CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) AND MANAGEMENT'S DISCUSSION AND ANALYSIS

Ascent Resources Utica Holdings, LLC

As of September 30, 2021 and December 31, 2020 and for the Three and Nine Months Ended September 30, 2021 and 2020.

ASCENT RESOURCES UTICA HOLDINGS, LLC
INDEX TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

GLOSSARY OF NATURAL GAS, OIL AND NGL TERMS

The following are abbreviations and definitions of certain terms used in this document, which are commonly used in the natural gas, oil and NGL industry:

"bbl(s)." Barrel(s) as used in reference to crude oil, condensate and NGL. One barrel equals 42 U.S. gallons liquid volume.

"bbls/d." Barrels of crude oil, condensate or NGL per day.

"bcf." Billion cubic feet of natural gas.

"bcfe." Billion cubic feet of natural gas equivalent with one barrel of oil, condensate or NGL converted to six thousand cubic feet of natural gas.

"bcfe/d." Billion cubic feet of natural gas equivalent per day.

"btu." British thermal units, a measure of heating value.

"DD&A." Depreciation, depletion and amortization expenses.

"gross." means:

- In relation to our interest in production and reserves, our interest (operating and non-operating) share before deduction of royalty and overriding royalty interests;
- In relation to wells, the total number of wells in which we have an interest before the deduction of outside working interests, royalty interests and overriding royalty interests; and
- In relation to our interest in a property, the total area in acres of properties in which we have an interest.

"mbbls." Thousand barrels of crude oil, condensate or NGL.

"mbbls/d." Thousand barrels of crude oil, condensate or NGL per day.

"mcf." Thousand cubic feet of natural gas.

"mcfe." Thousand cubic feet of natural gas equivalent with one barrel of oil, condensate or NGL converted to six thousand cubic feet of natural gas.

"mmbtu." Million British thermal units.

"mmbtu/d." Million British thermal units per day.

"mmcf." Million cubic feet of natural gas.

"mmcf/d." Million cubic feet of natural gas per day.

"mmcfe." Million cubic feet of natural gas equivalent with one barrel of oil, condensate or NGL converted to six thousand cubic feet of natural gas.

"mmcfe/d." Million cubic feet of natural gas equivalent per day.

"net." means:

- In relation to our interest in production and reserves, our interest (operating and non-operating) share after the deduction of royalty and overriding royalty interests;
- In relation to wells, the number of wells obtained by aggregating our working interest after the deduction of royalty and overriding royalty interests in each of its gross wells;
- In relation to our interest in a property, the total area in acres in which we have an interest multiplied by our working interest in the area after the deduction of royalty and overriding royalty interests; and
- In relation to our interest in leasehold acreage, our gross working interest after the deduction of royalty and overriding royalty interests.

"NGL." Natural gas liquids.

"NYMEX." The New York Mercantile Exchange.

"operator." The individual or company responsible for the exploration, development and/or production of an oil or gas well or lease.

"proved reserves." Defined by the SEC as the quantities of natural gas, oil and NGL, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward from known reservoirs under existing economic conditions, operating methods and government regulations.

"reserves." Estimated remaining quantities of natural gas and oil and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.

"royalty interest." An interest in a natural gas and oil lease that gives the owner of the interest the right to receive a portion of the production from the leased acreage (or the proceeds of the sale thereof), but generally does not require the owner to pay any portion of the costs of drilling or operating the wells on the leased acreage.

"*unproved properties."* Properties with no proved reserves.

"working interest." An interest in a natural gas and oil lease that gives the owners of the interest the right to drill for and produce natural gas, oil and NGL on the leased acreage and requires the owners of the interest to pay their share of the costs of drilling, completions and production operations.

"WTI." West Texas Intermediate.

ASCENT RESOURCES UTICA HOLDINGS, LLC
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

($ in thousands)	September 30, 2021	December 31, 2020
Current Assets:		
Cash and cash equivalents	$ 6,054	$ 8,843
Accounts receivable – natural gas, oil and NGL sales	357,600	223,976
Accounts receivable – joint interest and other	20,446	8,466
Short-term derivative assets	—	8,202
Other current assets	5,669	8,316
Total Current Assets	389,769	257,803
Property and Equipment:		
Natural gas and oil properties, based on successful efforts accounting	9,222,813	8,791,061
Other property and equipment	31,745	31,565
Less: accumulated depreciation, depletion and amortization	(3,065,057)	(2,627,213)
Property and Equipment, net	6,189,501	6,195,413
Other Assets:		
Long-term derivative assets	—	2,401
Other long-term assets	12,276	16,232
Total Assets	$ 6,591,546	$ 6,471,849
Current Liabilities:		
Accounts payable	$ 61,014	$ 36,736
Accrued interest	51,719	31,287
Current portion of long-term debt, net	—	12,498
Short-term derivative liabilities	1,453,870	54,144
Other current liabilities	421,727	341,637
Total Current Liabilities	1,988,330	476,302
Long-Term Liabilities:		
Long-term debt, net of current portion	2,632,758	2,707,382
Long-term derivative liabilities	689,651	113,160
Other long-term liabilities	95,572	73,010
Total Long-Term Liabilities	3,417,981	2,893,552
Commitments and contingencies (Note 9)		
Member's Equity	1,185,235	3,101,995
Total Liabilities and Member's Equity	$ 6,591,546	$ 6,471,849

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

ASCENT RESOURCES UTICA HOLDINGS, LLC
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

($ in thousands)	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Revenues:				
Natural gas	$ 656,562	$ 300,643	$ 1,534,239	$ 868,249
Oil	43,480	37,177	136,235	107,736
NGL	64,888	27,243	172,749	80,590
Commodity derivative loss	(1,512,044)	(386,020)	(2,276,477)	(248,066)
Total Revenues	(747,114)	(20,957)	(433,254)	808,509
Operating Expenses:				
Lease operating expenses	23,756	19,203	66,548	57,839
Gathering, processing and transportation expenses	242,288	227,247	697,931	689,896
Taxes other than income	9,928	9,344	29,316	28,343
Exploration expenses	22,274	28,096	57,306	77,907
General and administrative expenses	13,899	15,063	42,991	50,112
Depreciation, depletion and amortization	151,631	196,048	438,384	574,795
Total Operating Expenses	463,776	495,001	1,332,476	1,478,892
Loss from Operations	(1,210,890)	(515,958)	(1,765,730)	(670,383)
Other (Expense) Income:				
Interest expense, net	(44,985)	(33,279)	(127,773)	(98,432)
Change in fair value of contingent payment right	(1,544)	—	(20,328)	—
(Losses) gains on purchases or exchanges of debt	—	(3,632)	(3,822)	9,671
Other income	975	437	1,326	1,024
Total Other Expense	(45,554)	(36,474)	(150,597)	(87,737)
Net Loss	$ (1,256,444)	$ (552,432)	$ (1,916,327)	$ (758,120)

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

ASCENT RESOURCES UTICA HOLDINGS, LLC
CONDENSED CONSOLIDATED STATEMENTS OF MEMBER'S EQUITY
(Unaudited)

($ in thousands)	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Balance, Beginning of Period	$ 2,440,863	$ 3,475,756	$ 3,101,995	$ 3,681,383
Contributions from Member	816	740	2,801	801
Distributions to Member	—	—	(3,234)	—
Net loss	(1,256,444)	(552,432)	(1,916,327)	(758,120)
Balance, End of Period	$ 1,185,235	$ 2,924,064	$ 1,185,235	$ 2,924,064

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

ASCENT RESOURCES UTICA HOLDINGS, LLC
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

($ in thousands)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Cash Flows from Operating Activities:		
Net loss	$ (1,916,327)	$ (758,120)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation, depletion and amortization	438,384	574,795
Change in fair value of commodity derivatives	1,987,177	677,647
Change in fair value of interest rate derivatives	(357)	528
Impairment of unproved natural gas and oil properties	53,458	75,006
Non-cash interest expense	14,091	19,394
Stock-based compensation	2,801	710
Change in fair value of contingent payment right	20,328	—
Losses (gains) on purchases or exchanges of debt	3,810	(13,303)
Other	11,286	(1,564)
Changes in operating assets and liabilities	(59,940)	79,454
Net Cash Provided by Operating Activities	554,711	654,547
Cash Flows from Investing Activities:		
Drilling and completion costs	(376,388)	(472,233)
Acquisitions of natural gas and oil properties	(65,098)	(111,499)
Additions to other property and equipment	(329)	(1,461)
Net Cash Used in Investing Activities	(441,815)	(585,193)
Cash Flows from Financing Activities:		
Proceeds from credit facility borrowings	1,250,000	695,000
Repayment of credit facility borrowings	(1,660,000)	(715,000)
Proceeds from issuance of long-term debt	400,000	—
Repayment of long-term debt	(84,173)	(50,995)
Cash paid for debt issuance costs	(7,221)	(2,294)
Commodity derivative settlements	(11,188)	1,557
Other	(3,103)	—
Net Cash Used in Financing Activities	(115,685)	(71,732)
Net Decrease in Cash and Cash Equivalents	(2,789)	(2,378)
Cash and Cash Equivalents, Beginning of Period	8,843	7,346
Cash and Cash Equivalents, End of Period	$ 6,054	$ 4,968
Supplemental disclosures of cash flow information:		
Interest paid, net of capitalized interest	$ 94,436	$ 50,919
Supplemental disclosures of significant non-cash investing activities:		
Increase (decrease) in accrued capital expenditures	$ 41,863	$ (59,160)

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

1. Basis of Presentation and Significant Accounting Policies

Basis of Presentation and Consolidation

Ascent Resources Utica Holdings, LLC ("ARUH"), together with its wholly-owned subsidiaries (collectively, "we," "our" or "us"), is engaged in the acquisition, exploration, development, production and operation of natural gas and oil properties located in the Utica Shale in Ohio (the "Utica Shale"). ARUH is a wholly-owned subsidiary of Ascent Resources Operating, LLC (our "Member"), which is an indirect, wholly-owned subsidiary of Ascent Resources, LLC (our "Parent"). Together, The Energy & Minerals Group ("EMG") and First Reserve Corporation ("First Reserve") own a majority interest in our Parent.

Our accompanying unaudited condensed consolidated financial statements and notes were prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information, and intercompany accounts and balances have been eliminated. Accordingly, certain information and disclosures normally included in complete consolidated financial statements prepared in accordance with GAAP have been omitted. The unaudited condensed consolidated financial statements and notes should be read in conjunction with our audited consolidated financial statements and notes for the year ended December 31, 2020.

