay consideration with a higher per share cash or market value than the market value proposed to be received or realized in the merger or might result in a potential third-party acquiror proposing to pay a lower price to the stockholders than it might otherwise have proposed to pay because of the added expense of the termination fee that may become payable in certain circumstances.

If the merger agreement is terminated and either Range or Memorial determines to seek another business combination, it may not be able to negotiate a transaction with another party on terms comparable to—or better than—the terms of the merger.

Memorial's directors and executive officers have interests in the merger that may be different from, or in addition to, the interests of Memorial stockholders generally.

Memorial's directors and executive officers have financial interests in the merger that may be different from, or in addition to, the interests of the Memorial stockholders generally. The members of the Memorial board of directors were aware of and considered these interests, among other matters, in evaluating and negotiating the merger agreement and the merger, and in recommending to Memorial's stockholders that the merger agreement be approved. These interests include: (i) each Memorial executive officer (other than Mr. Jay Graham) is a party to a change in control agreement with Memorial that could provide that executive with potential compensation and benefits in the event the executive is involuntarily terminated in connection with the merger, (ii) Memorial's directors and executive officers hold equity compensation plan awards under the Memorial LTIP, the vesting of which awards will be accelerated as a result of the merger, in accordance with the terms of those awards and the merger agreement, (iii) upon adoption of the merger agreement by Memorial stockholders, MRD Holdco is permitted to distribute its shares of Memorial common stock to, among others, MRD Holdco LLC's members, including certain Memorial officers and employees, and the shares of Memorial common stock received by those Memorial officers and employees will be entitled to receive the merger consideration and (iv) Memorial's directors and executive officers are entitled to continued indemnification and insurance coverage under the merger agreement.

MRD Holdco LLC, Jay Graham, Anthony Bahr and WHR Incentive LLC have entered into the voting and support agreement with Range in connection with the execution of the merger agreement.

The Memorial board of directors was aware of these interests at the time it approved the merger agreement and the transactions contemplated by the merger agreement, including the merger. If you are a Memorial stockholder, these interests may cause Memorial's directors and executive officers to view the merger proposal differently and more favorably than you may view it

If the merger does not qualify as a reorganization under Section 368(a) of the Code, the stockholders of Memorial may be required to pay substantial U.S. federal income taxes.

As a condition to the completion of the merger, Memorial and Range will each have received a tax opinion dated as of the closing date of the merger, including an opinion that the merger will be treated for U.S. federal income tax purposes as a "reorganization" within the meaning of Section 368(a) of the Code. These opinions will be based on certain assumptions and representations as to factual matters from Range and Memorial, as well as certain covenants and undertakings by Range and Memorial. If any of the assumptions, representations, covenants or undertakings is incorrect, incomplete, inaccurate or violated in any material respect, the validity of the conclusions reached by counsel in their opinions would be jeopardized. In addition, an opinion of counsel represents counsel's best legal judgment but is not binding on the IRS or any court, so there can be no certainty that the IRS will not challenge the conclusions reflected in the opinions or that a court will not sustain such a challenge. If the IRS or a court determines that the merger should not be treated as a "reorganization," a holder of Memorial common stock would recognize taxable gain or loss upon the exchange of Memorial common stock for Range common stock pursuant to the merger.

Completion of the merger may trigger change in control or other provisions in certain agreements to which Memorial is a party.

The completion of the merger may trigger change in control or other provisions in certain agreements to which Memorial is a party. If Range and Memorial are unable to negotiate waivers of those provisions, the counterparties may exercise their rights and remedies under the agreements, potentially terminating the agreements or seeking monetary damages. Even if Range and Memorial

are able to negotiate waivers, the counterparties may require a fee for such waivers or seek to renegotiate the agreements on terms less favorable to Memorial or the combined company.

Range and Memorial are subject to litigation related to the merger and it is possible that additional claims may be brought by the current plaintiffs or others.

Range and Memorial are subject to litigation related to the merger. It is possible that additional claims beyond those that have already been filed will be brought by the current plaintiffs or by others in an effort to enjoin the merger or seek monetary relief from Memorial or Range. Memorial and Range cannot predict the outcome of these lawsuits, or others, nor can they predict the amount of time and expense that will be required to resolve any such lawsuits. An unfavorable resolution of any such litigation surrounding the merger could delay or prevent their consummation. In addition, the costs of defending any such litigation, even if resolved in Memorial's or Range's favor, could be substantial and such litigation could distract Memorial and Range from pursuing the consummation of the merger and other potentially beneficial business opportunities.

Risk Factors Relating to the Combined Company Following the Merger

The combined company's debt may limit its financial flexibility.

As of June 30, 2016, Range had \$3.0 million outstanding under its credit facility and a total of \$2.6 billion in principal amount of senior notes and senior subordinated notes. In addition, the combined company may incur additional debt from time to time in connection with the financing of operations, acquisitions, recapitalizations and refinancing's. The level of the combined company's debt could have several important effects on future operations, including, among others:

- a significant portion of the combined company's income from operations may be applied to the payment of principal and interest on the debt and will not be available for other purposes;
- covenants contained in the combined company's existing and future debt arrangements may require the combined company to meet financial tests that may affect its flexibility in planning for and reacting to changes in its business, including possible acquisition opportunities;
- the combined company's ability to obtain additional financing for capital expenditures, acquisitions, general corporate and other purposes may be limited or burdened by increased costs or more restrictive covenants;
- the combined company may not be able to refinance or extend the term of the existing debt on favorable terms or at all which would have a material effect on its ability to continue operations;
- the combined company may be at a competitive disadvantage to similar companies that have less debt;
- the combined company's vulnerability to adverse economic and industry conditions may increase; and
- the combined company may face limitations on its flexibility to plan for and react to changes in its business and the industries in which it operates.

The failure to integrate successfully the businesses of Range and Memorial in the expected timeframe would adversely affect the combined company's future results following the merger.

The merger involves the integration of two companies that currently operate independently. The success of the merger will depend—in large part—on the ability of the combined company to realize the anticipated benefits, including cost savings, innovation and operational efficiencies, from combining the businesses of Range and Memorial. To realize these anticipated benefits, the businesses of Range and Memorial must be successfully integrated. This integration will be complex and time-consuming. The failure to integrate successfully and to manage successfully the challenges presented by the integration process may result in the combined company not achieving the anticipated benefits of the merger.

Potential difficulties that may be encountered in the integration process include the following:

- the inability to successfully integrate the businesses of Range and Memorial in a manner that permits the combined company to achieve the full benefit of synergies, cost savings and operational efficiencies that are anticipated to result from the merger;
- complexities associated with managing the larger, more complex combined business;
- complexities associated with integrating the workforces of the two companies;
- potential unknown liabilities and unforeseen expenses, delays or regulatory conditions associated with the merger, including one-time cash costs to integrate the two companies that may exceed the anticipated range of such one-time cash costs that Range and Memorial estimated as of the date of execution of the merger agreement;

- difficulty or inability to refinance the debt of the combined company or comply with the covenants thereof;
- performance shortfalls at one or both of the companies as a result of the diversion of management’s attention caused by completing the merger and integrating the companies’ operations; and
- the disruption of, or the loss of momentum in, each company’s ongoing business or inconsistencies in standards, controls, procedures and policies.

Any of these difficulties in successfully integrating the businesses of Range and Memorial, or any delays in the integration process, could adversely affect the combined company’s ability to achieve the anticipated benefits of the merger and could adversely affect the combined company’s business, financial results, financial condition and stock price. Even if the combined company is able to integrate the business operations of Range and Memorial successfully, there can be no assurance that this integration will result in the realization of the full benefits of synergies, cost savings, innovation and operational efficiencies that Range and Memorial currently expect from this integration or that these benefits will be achieved within the anticipated time frame.

The future results of the combined company will suffer if the combined company does not effectively manage its expanded operations following the merger.

Following the merger, the size of the business of the combined company will increase significantly beyond the current size of either Range’s or Memorial’s business, and the combined company will have significant operations in an oil and gas producing region in which Range has not recently operated. The combined company’s future success depends, in part, upon its ability to manage this expanded business, which will pose substantial challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. There can be no assurances that the combined company will be successful or that it will realize the expected operating efficiencies, cost savings, revenue enhancements and other benefits currently anticipated from the merger.

The combined company is expected to incur substantial expenses related to the merger and the integration of Range and Memorial.

The combined company is expected to incur substantial expenses in connection with the merger and the integration of Range and Memorial. There are a large number of processes, policies, procedures, operations, technologies and systems that must be integrated, including purchasing, accounting and finance, sales, billing, payroll, pricing, revenue management, maintenance, marketing and benefits. While Range and Memorial have assumed that a certain level of expenses will be incurred, there are many factors beyond their control that could affect the total amount or the timing of the integration expenses. Moreover, many of the expenses that will be incurred are, by their nature, difficult to estimate accurately. These expenses could, particularly in the near term, exceed the savings that the combined company expects to achieve from the elimination of duplicative expenses and the realization of economies of scale and cost savings. These integration expenses could result in the combined company’s taking charges against earnings following the completion of the merger, and the amount and timing of any such charges are uncertain at present.

Financial projections by Range and Memorial may not prove to be reflective of actual future results.

In connection with the merger, Range and Memorial prepared and considered, among other things, internal financial forecasts for Range and Memorial, respectively. These financial projections include assumptions regarding future operating cash flows, expenditures and growth of Range and Memorial. These financial projections are subject to significant economic, competitive, industry and other uncertainties and may not be achieved in full, at all or within projected timeframes. In addition, the failure of businesses to achieve projected results, could have a material adverse effect on the combined company’s share price and financial position following the merger.

Uncertainty about the merger and diversion of management could harm the combined company following the merger.

The combined company’s success will be dependent upon the experience and industry knowledge of its officers and other key employees. The merger could result in current and prospective employees’ experiencing uncertainty about their future with the combined company following the merger. These uncertainties may impair the ability of the combined company to retain, recruit or motivate key personnel. In addition, completion of the merger and integrating the companies’ operations will require a significant amount of time and attention from management of the two companies. The diversion of management’s attention away from ongoing operations could adversely affect business relationships of the combined company following the merger.