The unaudited condensed consolidated financial statements furnished in this report reflect all adjustments that are, in the opinion of management, necessary for a fair statement of the results for interim periods. All such adjustments are of a normal recurring nature. The results for any interim period are not necessarily indicative of the expected results for the entire year.

Credit and Concentration Risk

We are subject to credit risk resulting from the concentration of our natural gas, oil and NGL receivables. If our largest customers stopped purchasing our natural gas, oil or NGL, our revenues could decline and our operating results and financial condition could be adversely affected. However, we do not believe the loss of any single customer would materially impact our operating results, as natural gas, oil and NGL are fungible products with well-established markets, and we transact with numerous customers in our operating region. We historically have not incurred any material losses on our natural gas, oil and NGL receivables.

We also have joint interest receivables, which arise from billings to entities that own working interests in the wells we operate. These entities participate in our wells primarily based on their ownership in leases. We have little ability to control whether these entities will participate in our wells but can require these entities to prepay drilling costs. We historically have not incurred any material losses on our joint interest receivables.

By using derivative instruments, we are also exposed to credit risk associated with our hedge counterparties. To minimize such risk, our derivative contracts are with multiple counterparties, reducing our exposure to any individual counterparty. In addition, we only enter into derivative contracts with counterparties that we determine are creditworthy, and such creditworthiness is subject to periodic review. Any non-performance risk is considered in the valuation of our derivative instruments, but to date it has not had a material impact on the values of our derivatives.

Reclassifications

Certain reclassifications have been made to our September 30, 2020 condensed consolidated financial statements to conform to the presentation used for the September 30, 2021 condensed consolidated financial statements.

Adopted and Recently Issued Accounting Pronouncements

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, *Debt - Debt with Conversion and Other Options, Subtopic 470-20, and Derivatives and Hedging - Contracts in Entity's Own Equity, Subtopic 815-40.* This ASU modifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity, and adds new disclosure requirements. The amendments are effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2021 for public entities. For non-public entities, the amendments are effective for annual reporting periods beginning after December 15, 2023, including interim periods within those fiscal years. Entities may elect to apply the amendments in this guidance using either the modified retrospective method or the full retrospective method. We are currently evaluating the impact this standard will have on our financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments, Topic 326*. This ASU amends guidance on reporting credit losses for assets held at amortized cost basis and available for sale debt securities. For assets held at amortized cost basis, this ASU eliminates the probable initial recognition threshold in current GAAP and instead requires an entity to reflect its current estimate of all expected credit losses. The amendments affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables and any other financial assets not excluded from the scope that have the contractual right to receive cash. These amendments were effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2019 for public entities. For non-public entities, the amendments will be effective for annual reporting periods beginning after December 15, 2022, including interim periods within those fiscal years. The amendments in this guidance should be applied using the modified retrospective approach with a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. We adopted ASU 2016-13 effective January 1, 2021, and did not experience a material impact to our financial statements or disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases, Topic 842* ("Topic 842"). The amendments in this update require, among other things, that lessees recognize the following for all leases as defined by Topic 842 (with the exception of short-term leases) at the lease commencement date: (1) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (2) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Classification of leases as either a finance or operating lease will determine the recognition and presentation of expenses. This ASU also requires certain quantitative and qualitative disclosures about leasing arrangements. The FASB has issued subsequent updates, including ASU 2018-01, ASU 2018-11 and ASU 2019-01, in order to clarify its original intent under Topic 842 and provide additional guidance for transitional disclosures and practical expedients. The amendments were effective for interim and annual reporting periods beginning after December 15, 2018 for public entities. In accordance with the amendments made in ASU 2020-05, for non-public entities, Topic 842 will be effective for annual reporting periods beginning after December 15, 2021 and for interim periods beginning after December 15, 2022, with early adoption permitted. We plan to adopt Topic 842 on December 31, 2021 and apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented on the financial statements. This approach allows companies to account for leases prior to adoption under ASC 840, which was the guidance in place at the time of the original reporting.

We have completed our assessment of contracts potentially affected by Topic 842. We will record leases with durations greater than twelve months on our balance sheet along with expanded lease disclosures and internal control changes necessary for adoption. The adoption will primarily impact other assets and other liabilities but will not have a material impact on our balance sheet, results of operations or cash flows.

Subsequent Events

As of November 9, 2021, the date the condensed consolidated financial statements were issued, we completed our evaluation of material subsequent events for disclosure, and no items were noted.

2. Revenue from Contracts with Customers

Our revenues are derived from the sale of natural gas, oil and NGL and are recognized when production is sold to a customer at a fixed or determinable price, delivery has occurred, control has transferred and collection of the revenue is probable. We typically receive payment for natural gas, oil and NGL sales within 30 days of the month of delivery. A significant number of our sales contracts are short-term in nature, generally through evergreen contracts with terms of one year or less, and our sales contracts with a term greater than one year have no material long-term fixed consideration.

Under our natural gas sales contracts, we deliver natural gas to the customer at a delivery point specified under the sales contracts, utilizing third parties to gather, compress, process and transport our natural gas. Our sales contracts provide that we generally receive revenue for the sale of our natural gas based on a specific index price adjusted for pricing differentials. We transfer control of the natural gas at the delivery point and recognize revenue based on the contract price. The costs incurred to gather, compress, process and transport the natural gas prior to the point when control is transferred to the customer are recorded on the condensed consolidated statements of operations as gathering, processing and transportation expenses.

NGL, which are extracted from natural gas through processing, are either sold by us directly or to the processor under processing contracts. For NGL sold by us directly, the sales contracts provide that the product is delivered to the customer at an agreed upon delivery point and that we generally receive revenue for the sale of our NGL based on a specific index price adjusted for pricing differentials. We transfer control of the product to the customer at the delivery point and recognize revenue based on the contract price. The costs to process and transport NGL to the delivery points are recorded on the condensed consolidated statements of operations as gathering, processing and transportation expenses. For NGL sold to the processor, control is transferred by us to the processor at the tailgate of the processing plant, and revenue is recognized based on the price received from the processor.

Under our oil sales contracts, oil is sold to the customer from storage tanks near the wellhead, and we receive revenue for the sale of our oil based on a specific index price adjusted for pricing differentials. We transfer control of the product to the customer at the storage tanks and recognize revenue based on the contract price.

Our revenues from the sale of natural gas, oil and NGL are each presented separately on our condensed consolidated statements of operations. We believe that the disaggregation of revenue into these three major product types appropriately depicts the accounting guidance for revenue recognition.

Under our sales contracts, customers are invoiced after our performance obligations have been satisfied, generally when control of the product has been transferred to the customer, at which point payment is unconditional. Accordingly, we have no contract assets or contract liabilities associated with our revenues from contracts with customers. As of September 30, 2021 and December 31, 2020, receivables from contracts with customers were $357.6 million and $224.0 million, respectively, and were reported in accounts receivable – natural gas, oil and NGL sales on the condensed consolidated balance sheets.

3. Property and Equipment

Net property and equipment included the following as of the dates indicated:

($ in thousands)	September 30, 2021	December 31, 2020
Proved natural gas and oil properties	$ 8,322,676	$ 7,752,763
Unproved natural gas and oil properties	900,137	1,038,298
Other property and equipment	31,745	31,565
Total Property and Equipment	9,254,558	8,822,626
Accumulated depreciation, depletion and amortization	(3,065,057)	(2,627,213)
Property and Equipment, net	$ 6,189,501	$ 6,195,413

4. Debt

Our debt consisted of the following as of the dates indicated:

($ in thousands)	September 30, 2021	December 31, 2020
Long-Term Debt:		
Credit Facility[a]	$ 543,000	$ 953,000
Second lien term loans due November 2025[b]	549,822	549,822
7.00% senior notes due November 2026	600,000	600,000
9.00% senior notes due November 2027	348,294	348,294
8.25% senior notes due December 2028	300,000	300,000
5.875% senior notes due June 2029	400,000	—
10.00% senior notes due April 2022[c]	—	67,992
Net debt issuance costs	(14,067)	(8,248)
Net debt discounts and premiums	(94,291)	(103,478)
Total Long-Term Debt, net of current portion	2,632,758	2,707,382
Plus current maturities of long-term debt, net[d]	—	12,498
Total Debt, net	$ 2,632,758	$ 2,719,880

(a) The interest rate was 2.34% and 2.65% as of September 30, 2021 and December 31, 2020, respectively.

(b) The interest rate was 10.00% as of September 30, 2021 and December 31, 2020.

(c) On April 1, 2021, the 2022 Notes (defined below) were redeemed at 105.00% of the outstanding principal value for $71.4 million, plus accrued and unpaid interest.

(d) The Convertible Notes (defined below) matured on March 1, 2021, and were redeemed for $12.8 million, which included a premium that was accreted over the life of the Convertible Notes, plus accrued and unpaid interest. The interest rate was 6.50% as of December 31, 2020.

Credit Facility

Our $2.5 billion senior secured revolving credit facility ("Credit Facility") matures on April 1, 2024, and as of September 30, 2021, it had a fully committed borrowing base of $1.85 billion, of which $250.0 million was authorized for letters of credit. The Credit Facility is secured by liens on substantially all of our assets, including our natural gas and oil properties. The amount available to be borrowed under our Credit Facility is subject to a borrowing base that is required to be redetermined semiannually on or about May 1 and November 1 of each year primarily based on the estimated value and future net cash flows of our proved natural gas, oil and NGL reserves and the value of our commodity hedge positions as determined by lenders under the Credit Facility at their discretion. Additionally, we may request an interim redetermination of the borrowing base in certain circumstances, including acquisitions of proved reserves in excess of certain thresholds. As of September 30, 2021, we had $543.0 million of borrowings outstanding and $169.2 million of letters of credit issued under the Credit Facility. In November 2021, the borrowing base under the Credit Facility was reaffirmed at $1.85 billion.

Under the Credit Facility agreement, we may borrow either base rate loans or Eurodollar loans, and as of September 30, 2021, all of the borrowings under the Credit Facility were Eurodollar loans. Principal amounts borrowed are payable on the maturity date and may be repaid prior to the maturity date without any premium or penalty. Interest is payable at the end of the applicable interest period. Eurodollar loans bear interest at a rate per annum equal to the London Interbank Offered Rate ("LIBOR") plus an applicable margin ranging from 2.00% to 3.00% per annum based on Credit Facility utilization. Due to the weighted average 1-month LIBOR being 0.09% for the applicable interest periods on the most recent election dates, we were subject to a weighted average rate of 2.34% per annum as of September 30, 2021. We have entered into interest rate swaps through the end of 2021 to mitigate a significant portion of our exposure to future volatility in the 1-month LIBOR. See Note 5 for further information regarding our interest rate derivatives.

Under the Credit Facility agreement, we are subject to commitment fees payable to the administrative agent for the unutilized portion of our available borrowing base, the rate of which ranges from 0.375% to 0.50% based on Credit Facility utilization. Additionally, we are subject to letter of credit participation fees payable to the administrative agent which escalate based on applicable margins, ranging from 2.00% to 3.00% per annum, in accordance with the Credit Facility utilization. We are also subject to a letter of credit fronting fee that is payable to the issuing bank at a rate of 0.125% per annum of the balance of outstanding letters of credit issued.

We had $12.2 million and $16.1 million as of September 30, 2021 and December 31, 2020, respectively, in unamortized debt issuance costs associated with the Credit Facility, which are presented as part of other long-term assets on the condensed consolidated balance sheets.

Second Lien Term Loans

In October 2020, we issued $537.8 million in aggregate principal amount of second lien term loans ("2025 Second Lien Term Loans") and $339.7 million in aggregate principal amount of 9.00% senior unsecured notes due 2027 ("2027 Notes") in exchange for $856.7 million of aggregate principal amount of 2022 Notes (the "Exchange"). We accounted for the Exchange as a modification to existing debt, and no gain or loss was recognized related to the principal exchanged. In connection with the Exchange, we issued an additional $12.0 million in aggregate principal amount of 2025 Second Lien Term Loans, $8.6 million in aggregate principal amount of 2027 Notes and equity of our Parent to certain existing equity holders and their designated affiliates in exchange for an aggregate contribution of $20.0 million in cash. The proceeds were used to pay fees for the Exchange and to repay a portion of the borrowings outstanding under the Credit Facility. See Note 8 for further discussion of our debt held by certain related parties. The 2025 Second Lien Term Loans mature on November 1, 2025, and interest is payable quarterly, beginning with January 13, 2021, at an annual rate of 9.00% plus 3-month LIBOR, with a 1.00% LIBOR floor. Due to the 3-month LIBOR being 0.13% for the applicable interest period, we were subject to a rate of 10.00% per annum as of September 30, 2021. The 2025 Second Lien Term Loans are secured by second liens on substantially all of our assets, including our natural gas and oil properties. Our obligations under the 2025 Second Lien Term Loans are fully and unconditionally guaranteed, jointly and severally, by our current material subsidiaries and will be so guaranteed by any of our future material subsidiaries. We may redeem some or all of the 2025 Second Lien Term Loans at redemption prices ranging from 105.00% to 100.00% at any time on or after April 13, 2023. At any time prior to April 13, 2023, we may redeem some or all of the 2025 Second Lien Term Loans at a price of 100.00% plus a make-whole premium (as defined in the term loan credit agreement), and we may redeem up to 40% of the aggregate principal amount of 2025 Second Lien Term Loans at a price of 105.00% with an amount of cash not greater than the net cash proceeds of one or more equity offerings, subject to certain conditions. Upon the occurrence of a qualifying change of control, we are required to offer to repurchase all or any part of the 2025 Second Lien Term Loans at a price of 101.00%, plus accrued and unpaid interest.

Senior Notes

2026 Notes. In October 2018, we issued $600.0 million in aggregate principal amount of 7.00% senior unsecured notes due 2026 ("2026 Notes") in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act of 1933, as amended (the "Securities Act"). The 2026 Notes mature on November 1, 2026, and interest is payable on May 1 and November 1 of each year. We used the proceeds primarily to redeem $525.0 million of outstanding principal of the 2022 Notes and pay accrued and unpaid interest up to, but excluding, the date of the redemption. The remaining net proceeds were used to repay borrowings under the Credit Facility. We may redeem some or all of the 2026 Notes at redemption prices ranging from 103.50% to 100.00% at any time on or after November 1, 2021. At any time prior to November 1, 2021, we may redeem some or all of the 2026 Notes at a price of 100.00% plus a make-whole premium (as defined in the indenture), and we may redeem up to 40% of the aggregate principal amount of 2026 Notes at a price of 107.00% with an amount of cash not greater than the net cash proceeds of one or more equity offerings, subject to certain conditions. Upon the occurrence of a qualifying change of control, we are required to offer to repurchase all or any part of the 2026 Notes at a price of 101.00%, plus accrued and unpaid interest.

2027 Notes. In October 2020, we issued $339.7 million in aggregate principal amount of 2027 Notes as part of the Exchange. The 2027 Notes mature on November 1, 2027, and interest is payable at an annual rate of 9.00% on May 1 and November 1 of each year, beginning with May 1, 2021. Additionally, $8.6 million of 2027 Notes were issued to certain existing equity holders of our Parent, and their designated affiliates, the proceeds of which were used primarily to pay fees related to the Exchange. See Note 8 for further discussion of our debt held by certain related parties.

Unless and until a Triggering Event (as defined below) has occurred and we have paid all consideration payable in respect thereof, we may redeem some or all of the 2027 Notes (i) at any time prior to November 1, 2026, subject to a make-whole premium (as defined in the indenture) and (ii) on or after November 1, 2026, at a redemption price equal to 100.00% of the principal amount of 2027 Notes to be redeemed, in each case plus accrued and unpaid interest to, but excluding, the redemption date. If a Triggering Event has occurred and we have paid all consideration payable in respect thereof, we may redeem some or all of the 2027 Notes (i) at any time prior to November 1, 2023, subject to a make-whole premium and (ii) on or after November 1, 2023, at redemption prices ranging from 104.50% to 100.00%, in each case plus accrued and unpaid interest to, but excluding, the redemption date. Upon the occurrence of a qualifying change of control, we are required to offer to repurchase all or any part of the 2027 Notes at a price of 101.00%, plus accrued and unpaid interest.

The 2027 Notes also contain a contingent payment right which entitles the holders to receive a fixed amount of cash or equity that, as of September 30, 2021, ranged from 30% to 45% of the then-outstanding aggregate principal amount of 2027 Notes, if certain triggering events (the "Triggering Events") occur. The Triggering Events include a qualified public offering, a qualified merger or consolidation that results in our equity holders receiving an equity interest that is listed or quoted on any national securities exchange, or a change of control. The amount paid is dependent upon the timing of the first occurrence of such Triggering Events. The contingent payment right is required to be bifurcated and accounted for at fair value, and as of September 30, 2021, the estimated fair value was $85.6 million and is presented as part of other long-term liabilities on the condensed consolidated balance sheet. See Note 6 for further discussion of the contingent payment right valuation. In certain instances, the contingent payment right may be replaced by a Contingent Value Right ("CVR"), which entitles the holder of the CVR to the same fixed amount of consideration upon the same Triggering Events despite no longer holding the associated 2027 Notes. However, if the 2027 Notes are voluntarily sold to us prior to a Triggering Event through means of open market transactions or other negotiated transactions, the contingent payment right will expire.

2028 Notes. In December 2020, we issued $300.0 million in aggregate principal amount of 8.25% senior unsecured notes due 2028 ("2028 Notes") in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act. The 2028 Notes mature on December 31, 2028, and interest is payable on February 1 and August 1 of each year, beginning with August 1, 2021. The net proceeds were used to repay a portion of the borrowings outstanding under the Credit Facility. We may redeem some or all of the 2028 Notes at redemption prices ranging from 104.125% to 100.00% at any time on or after February 1, 2024. At any time prior to February 1, 2024, we may redeem some or all of the 2028 Notes at a price of 100.00% plus a make-whole premium (as defined in the indenture), and we may redeem up to 40% of the aggregate principal amount of 2028 Notes at a price of 108.25% with an amount of cash not greater than the net cash proceeds of one or more equity offerings, subject to certain conditions. Upon the occurrence of a qualifying change of control, we are required to offer to repurchase all or any part of the 2028 Notes at a price of 101.00%, plus accrued and unpaid interest.

2029 Notes. In June 2021, we issued $400.0 million in aggregate principal amount of 5.875% senior unsecured notes due 2029 ("2029 Notes") in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act. The 2029 Notes mature on June 30, 2029, and interest is payable on March 1 and September 1 of each year, beginning with September 1, 2021. The net proceeds were used to repay a portion of the borrowings outstanding under the Credit Facility. We may redeem some or all of the 2029 Notes at redemption prices ranging from 102.938% to 100.00% at any time on or after September 1, 2024. At any time prior to

September 1, 2024, we may redeem some or all of the 2029 Notes at a price of 100.00% plus a make-whole premium (as defined in the indenture), and we may redeem up to 40% of the aggregate principal amount of 2029 Notes at a price of 105.875% with an amount of cash not greater than the net cash proceeds of one or more equity offerings, subject to certain conditions. Upon the occurrence of a qualifying change of control, we are required to offer to repurchase all or any part of the 2029 Notes at a price of 101.00%, plus accrued and unpaid interest.

2022 Notes. In April 2017, we issued $1.5 billion in aggregate principal amount of 10.00% senior unsecured notes due 2022 ("2022 Notes") in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act. The 2022 Notes had a maturity date of April 1, 2022, and interest was payable on April 1 and October 1 of each year. Our obligations under the 2022 Notes were fully and unconditionally guaranteed, jointly and severally, by our material subsidiaries. Through multiple transactions from 2018 to 2020, we repurchased or otherwise retired a significant portion of the 2022 Notes, including, during the nine months ended September 30, 2020, the repurchase of approximately $50.3 million of outstanding principal amount of the 2022 Notes at a discount for $35.4 million, plus accrued and unpaid interest, and recorded a $14.3 million gain, including the write-off of unamortized debt issuance costs and discounts. During the nine months ended September 30, 2021, we redeemed the remaining $68.0 million of outstanding principal amount of the 2022 Notes at a price of 105.00% of the outstanding principal value for a total of $71.4 million, plus accrued and unpaid interest, resulting in a loss of $3.8 million, including the redemption premium and the write-off of unamortized discounts and debt issuance costs.

The 2022 Notes, 2026 Notes, 2027 Notes, 2028 Notes and 2029 Notes (together, the "Senior Notes") are senior unsecured obligations and rank equally in right of payment with all of our existing and future senior unsecured debt, and the outstanding Senior Notes will rank senior in right of payment to all of our future subordinated debt. The outstanding Senior Notes are effectively subordinated to all of our existing and future secured debt to the extent of the value of the collateral securing such indebtedness. Our obligations under the outstanding Senior Notes are fully and unconditionally guaranteed, jointly and severally, by our current material subsidiaries and will be so guaranteed by any of our future material subsidiaries.