The combined company may not be able to utilize a portion of Memorial’s or Range’s net operating loss carryforwards to offset future taxable income for U.S. federal tax purposes, which could adversely affect the combined company’s net income and cash flows.

As of December 31, 2015, Memorial had federal income tax net operating loss carryforwards (“NOLs”) of approximately \$169.7 million, which will expire in 2034 and 2035, and Range had regular NOLs of approximately \$620.6 million and alternative

minimum tax NOLs of approximately \$539.3 million, which will expire between 2018 and 2035. Utilization of these NOLs depends on many factors, including the combined company's future taxable income, which cannot be predicted with any accuracy. In addition, Section 382 of the Internal Revenue Code of 1986, as amended ("Section 382"), generally imposes an annual limitation on the amount of an NOL that may be used to offset taxable income when a corporation has undergone an "ownership change" (as determined under Section 382). An ownership change generally occurs if one or more stockholders (or groups of stockholders) change their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period, taking into account for this purpose only those stockholders (or groups of stockholders) who are deemed to own at least 5% of the corporation's stock. In the event that an ownership change has occurred—or were to occur—with respect to a corporation following its recognition of an NOL, utilization of this NOL would be subject to an annual limitation under Section 382, generally determined by multiplying the value of the corporation's stock at the time of the ownership change by the applicable long-term tax-exempt rate as defined in Section 382. However, this annual limitation would be increased under certain circumstances by recognized built-in gains of the corporation existing at the time of the ownership change. Any unused annual limitation with respect to an NOL generally may be carried over to later years, subject to the expiration of the NOL 20 years after it arose.

We believe Memorial will undergo an ownership change as a result of its acquisition pursuant to the merger, and the corresponding annual limitation associated with that change in ownership may prevent the combined company from fully utilizing—prior to their expiration—Memorial's NOLs as of the effective time of the merger. While Range's issuance of stock pursuant to the merger would, standing alone, be insufficient to result in an ownership change with respect to Range, the determination of whether Range will undergo an ownership change as a result of the merger will be dependent upon other changes in ownership of Range stock occurring within the relevant three-year period described above, which cannot be predicted or determined with accuracy until after they occur. If Range were to undergo an ownership change, the combined company may be prevented from fully utilizing Range's NOLs as of the time of the merger prior to their expiration. Future changes in stock ownership or future regulatory changes could also limit the combined company's ability to utilize Memorial's or Range's NOLs. To the extent the combined company is not able to offset future taxable income with Memorial's or Range's NOLs, the combined company's net income and cash flows may be adversely affected.

ITEM 6. EXHIBITS

Exhibits included in this report are set forth in the Index to Exhibits which immediately precedes such exhibits, and are incorporated herein by reference.

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: July 26, 2016

RANGE RESOURCES CORPORATION

By: /s/ ROGER S. MANNY

Roger S. Manny
*Executive Vice President and
Chief Financial Officer*

Date: July 26, 2016

RANGE RESOURCES CORPORATION

By: /s/ DORI A. GINN

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

Exhibit index

Exhibit Number	Exhibit Description
2.1	Agreement and Plan of Merger by and among Range Resources Corporation, Medina Merger Sub, Inc. and Memorial Resources Development Corp., dated as of May 15, 2016 (incorporated by reference to Exhibit 2.1 to our Form 8-K (File No. 001-12209) as filed with the SEC on May 19, 2016)
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. 001-12209) as filed with the SEC on May 5, 2004, as amended by the Certificate of First Amendment to Restated Certificate of Incorporation of Range 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 to 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. 001-12209) as filed with the SEC on May 19, 2016)
10.1	Voting and Support Agreement, by and among MRD Holdco LLC, Jay Graham, WHR Incentive LLC, Anthony Bahr and Range Resources Corporation dated as of May 15, 2016 (incorporated by reference to Exhibit 10.1 to our Form 8-K (File No. 001-12209) as filed with the SEC on May 19, 2016)
31.1*	Certification by the President and Chief Executive Officer of Range Resources Corporation Pursuant to Section 302 of the Sarbanes-Oxley Act of 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 Section 906 of the Sarbanes-Oxley Act of 2002
101. INS*	XBRL Instance Document
101. SCH*	XBRL Taxonomy Extension Schema
101. CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101. DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101. LAB*	XBRL Taxonomy Extension Label Linkbase Document
101. PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* filed herewith

** furnished herewith

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: July 26, 2016

/s/ JEFF L. VENTURA

Jeff L. Ventura
President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Roger S. Manny, 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: July 26, 2016

/s/ ROGER S. MANNY

Roger S. Manny
Executive Vice President and Chief Financial Officer

**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 June 30, 2016 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

July 26, 2016

**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 June 30, 2016 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, Roger S. Manny, 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/ ROGER S. MANNY
Roger S. Manny

July 26, 2016