Convertible Notes

In 2014, we issued $1.0 billion of convertible notes due 2021 ("Convertible Notes"). Through multiple transactions from 2015 through 2020, we repurchased or otherwise retired a significant portion of the Convertible Notes. During the nine months ended September 30, 2020, we repurchased $10.9 million of outstanding principal amount for $15.6 million, plus accrued and unpaid interest, resulting in a loss of $1.0 million, including the write-off of debt issuance costs, discounts and premiums. On March 1, 2021 the remaining outstanding aggregate principal of $8.3 million matured and was redeemed at a 53.8% premium for $12.8 million, plus accrued and unpaid interest.

Debt Covenants

The agreements governing our debt contain restrictive covenants including, but not limited to, restrictions on our ability to incur additional indebtedness, create certain liens on assets, make certain investments or restricted payments, make loans to others, make certain payments, consolidate or merge, hedge hydrocarbons, enter into transactions with affiliates, dispose of assets or engage in certain other transactions without the prior consent of the lenders. The Credit Facility also requires us to maintain the following two financial ratios: (i) a consolidated leverage ratio, which requires us to maintain a consolidated funded indebtedness to consolidated EBITDAX ratio for the aggregate of the last four consecutive quarters (as defined in the Credit Facility agreement) of not more than 4.00 to 1.00 for each fiscal quarter and (ii) a modified current ratio (as defined in the Credit Facility agreement), which requires us to maintain consolidated current assets to consolidated current liabilities of not less than 1.00 to 1.00 as of the end of each fiscal quarter. We were in compliance with all applicable debt covenants as of September 30, 2021.

5. Derivative Instruments

We use derivative instruments to mitigate our exposure to fluctuations in future commodity prices and floating interest rates in order to protect our anticipated operating cash flow against significant market movements or volatility. We do not use derivative instruments for speculative or trading purposes. As of September 30, 2021, we utilized the following types of derivative instruments:

- *Swaps*. We receive a fixed price and pay a floating market price to the counterparty for the hedged commodity.
- *Call Options*. We sell call options in exchange for a premium, which establish the maximum price we will receive for contracted commodity volumes. At the time of settlement, if the market price exceeds the fixed price of the call option, we pay the difference to the counterparty. From time to time, we may sell future call options to obtain more favorable strike prices on swap or collar contracts.

- *Collars*. These instruments contain a fixed floor price ("put") and ceiling price ("call"). If the market price exceeds the call strike price, we pay the difference between the market price and the strike price of the sold call to the counterparty. If the market price falls below the put strike price, we receive the difference between the market price and the strike price of the purchased put from the counterparty. If the market price is between the put and the call strike prices, no payments are due to or from either party.

- *Three-Way Collars*. Three-way collars consist of a traditional collar and our sale of an additional put option in exchange for more favorable strike prices on purchased put or sold call options.

- *Basis Swaps*. Our natural gas production is sold at various delivery points that at times may have material spreads or volatility relative to NYMEX. Therefore, we periodically use basis swaps to fix the differential between product prices at the following market locations relative to NYMEX: Chicago (Citygate), Dawn (Ontario), MichCon, Rex Zone 3, Dominion South, TCO and Tetco M-2. Under these instruments, we receive the fixed price differential and pay the floating market price differential to the counterparty for the contracted volumes.

- *Interest Rate Swaps*. Interest rate swaps are used to fix interest rates on existing or anticipated floating rate indebtedness. The purpose of these instruments is to manage our existing or anticipated exposure to unfavorable interest rate changes. We pay a fixed interest rate and receive a floating interest rate from the counterparty subject to a floor of zero basis points.

All derivative instruments are recognized at their current fair value as either assets or liabilities on the condensed consolidated balance sheets. Changes in the fair value of these derivative instruments are recorded in earnings as we have not elected hedge accounting for any of our derivative instruments.

The following table sets forth the average volumes per day associated with our outstanding natural gas derivative instruments as of September 30, 2021, the contracted weighted average natural gas prices, the contracted weighted average basis swap spreads and the estimated fair values:

		Weighted Average Prices ($/mmbtu)				
	Average Volume (mmbtu/d)	Swap Strike Price	Sold Call Strike Price	Purchased Put Strike Price	Sold Put Strike Price	Fair Value ($ in thousands)
Natural gas:						
Swaps:						$ (1,468,497)
Remaining in 2021	1,291,000	$ 2.50				
2022	1,248,000	$ 2.66				
2023	670,000	$ 2.54				
2024	215,000	$ 2.55				
Collars:						(49,114)
Remaining in 2021	180,000		$ 3.05	$ 2.50		
2022	20,000		$ 6.05	$ 3.75		
2023	50,000		$ 4.16	$ 3.00		
Three-way collars:						(81,488)
2022	150,000		$ 3.00	$ 2.50	$ 2.01	
Call options:						(496,230)
Remaining in 2021	335,000		$ 3.02			
2022	360,000		$ 2.99			
2023	370,000		$ 2.89			
2024	400,000		$ 2.84			
Basis swaps:						18,584
Remaining in 2021	473,000	$ (0.25)				
2022	553,000	$ (0.32)				
2023	190,000	$ (0.19)				
Total Estimated Fair Value						$ (2,076,745)

The following table sets forth the average volumes per day associated with our outstanding oil derivative instruments as of September 30, 2021, the contracted weighted average oil prices and the estimated fair values:

		Weighted Average Prices ($/bbl)		
	Average Volume (bbls/d)	Swap Strike Price	Sold Call Strike Price	Fair Value ($ in thousands)
Oil:				
Swaps:				$ (27,923)
Remaining in 2021	2,000	$ 54.89		
2022	5,000	$ 57.50		
2023	1,000	$ 60.00		
Call options:				(1,957)
Remaining in 2021	3,500		$ 70.00	
Total Estimated Fair Value				$ (29,880)

The following table sets forth the average volumes per day associated with our outstanding NGL derivative instruments as of September 30, 2021, the contracted weighted average NGL prices and the estimated fair values:

		Weighted Average Prices ($/bbl)	
	Average Volume (bbls/d)	Swap Strike Price	Fair Value ($ in thousands)
NGL:			
Swaps - Propane:			$ (36,683)
Remaining in 2021	4,000	$ 27.06	
2022	4,000	$ 30.58	
2023	1,000	$ 31.50	
Total Estimated Fair Value			$ (36,683)

The following table sets forth the notional amounts associated with our outstanding interest rate derivative instruments as of September 30, 2021, the contracted fixed rate to be paid, the contracted floating rate to be received and the estimated fair value:

($ in thousands)	Notional Amount	Fixed Rate	Floating Rate[(a)]	Fair Value
Interest Rate Swaps:				$ (213)
Remaining in 2021	$ 550,000	0.2525 %	1-month LIBOR	
Total Estimated Fair Value				$ (213)

(a) The interest rate swaps include an embedded put option (floor) of zero basis points, limiting our exposure should 1-month LIBOR rates fall below this threshold.

The following tables summarize the fair value of our derivative instruments on a gross basis, the effects of netting assets and liabilities for which the right of offset exists based on master netting agreements and the net amount presented on our condensed consolidated balance sheets as of September 30, 2021 and December 31, 2020:

($ in thousands) Condensed Consolidated Balance Sheet Presentation	September 30, 2021 Fair Value, Gross	Amounts Netted on Balance Sheet	Fair Value, Net
Short-term derivative assets:			
Commodity derivatives	$ 29,519	$ (29,519)	$ —
Total short-term derivative assets	$ 29,519	$ (29,519)	$ —
Long-term derivative assets:			
Commodity derivatives	$ 19,273	$ (19,273)	$ —
Total long-term derivative assets	$ 19,273	$ (19,273)	$ —
Short-term derivative liabilities:			
Commodity derivatives	$ 1,483,176	$ (29,519)	$ 1,453,657
Interest rate derivatives	213	—	213
Total short-term derivative liabilities	$ 1,483,389	$ (29,519)	$ 1,453,870
Long-term derivative liabilities:			
Commodity derivatives	$ 708,924	$ (19,273)	$ 689,651
Total long-term derivative liabilities	$ 708,924	$ (19,273)	$ 689,651

($ in thousands) Condensed Consolidated Balance Sheet Presentation	December 31, 2020 Fair Value, Gross	Amounts Netted on Balance Sheet	Fair Value, Net
Short-term derivative assets:			
Commodity derivatives	$ 44,802	$ (36,600)	$ 8,202
Total short-term derivative assets	$ 44,802	$ (36,600)	$ 8,202
Long-term derivative assets:			
Commodity derivatives	$ 64,755	$ (62,354)	$ 2,401
Total long-term derivative assets	$ 64,755	$ (62,354)	$ 2,401
Short-term derivative liabilities:			
Commodity derivatives	$ 90,175	$ (36,600)	$ 53,575
Interest rate derivatives	569	—	569
Total short-term derivative liabilities	$ 90,744	$ (36,600)	$ 54,144
Long-term derivative liabilities:			
Commodity derivatives	$ 175,514	$ (62,354)	$ 113,160
Total long-term derivative liabilities	$ 175,514	$ (62,354)	$ 113,160

The following table summarizes the effects of derivative instruments on the condensed consolidated statements of operations for the periods indicated:

($ in thousands)	Condensed Consolidated Statements of Operations Presentation	Three Months Ended September 30, 2021	2020	Nine Months Ended September 30, 2021	2020
Commodity derivatives	Commodity derivative loss	$ (1,512,044)	$ (386,020)	$ (2,276,477)	$ (248,066)
Interest rate derivatives	Interest expense, net	$ (66)	$ (118)	$ (243)	$ (620)

6. Fair Value Measurements

We use a three-level valuation hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

Level 1 – Unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2 – Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and model-derived valuations whose inputs or significant value drivers are observable.

Level 3 – Unobservable inputs that reflect our own assumptions.

Fair Value on a Recurring Basis

The following tables summarize the valuation of financial instruments by pricing levels that were accounted for at fair value on a recurring basis as of September 30, 2021 and December 31, 2020. There were no transfers in or out of our Level 3 fair value measurements.

	Fair value measurements at September 30, 2021:			
($ in thousands)	Level 1	Level 2	Level 3	Total
Liabilities:				
Commodity derivatives	$ —	$ 2,143,308	$ —	$ 2,143,308
Interest rate derivatives	—	213	—	213
Contingent payment right	—	—	85,630	85,630
Total	$ —	$ 2,143,521	$ 85,630	$ 2,229,151

	Fair value measurements at December 31, 2020:			
($ in thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Commodity derivatives	$ —	$ 10,603	$ —	$ 10,603
Total	$ —	$ 10,603	$ —	$ 10,603
Liabilities:				
Commodity derivatives	$ —	$ 166,735	$ —	$ 166,735
Interest rate derivatives	—	569	—	569
Contingent payment right	—	—	65,302	65,302
Total	$ —	$ 167,304	$ 65,302	$ 232,606

Derivatives. We estimate the fair value of our commodity and interest rate derivatives using models that utilize market-based parameters and are therefore classified as Level 2 fair value measurements. The fair value of our commodity swaps, collars and options are based on standard industry income approach models that use significant observable inputs including, but not limited to, forward curves, discount rates, nonperformance risk and volatilities. We estimate the fair value of our interest rate swaps using a discounted cash flow model utilizing the contracted notional amounts, active market-quoted LIBOR yield curves and the applicable credit-adjusted risk-free rate yield curve. See Note 5 for further information regarding our derivative instruments.

Contingent Payment Right. The 2027 Notes contain a contingent payment right that is required to be bifurcated and accounted for as a liability at fair value. The estimated fair value of the contingent payment right was $85.6 million and $65.3 million as of September 30, 2021 and December 31, 2020, respectively. The fair value of the contingent payment right is based on unobservable inputs and is therefore classified as Level 3.

The fair value of the contingent payment right was determined using a “with” and “without” analysis, which compares the value of the 2027 Notes including the contingent payment right to the value of an otherwise identical bond that omits the contingent payment right feature by comparing the discounted cash flows. The significant unobservable inputs used to estimate the fair value of the contingent payment right include the probability of a triggering event occurring prior to maturity, which was 70.0% as of both September 30, 2021 and December 31, 2020, and the discount rate used in the discounted cash flow analysis, which was 5.87% and 12.41% as of September 30, 2021 and December 31, 2020, respectively. The contingent payment right is presented as part of other long-term liabilities on the condensed consolidated balance sheets. Changes in its fair value are presented as a change in fair value of the contingent payment right on the condensed consolidated statements of operations.

Fair Value of Debt

The carrying amounts and estimated fair values of our debt instruments as of September 30, 2021 and December 31, 2020 are shown in the table below. The fair values were estimated using Level 2 market data inputs. See Note 4 for further information regarding our debt.

	September 30, 2021		December 31, 2020	
($ in thousands)	Carrying Value	Fair Value	Carrying Value	Fair Value
Credit Facility	$ 543,000	$ 543,000	$ 953,000	$ 953,000
2025 Second Lien Term Loans	529,857	605,354	527,108	606,179
2026 Notes	589,201	619,660	587,925	576,655
2027 Notes	282,011	477,674	277,006	387,863
2028 Notes	295,255	326,912	294,857	299,683
2029 Notes	393,434	406,354	—	—
2022 Notes	—	—	67,486	70,477
Convertible Notes	—	—	12,498	12,665
Total	$ 2,632,758	$ 2,978,954	$ 2,719,880	$ 2,906,522

7. Stock-Based Compensation

In July 2020, our Parent established a long-term incentive plan (the “Plan”) in order to further our growth and success. Under this Plan, the board of managers of our Parent may, among other things, grant time-vested restricted stock units (“Time-Vested RSUs”) and performance-vested restricted stock units (“Performance-Vested RSUs,” and together with the Time-Vested RSUs, the “RSUs”) to certain of our employees and certain managers of the board of our Parent. Under the Plan, 360.2 million Series B units (“Units”) of the Parent were reserved for issuance. As of September 30, 2021, approximately 130.6 million Time-Vested RSUs and 161.1 million Performance-Vested RSUs were unvested.

The Time-Vested RSUs are accounted for as equity awards. Stock-based compensation related to the Time-Vested RSUs is measured based on the fair value on the date of grant using appropriate valuation techniques and is recognized on a straight-line basis over the requisite service period. Performance-Vested RSUs are accounted for as liability awards, whose ultimate settlement may be partially or fully offset by certain cash awards received prior to vesting. Such cash awards allow Plan participants to receive cash payments associated with us achieving certain financial metrics during a calendar year and, therefore, such payments are accrued when they become probable and determinable. Stock-based compensation related to the Performance-Vested RSUs is recognized once it becomes probable that the performance condition will be achieved. We account for forfeitures during the period in which they occur by reversing the expense previously recognized for such awards. Stock-based compensation cost was $0.8 million, $0.7 million, $2.8 million and $0.7 million for the three and nine months ended September 30, 2021 and 2020, respectively, and is presented as part of general and administrative expenses on the condensed consolidated statements of operations.

8. Related Party Transactions

Gas Gathering, Firm Transportation, Processing and Commodity Sales Agreements

In the normal course of our business, we have entered into certain business relationships with entities in which EMG or First Reserve have control or significant influence through their equity investments. These relationships include agreements for the sale of our NGL production and the gathering, processing and transportation of our natural gas and NGL production. The NGL revenues recognized under such agreements were $29.8 million, $13.5 million, $81.3 million and $49.1 million during the three and nine months ended September 30, 2021 and 2020, respectively. As of September 30, 2021 and December 31, 2020, we had accounts receivable – natural gas, oil and NGL sales of $12.0 million and $9.5 million, respectively, due from these purchasers. We also incurred gathering, processing and transportation expenses associated with these agreements of $158.5 million, $152.4 million, $462.7 million and $470.7 million during the three and nine months ended September 30, 2021 and 2020, respectively. As of September 30, 2021 and December 31, 2020, we had $96.2 million and $96.6 million of payables, respectively, due to companies associated with these agreements, which are presented as part of other current liabilities on the condensed consolidated balance sheets. For information regarding the credit support requirements due to certain related parties, see Note 9, *Pipeline Commitments*.

Long-Term Debt

In connection with the Exchange, we issued $12.0 million in aggregate principal amount of 2025 Second Lien Term Loans and $8.6 million in aggregate principal amount of 2027 Notes to certain existing equity holders and their designated affiliates. As of both September 30, 2021 and December 31, 2020, $8.6 million in aggregate principal amount of 2025 Second Lien Term Loans and $0.3 million in aggregate principal amount of 2027 Notes were held by certain related parties.

9. Commitments and Contingencies

Litigation Matters

We are periodically involved in litigation and regulatory proceedings, investigations and disputes, including matters relating to commercial transactions, operations, landowner disputes, royalty claims, property damage claims, contract actions and environmental, health and safety matters. We may also periodically be involved in disputes with our midstream counterparties, some of which are related parties as discussed in Note 8, including disputes arising due to the overlapping nature of dedication provisions, ownership and contractual interests in the Utica Shale. A liability is recognized for any contingency that is probable and reasonably estimable. We continually assess the likelihood of adverse judgments or outcomes in these matters, as well as potential ranges of possible losses, based on a careful analysis of each matter and, if necessary, with the assistance of outside legal counsel and other experts. We will continue to monitor the impact that litigation could have on us and will assess the impact of future events. Legal defense costs are accounted for in the period the costs are incurred.

We are defending against certain pending claims, have resolved a number of claims through negotiated settlements and have prevailed in various other lawsuits. Based on management's current assessment, we believe no pending or threatened lawsuit or dispute relating to our business operations is likely to have a material adverse effect on our consolidated financial position, results of operations or cash flows.

For all such claims, disputes and threatened or pending litigation, we have accrued $15.0 million as of both September 30, 2021 and December 31, 2020, which is presented as part of other current liabilities on the condensed consolidated balance sheets. The final resolution of such matters could differ materially from management's estimates.

Environmental Matters

We are subject to existing federal, state and local laws and regulations governing environmental matters, such as the Comprehensive Environmental Response, Compensation and Liability Act and similar statutes. From time to time, we are party to various environmental and regulatory proceedings in the ordinary course of business. Management does not believe the results of these environmental proceedings, individually or in the aggregate, will have a material adverse effect on us.

Commitments

The following table presents our undiscounted commitments under unconditional purchase obligations, excluding any reimbursement from working interest and royalty interest owners, that have initial or remaining non-cancelable terms in excess of one year as of September 30, 2021:

($ in thousands)	Pipeline Commitments	Operating Leases	Total
Remaining in 2021	$ 166,982	$ 1,614	$ 168,596
2022	662,606	7,670	670,276
2023	663,401	6,407	669,808
2024	655,320	2,830	658,150
2025	643,474	448	643,922
2026 and Thereafter	5,481,239	—	5,481,239
Total	$ 8,273,022	$ 18,969	$ 8,291,991

Pipeline Commitments

We have entered into certain pipeline capacity commitments with various counterparties in order to facilitate the delivery of our production to market and reduce the likelihood of possible production curtailments that may arise due to limited capacity. Through these contracts, we are committed to transport minimum daily natural gas or NGL volumes at negotiated rates or pay for any deficiencies. The amounts in the table above represent the gross amounts we are committed to pay; however, working interest owners and royalty interest owners, where appropriate, will be responsible for their proportionate share of these costs. To satisfy credit support requirements for these commitments, $169.2 million in letters of credit and $258.7 million in surety bonds were issued by us or on our behalf to certain transportation providers as of September 30, 2021. Our credit support includes support provided to certain related parties, which, as of September 30, 2021, included $121.3 million in letters of credit and $192.6 million in surety bonds. For information regarding certain other transactions with related parties, see Note 8.

Operating Leases

We lease certain equipment and office space as part of our operations. See Note 1, *Adopted and Recently Issued Accounting Pronouncements*, for further discussion of our leases and the expected impact of Topic 842.

10. Other Current Liabilities

Our other current liabilities consisted of the following as of the dates indicated:

($ in thousands)	September 30, 2021	December 31, 2020
Gathering, processing and transportation expense accrual	$ 128,934	$ 130,058
Revenues and royalties due others	142,270	84,142
Drilling and completion cost accrual	71,302	48,922
Taxes other than income accrual	23,036	28,593
Other	56,185	49,922
Total Other Current Liabilities	$ 421,727	$ 341,637

Management's Discussion and Analysis of Financial Condition and Results of Operations

Our Management's Discussion and Analysis of our Financial Condition and Results of Operations ("MD&A") should be read in conjunction with our audited consolidated financial statements, the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" for the year ended December 31, 2020, in addition to the unaudited condensed consolidated financial statements and related notes included within this quarterly report. The following discussion and analysis contains forward-looking statements that involve known and unknown risks, uncertainties and assumptions. The forward-looking statements are not historical facts, but rather reflect our future plans, estimates, beliefs and expected performance. In light of these risks, uncertainties and assumptions, the forward-looking events discussed may not occur. We do not undertake any obligation to publicly update any forward-looking statements except as otherwise required by applicable law.

Unless otherwise indicated or the context otherwise requires, references in this MD&A section to "we," "our" and "us" refer to Ascent Resources Utica Holdings, LLC together with its wholly-owned subsidiaries.

Overview

We are one of the largest private producers of natural gas in the United States and are focused on acquiring, developing, producing and operating natural gas and oil properties located in the Utica Shale. We are a wholly-owned subsidiary of Ascent Resources Operating, LLC (our "Member") and an indirect wholly-owned subsidiary of Ascent Resources, LLC (our "Parent"). We were formed in 2013 by our private equity sponsors, primarily The Energy & Minerals Group and First Reserve Corporation, to utilize our technical expertise to acquire and exploit assets in the Utica Shale. Our asset base is concentrated in southern Ohio, where we target primarily the Point Pleasant interval of the Utica Shale, one of the premier North American shale plays. Our largely contiguous development footprint of approximately 335,000 net leasehold acres, including 73,000 mineral acres, lies within the core of the southern Utica Shale and, as supported by our drilling results and those of offset operators, offers development opportunities with predictable and repeatable production profiles, low breakeven costs and industry-leading rates of return. We also own royalty interests in approximately 6,100 mineral acres that are being developed by third-party operators and provide enhanced value without additional capital costs or operating expenses.

We are continuously focused on enhancing our drilling and completion techniques, minimizing costs and maximizing the ultimate recovery of natural gas, oil and NGL from our assets, with the goal of generating top-tier corporate-level returns and sustainable free cash flow in a capital efficient and financially disciplined manner.

2021 Highlights

Significant financial and operating results for the three months ended September 30, 2021:

- We exited the quarter with $1.14 billion in liquidity, comprised of $1.14 billion of available borrowing capacity under our senior secured revolving credit facility ("Credit Facility") and $6.1 million of cash on hand.
- Our net daily production for the three months ended September 30, 2021 averaged 2.0 bcfe/d and was comprised of approximately 93% natural gas, 2% oil and 5% NGL.
- We spud 19 wells, hydraulically fractured 20 wells and turned-in-line 17 new wells.
- Our average realized price for the three months ended September 30, 2021, including the effects of settled derivatives, increased 12% to $2.95 per mcfe from $2.63 per mcfe for the three months ended September 30, 2020.

Significant financial and operating results for the nine months ended September 30, 2021:

- In June 2021, we issued $400.0 million in aggregate principal amount of 2029 Notes (defined below). The net proceeds were used to repay a portion of the borrowings outstanding under our Credit Facility.
- We redeemed the remaining $68.0 million in aggregate principal amount of 2022 Notes (defined below) on April 1, 2021 for $71.4 million, plus accrued and unpaid interest.
- The remaining $8.3 million in aggregate principal amount of Convertible Notes (defined below) matured on March 1, 2021 and was redeemed for $12.8 million, plus accrued and unpaid interest.
- Capital expenditures incurred decreased 7% to $485.4 million during the nine months ended September 30, 2021 from $524.0 million during the nine months ended September 30, 2020.

- Our net daily production for the nine months ended September 30, 2021 averaged 1.9 bcfe/d and was comprised of approximately 91% natural gas, 3% oil and 6% NGL.
- We spud 56 wells, hydraulically fractured 55 wells and turned-in-line 54 new wells.
- Our average realized price for the nine months ended September 30, 2021, including the effects of settled derivatives, increased 12% to $2.98 per mcfe from $2.67 per mcfe for the nine months ended September 30, 2020.

COVID-19 Update

We continue to monitor the current and potential impacts of the novel coronavirus ("COVID-19") pandemic on all aspects of our business, including how it has impacted, and may in the future impact, our operations, financial results, liquidity, employees and communities in which we operate. We also continue to monitor a number of factors that may cause actual results of operations to differ from our historical results or current expectations. Due to the commodity price environment in 2020, we curtailed certain wells in an effort to optimize revenue in future periods. All such wells have since been turned back to sales. While we did not incur significant disruptions to operations during the nine months ended September 30, 2021, further curtailments could be utilized in the future.

As of the third quarter of 2021, the effects of COVID-19 mitigation efforts, including the wide availability of vaccines, the relaxation of COVID-19 related restrictions and optimism regarding economic recovery have contributed to increased demand and prices for oil, natural gas and NGL. Natural gas prices in particular staged a material comeback beginning in late 2020 which has continued through the third quarter of 2021. As the full impact of COVID-19 and the volatility in commodity prices continues to evolve, and, although we are monitoring both closely, we cannot be certain as to the full magnitude that they will have on our future financial condition, liquidity, results of operations or cash flows.

Liquidity and Capital Resources

Overview

The drilling, completion and production of our natural gas and oil properties are capital intensive activities that require access to significant capital. We continually evaluate our capital needs and compare them to our capital resources. Our primary sources of funds are internally generated cash flows from operations, draws on our Credit Facility and proceeds from the issuance of debt, and historically have included equity contributions from our Parent. Our future success in growing our proved reserves and production will be highly dependent upon net cash provided by our operating activities and the capital resources available to us. Based on existing market conditions and our expected liquidity needs, among other factors, we intend to use a portion of our cash flows from operations to repay or redeem portions of our indebtedness. Additionally, we may use securities offerings or other debt issuances to repay debt prior to scheduled maturities, and we may seek opportunities to refinance all or a portion of our indebtedness, including through cash purchases, exchanges, open market purchases, privately negotiated transactions or otherwise, as demonstrated through our recent debt transactions. See Note 4 of the notes to our condensed consolidated financial statements included in this report for further discussion of our recent debt transactions.

Our cash flow from operating activities is highly dependent upon our ability to produce and sell our natural gas, oil and NGL production and the sales prices that we receive. Commodity prices are subject to wide fluctuations and are driven by market supply and demand, which is impacted by many factors. The sales price we realize for our production is also impacted by our commodity hedging activities. Our derivative contracts allow us to ensure a certain level of cash flow to fund our operations. Although we are continually securing additional derivative positions for portions of our expected future production, there can be no assurance that we will be able to add derivative positions to cover the remainder of our expected production at favorable prices. See Quantitative and Qualitative Disclosures about Market Risk and Note 5 of our condensed consolidated financial statements for further details.

As of September 30, 2021, we had a cash balance of $6.1 million and availability under our Credit Facility of $1.14 billion. In November 2021, the borrowing base under the Credit Facility was reaffirmed at $1.85 billion. Based on our expected operating cash flows, Credit Facility availability and cash on hand, we anticipate being able to satisfy all of our financial obligations and liquidity needs for the next twelve months.

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 natural gas and oil industry. Based on our significant borrowing capacity under our Credit Facility with a maturity date in 2024, commodity derivatives we have in place which cover a portion of our expected annual production through 2024 and no significant maturities of senior notes or term loans as of September 30, 2021 until 2025 and beyond, we believe we will have adequate capital resources and liquidity for the foreseeable future.

We establish a capital budget at the beginning of each calendar year and periodically review or adjust our allocation for capital expenditures as business conditions warrant. Actual capital expenditures may vary due to many factors, including drilling results, commodity prices, industry conditions, the prices and availability of goods and services and the extent to which properties are acquired or assets are sold. Our 2021 capital budget has been revised to approximately $630 million to $650 million, and we expect to operate an average of 4 rigs and to turn-in-line between 65 and 70 wells.

Sources and Uses of Funds

The following table presents the sources of cash and cash equivalents:

($ in thousands)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Cash provided by operating activities	$ 554,711	$ 654,547
Proceeds from issuance of long-term debt	400,000	—
Financing commodity derivative settlements	—	1,557
Total Sources of Cash and Cash Equivalents	$ 954,711	$ 656,104

The following table presents the uses of cash and cash equivalents:

($ in thousands)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Natural Gas and Oil Expenditures:		
Drilling and completion costs	$ 367,640	$ 460,373
Acquisitions of natural gas and oil properties	36,349	59,240
Interest capitalized[a]	37,497	64,119
Total Natural Gas and Oil Expenditures	441,486	583,732
Other Uses of Cash and Cash Equivalents:		
Repayment of Credit Facility, net of borrowings	410,000	20,000
Repayment of long-term debt	84,173	50,995
Additions to other property and equipment	329	1,461
Cash paid for debt issuance costs	7,221	2,294
Financing commodity derivative settlements	11,188	—
Other	3,103	—
Total Other	516,014	74,750
Total Uses of Cash and Cash Equivalents	$ 957,500	$ 658,482

(a) Interest is capitalized on significant investments in active unproved properties and wells in process.

Our primary source of funds is net cash flow provided by operating activities, which was approximately $554.7 million and $654.5 million for the nine months ended September 30, 2021 and 2020, respectively. Operating cash flows were positively impacted by an increase in prices received for commodity sales year over year but were more than offset by an increase in cash settlements paid to our counterparties on commodity derivatives, as well as timing differences between the settlements of our hedged volumes and receipts for sales of our produced volumes.

Our cash drilling and completion costs were $367.6 million and $460.4 million for the nine months ended September 30, 2021 and 2020, respectively. The decrease in drilling and completion costs in 2021 was the result of us completing and turning-in-line fewer wells as well as reduced costs per lateral foot due to increased completion stages per day and improved drilling cycle times. We spud 56 wells, hydraulically fractured 55 wells and turned-in-line 54 new wells during the nine months ended September 30, 2021 compared to the same period in 2020 during which we spud 49 wells, hydraulically fractured 61 wells and turned-in-line 65 new wells. We spent cash of $36.3 million and $59.2 million during the nine months ended September 30, 2021 and 2020, respectively, primarily related to the acquisition of leases arising in the ordinary course of business.

We spent cash of $84.2 million during the nine months ended September 30, 2021 to redeem $68.0 million in aggregate principal amount of our 2022 Notes at 105.00% of the outstanding principal value, plus accrued and unpaid interest, and $8.3 million in aggregate principal amount of our Convertible Notes at 153.8% of the outstanding principal value, plus accrued and unpaid interest. We spent cash of $51.0 million during the nine months ended September 30, 2020 to repurchase $50.3 million in aggregate principal amount of our 2022 Notes, plus accrued and unpaid interest, and $10.9 million in aggregate principal amount of our Convertible Notes, plus accrued and unpaid interest.

Certain Indebtedness

Credit Facility

Our Credit Facility matures on April 1, 2024, and as of September 30, 2021, it had a fully committed borrowing base of $1.85 billion, of which $250.0 million was authorized for letters of credit. The amount available to be borrowed under the Credit Facility is subject to a borrowing base that is required to be redetermined semiannually on or about May 1 and November 1 of each year primarily based on the estimated value and future net cash flows of our proved natural gas, oil and NGL reserves and our commodity derivative positions, as determined by lenders under the Credit Facility at their discretion. If the commodity price environment declines over an extended period, it may in the future lead to a reduction in the borrowing base of our Credit Facility. We do not believe that any such reductions would have a significant impact on our ability to service our debt and fund our drilling program and related operations. As of September 30, 2021, we had $543.0 million of borrowings outstanding and $169.2 million of letters of credit issued under the Credit Facility.

As of September 30, 2021, we were in compliance with all applicable financial covenants under the Credit Facility. Our ability to comply with financial covenants in future periods depends, among other things, on the success of our development program and other factors beyond our control, such as market demand and prices for natural gas, oil and NGL. See Note 4, *Credit Facility*, of the notes to our condensed consolidated financial statements included in this report for further discussion of the terms of the Credit Facility.

Second Lien Term Loans

In October 2020, we issued $537.8 million in aggregate principal amount of second lien term loans (“2025 Second Lien Term Loans”) and $339.7 million in aggregate principal amount of of 9.00% senior unsecured notes due 2027 (“2027 Notes”) in exchange for $856.7 million of aggregate principal amount of 2022 Notes (the “Exchange”). In connection with the Exchange, we issued an additional $12.0 million in aggregate principal amount of 2025 Second Lien Term Loans, $8.6 million in aggregate principal amount of 2027 Notes and equity of our Parent to certain existing equity holders and their designated affiliates in exchange for an aggregate contribution of $20.0 million in cash. The 2025 Second Lien Term Loans mature on November 1, 2025, and interest is payable quarterly, beginning with January 13, 2021, at an annual rate of 9.00% plus 3-month LIBOR, with a 1.00% LIBOR floor. The 2025 Second Lien Term Loans are secured by second liens on substantially all of our assets, including our natural gas and oil properties. As of September 30, 2021, we had $549.8 million in aggregate principal amount of 2025 Second Lien Term Loans outstanding, and we were in compliance with all applicable covenants under the 2025 Second Lien Term Loans.

Senior Notes

2026 Notes. In October 2018, we issued $600.0 million in aggregate principal amount of 7.00% senior unsecured notes due 2026 (“2026 Notes”) in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act of 1933, as amended (the “Securities Act”). The 2026 Notes mature on November 1, 2026, and interest is payable on May 1 and November 1 of each year. As of September 30, 2021, we had $600.0 million in aggregate principal amount of the 2026 Notes outstanding.

2027 Notes. In October 2020, we issued $348.3 million in aggregate principal amount of 2027 Notes. The 2027 Notes mature on November 1, 2027, and interest is payable at an annual rate of 9.00% on May 1 and November 1 of each year, beginning with May 1, 2021. As of September 30, 2021, we had $348.3 million in aggregate principal amount of the 2027 Notes outstanding.

The 2027 Notes also contain a contingent payment right which entitles the holders to receive a fixed amount of cash or equity that, as of September 30, 2021, ranged from 30% to 45% of the then-outstanding aggregate principal amount of 2027 Notes, if certain triggering events occur. The contingent payment right is required to be bifurcated, and as of September 30, 2021, the estimated fair value was $85.6 million. See Note 4, *Senior Notes*, and Note 6, *Contingent Payment Right*, of the notes to our condensed consolidated financial statements included in this report for further discussion of the contingent payment right.

2028 Notes. In December 2020, we issued $300.0 million in aggregate principal amount of 8.25% senior unsecured notes due 2028 (“2028 Notes”) in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act. The 2028 Notes mature on December 31, 2028, and interest is payable on February 1 and August 1 of each year, beginning with August 1, 2021. As of September 30, 2021, we had $300.0 million in aggregate principal amount of the 2028 Notes outstanding.

2029 Notes. In June 2021, we issued $400.0 million in aggregate principal amount of 5.875% senior unsecured notes due 2029 ("2029 Notes") in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act. The 2029 Notes mature on June 30, 2029, and interest is payable on March 1 and September 1 of each year, beginning with September 1, 2021. As of September 30, 2021, we had $400.0 million in aggregate principal amount of the 2029 Notes outstanding.

2022 Notes. In April 2017, we issued $1.5 billion in aggregate principal amount of 10.00% senior unsecured notes due 2022 ("2022 Notes") in a private placement to eligible purchasers under Rule 144A and Regulation S of the Securities Act. The 2022 Notes had a maturity date of April 1, 2022, and interest was payable on April 1 and October 1 of each year. Through multiple transactions from 2018 to 2020, we repurchased or otherwise retired a significant portion of the 2022 Notes. During the nine months ended September 30, 2020, we repurchased approximately $50.3 million of outstanding principal amount of the 2022 Notes for $35.4 million, plus accrued and unpaid interest. On April 1, 2021, we redeemed the remaining $68.0 million of outstanding principal amount of the 2022 Notes at a price of 105.00% of the outstanding principal value for $71.4 million, plus accrued and unpaid interest.

The 2022 Notes, 2026 Notes, 2027 Notes, 2028 Notes and 2029 Notes (together, the "Senior Notes") are senior unsecured obligations and rank equally in right of payment with all of our existing and future senior unsecured debt and will rank senior in right of payment to all our future subordinated debt. The outstanding Senior Notes are effectively subordinated to all of our existing and future secured debt to the extent of the value of the collateral securing such indebtedness. Our obligations under the outstanding Senior Notes are fully and unconditionally guaranteed, jointly and severally, by our current material subsidiaries and will be so guaranteed by any of our future material subsidiaries. As of September 30, 2021, we were in compliance with all applicable covenants of the indentures governing the Senior Notes.

Upon the occurrence of a qualifying change of control, we are required to offer to repurchase all or any part of these outstanding Senior Notes at a price of 101.00%, plus accrued and unpaid interest. The outstanding Senior Notes each have certain conditions set forth under which they may be redeemed prior to maturity. See Note 4, *Senior Notes*, of the notes to our condensed consolidated financial statements included in this report for further discussion of the terms and early redemptions of the Senior Notes.

Convertible Notes

In 2014, we issued $1.0 billion of convertible notes due 2021 ("Convertible Notes"). Through multiple transactions from 2015 through 2020, we repurchased or otherwise retired a significant portion of the Convertible Notes. During the nine months ended September 30, 2020, we repurchased $10.9 million of outstanding principal amount for $15.6 million, plus accrued and unpaid interest. On March 1, 2021, the remaining outstanding aggregate principal of $8.3 million matured and was redeemed at a 53.8% premium for $12.8 million, plus accrued and unpaid interest.

Contractual Obligations and Off-Balance Sheet Arrangements

We occasionally enter into arrangements that can give rise to contractual obligations and off-balance sheet commitments, such as pipeline transportation commitments, operating leases, and various other commitments in the ordinary course of business. See Note 9 of the notes to our condensed consolidated financial statements included in this report for further details of our commitments.

New Accounting Pronouncements

See Note 1, *Adopted and Recently Issued Accounting Pronouncements,* of the notes to our condensed consolidated financial statements included in this report for a description of recent accounting pronouncements.

Results of Operations

Comparison of Three Months Ended September 30, 2021 and 2020

Revenues. The following table sets forth certain information for the periods indicated regarding our revenues; average sales prices received; and net production volumes:

	Three Months Ended September 30,		Variance	
	2021	2020	Amount	Percent
Revenues ($ in thousands):				
Natural gas	$ 656,562	$ 300,643	$ 355,919	118 %
Oil	43,480	37,177	6,303	17 %
NGL	64,888	27,243	37,645	138 %
Total Revenues, before effects of commodity derivatives	$ 764,930	$ 365,063	$ 399,867	110 %
Average Sales Prices:				
Natural gas ($/mcf)	$ 3.90	$ 1.83	$ 2.07	113 %
Oil ($/bbl)	$ 64.13	$ 33.16	$ 30.97	93 %
NGL ($/bbl)	$ 40.25	$ 14.34	$ 25.91	181 %
Natural Gas Equivalent ($/mcfe)	$ 4.20	$ 2.00	$ 2.20	110 %
Settlements of commodity derivatives ($/mcfe)	(1.25)	0.63	(1.88)	(298)%
Average sales price, after effects of settled derivatives ($/mcfe)	$ 2.95	$ 2.63	$ 0.32	12 %
Net Production Volumes:				
Natural gas (mmcf)	168,236	164,208	4,028	2 %
Oil (mbbls)	678	1,121	(443)	(40)%
NGL (mbbls)	1,612	1,900	(288)	(15)%
Natural Gas Equivalent (mmcfe)	181,975	182,333	(358)	— %
Average Daily Net Production Volumes:				
Natural gas (mmcf/d)	1,829	1,785	44	2 %
Oil (mbbls/d)	7	12	(5)	(42)%
NGL (mbbls/d)	18	21	(3)	(14)%
Natural Gas Equivalent (mmcfe/d)	1,978	1,982	(4)	— %

The $399.9 million increase in natural gas, oil and NGL revenues (excluding the effects of derivatives) was primarily due to a significant increase in commodity prices. Commodity prices fluctuate in response to changes in supply and demand, market uncertainty and a variety of other factors beyond our control.

A change in commodity prices has a direct impact on our sales and cash flows. The following table illustrates the effects of an increase or decrease in commodity prices on our sales and cash flows, before the effects of derivatives, assuming our production levels for the three months ended September 30, 2021 remained constant:

($ in thousands)	Volumes	Price Fluctuation per Unit	Effect on Sales and Cash Flows
Commodity:			
Natural Gas (mmcf)	168,236	$ 0.10	$ 16,824
Oil (mbbls)	678	$ 1.00	$ 678
NGL (mbbls)	1,612	$ 1.00	$ 1,612

Impact of Commodity Derivative Instruments. We use commodity derivative instruments to mitigate our exposure to fluctuations in future commodity prices in order to protect our anticipated operating cash flow against significant market movements or volatility. The following table sets forth the settlements of our derivative instruments and the change in fair value for the periods indicated:

	Three Months Ended September 30,	
($ in thousands)	2021	2020
Net Settlements of Commodity Derivatives:		
Natural Gas	$ (212,491)	$ 111,137
Oil	(6,271)	1,909
NGL	(8,524)	1,109
Total Net Settlements of Commodity Derivatives	(227,286)	114,155
Change in Fair Value of Commodity Derivatives:		
Natural Gas	(1,270,844)	(493,844)
Oil	(2,408)	(4,505)
NGL	(11,506)	(1,826)
Total Change in Fair Value of Commodity Derivatives	(1,284,758)	(500,175)
Total Loss on Commodity Derivatives	$ (1,512,044)	$ (386,020)

Operating Expenses. The following table sets forth our operating expenses and costs per mcfe:

	Three Months Ended September 30,		Variance	
	2021	2020	Amount	Percent
Operating Expenses ($ in thousands):				
Lease operating expenses	$ 23,756	$ 19,203	$ 4,553	24 %
Gathering, processing and transportation expenses	$ 242,288	$ 227,247	$ 15,041	7 %
Taxes other than income	$ 9,928	$ 9,344	$ 584	6 %
Exploration expenses	$ 22,274	$ 28,096	$ (5,822)	(21)%
General and administrative expenses	$ 13,899	$ 15,063	$ (1,164)	(8)%
Natural gas and oil depreciation, depletion and amortization	$ 151,188	$ 195,120	$ (43,932)	(23)%
Depreciation and amortization of other assets	$ 443	$ 928	$ (485)	(52)%
Operating Expenses ($/mcfe):				
Lease operating expenses	$ 0.13	$ 0.11	$ 0.02	18 %
Gathering, processing and transportation expenses	$ 1.33	$ 1.25	$ 0.08	6 %
Taxes other than income	$ 0.05	$ 0.05	$ —	— %
General and administrative expenses	$ 0.08	$ 0.08	$ —	— %
Natural gas and oil depreciation, depletion and amortization	$ 0.83	$ 1.07	$ (0.24)	(22)%
Depreciation and amortization of other assets	$ —	$ 0.01	$ (0.01)	(100)%

- Lease operating expenses per mcfe increased as a result of an increase in our total number of producing wells combined with an increase in compression costs for the three months ended September 30, 2021 compared to the same period in 2020.

- Gathering, processing and transportation expenses per mcfe increased primarily as a result of an increase in firm transportation commitments for the three months ended September 30, 2021 compared to the same period in 2020.

- Exploration expense was primarily driven by impairments of $20.1 million and $26.3 million for the three months ended September 30, 2021 and 2020, respectively, for unproved natural gas and oil properties for which the leases are expected to expire. As we continue to review our acreage position and high grade our drilling inventory, focusing on our core type curve areas, additional leasehold impairments and abandonments may be recorded.

- Natural gas and oil DD&A per mcfe decreased primarily due to an increase in total proved reserves and increased capital efficiencies as of September 30, 2021, compared to September 30, 2020.

Interest Expense. Interest expense was $45.0 million and $33.3 million for the three months ended September 30, 2021 and 2020, respectively, detailed as follows along with our weighted average debt outstanding:

($ in thousands)	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020
Credit Facility	$ 6,200	$ 10,537
2025 Second Lien Term Loans	14,076	—
Senior Notes	30,416	33,624
Convertible Notes	—	1,080
Loss on interest rate derivatives	66	118
Amortization of debt discounts, premium and issuance costs	4,612	6,048
Other	1,138	1,355
Capitalized interest	(11,523)	(19,483)
Total Interest Expense, net	$ 44,985	$ 33,279
Weighted Average Debt Outstanding:		
Credit Facility	$ 700,283	$ 1,227,783
2025 Second Lien Term Loans	549,822	—
Senior Notes	1,648,294	1,524,713
Convertible Notes	—	66,421
Weighted Average Debt Outstanding	$ 2,898,399	$ 2,818,917

The increase in interest expense for the three months ended September 30, 2021 compared to the same period in 2020 was primarily due to reduced capitalized interest resulting from changes in our development activities.

Results of Operations

Comparison of Nine Months Ended September 30, 2021 and 2020

Revenues. The following table sets forth certain information for the periods indicated regarding our revenues; average sales prices received; and net production volumes:

	Nine Months Ended September 30,		Variance	
	2021	2020	Amount	Percent
Revenues ($ in thousands):				
Natural gas	$ 1,534,239	$ 868,249	$ 665,990	77 %
Oil	136,235	107,736	28,499	26 %
NGL	172,749	80,590	92,159	114 %
Total Revenues, before effects of commodity derivatives	$ 1,843,223	$ 1,056,575	$ 786,648	74 %
Average Sales Prices:				
Natural gas ($/mcf)	$ 3.24	$ 1.77	$ 1.47	83 %
Oil ($/bbl)	$ 57.36	$ 31.65	$ 25.71	81 %
NGL ($/bbl)	$ 31.58	$ 10.86	$ 20.72	191 %
Natural Gas Equivalent ($/mcfe)	$ 3.54	$ 1.90	$ 1.64	86 %
Settlements of commodity derivatives ($/mcfe)	(0.56)	0.77	(1.33)	(173)%
Average sales price, after effects of settled derivatives ($/mcfe)	$ 2.98	$ 2.67	$ 0.31	12 %
Net Production Volumes:				
Natural gas (mmcf)	473,089	490,108	(17,019)	(3)%
Oil (mbbls)	2,375	3,404	(1,029)	(30)%
NGL (mbbls)	5,471	7,423	(1,952)	(26)%
Natural Gas Equivalent (mmcfe)	520,160	555,068	(34,908)	(6)%
Average Daily Net Production Volumes:				
Natural gas (mmcf/d)	1,733	1,789	(56)	(3)%
Oil (mbbls/d)	9	12	(3)	(25)%
NGL (mbbls/d)	20	27	(7)	(26)%
Natural Gas Equivalent (mmcfe/d)	1,905	2,026	(121)	(6)%

The $786.6 million increase in natural gas, oil and NGL revenues (excluding the effects of derivatives) was primarily due to a significant increase in commodity prices, which was partially offset by a decline in total production volumes. Commodity prices fluctuate in response to changes in supply and demand, market uncertainty and a variety of other factors beyond our control.

A change in commodity prices has a direct impact on our sales and cash flows. The following table illustrates the effects of an increase or decrease in commodity prices on our sales and cash flows, before the effects of derivatives, assuming our production levels for the nine months ended September 30, 2021 remained constant:

($ in thousands)	Volumes	Price Fluctuation per Unit	Effect on Sales and Cash Flows
Commodity:			
Natural Gas (mmcf)	473,089	$ 0.10	$ 47,309
Oil (mbbls)	2,375	$ 1.00	$ 2,375
NGL (mbbls)	5,471	$ 1.00	$ 5,471

Impact of Commodity Derivative Instruments. We use commodity derivative instruments to mitigate our exposure to fluctuations in future commodity prices in order to protect our anticipated operating cash flow against significant market movements or volatility. The following table sets forth the settlements of our derivative instruments and the change in fair value for the periods indicated:

	Nine Months Ended September 30,	
($ in thousands)	2021	2020
Net Settlements of Commodity Derivatives:		
Natural Gas	$ (254,831)	$ 380,496
Oil	(18,054)	44,240
NGL	(16,415)	4,845
Total Net Settlements of Commodity Derivatives	(289,300)	429,581
Change in Fair Value of Commodity Derivatives:		
Natural Gas	(1,920,423)	(686,667)
Oil	(31,062)	14,051
NGL	(35,692)	(5,031)
Total Change in Fair Value of Commodity Derivatives	(1,987,177)	(677,647)
Total Loss on Commodity Derivatives	$ (2,276,477)	$ (248,066)

Operating Expenses. The following table sets forth our operating expenses and costs per mcfe:

	Nine Months Ended September 30,		Variance	
	2021	2020	Amount	Percent
Operating Expenses ($ in thousands):				
Lease operating expenses	$ 66,548	$ 57,839	$ 8,709	15 %
Gathering, processing and transportation expenses	$ 697,931	$ 689,896	$ 8,035	1 %
Taxes other than income	$ 29,316	$ 28,343	$ 973	3 %
Exploration expenses	$ 57,306	$ 77,907	$ (20,601)	(26)%
General and administrative expenses	$ 42,991	$ 50,112	$ (7,121)	(14)%
Natural gas and oil depreciation, depletion and amortization	$ 436,950	$ 572,001	$ (135,051)	(24)%
Depreciation and amortization of other assets	$ 1,434	$ 2,794	$ (1,360)	(49)%
Operating Expenses ($/mcfe):				
Lease operating expenses	$ 0.13	$ 0.10	$ 0.03	30 %
Gathering, processing and transportation expenses	$ 1.34	$ 1.24	$ 0.10	8 %
Taxes other than income	$ 0.06	$ 0.05	$ 0.01	20 %
General and administrative expenses	$ 0.08	$ 0.09	$ (0.01)	(11)%
Natural gas and oil depreciation, depletion and amortization	$ 0.84	$ 1.03	$ (0.19)	(18)%
Depreciation and amortization of other assets	$ —	$ 0.01	$ (0.01)	(100)%

- Lease operating expenses per mcfe increased as a result of an increase in our total number of producing wells, combined with an increase in compression costs and a reduction in our overall production for the nine months ended September 30, 2021 compared to the same period in 2020.

- Gathering, processing and transportation expenses per mcfe increased primarily as a result of an increase in firm transportation commitments and a decrease in production for the nine months ended September 30, 2021 compared to the same period in 2020.

- Exploration expense was primarily driven by impairments of $53.5 million and $75.0 million for the nine months ended September 30, 2021 and 2020, respectively, for unproved natural gas and oil properties for which the leases are expected to expire. As we continue to review our acreage position and high grade our drilling inventory, focusing on our core type curve areas, additional leasehold impairments and abandonments may be recorded.

- General and administrative expenses decreased primarily due to $5.6 million of non-recurring legal expenses recorded during the nine months ended September 30, 2020.

- Natural gas and oil DD&A per mcfe decreased primarily due to an increase in total proved reserves and increased capital efficiencies as of September 30, 2021, compared to September 30, 2020.

Interest Expense. Interest expense was $127.8 million and $98.4 million for the nine months ended September 30, 2021 and 2020, respectively, detailed as follows along with our weighted average debt outstanding:

($ in thousands)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Credit Facility	$ 23,069	$ 35,242
2025 Second Lien Term Loans	41,745	—
Senior Notes	82,335	101,830
Convertible Notes	93	3,357
Loss on interest rate derivatives	243	620
Amortization of debt discounts, premium and issuance costs	13,922	19,273
Other	3,863	2,229
Capitalized interest	(37,497)	(64,119)
Total Interest Expense, net	$ 127,773	$ 98,432
Weighted Average Debt Outstanding:		
Credit Facility	$ 898,293	$ 1,224,204
2025 Second Lien Term Loans	549,822	—
Senior Notes	1,430,416	1,536,869
Convertible Notes	1,796	68,646
Weighted Average Debt Outstanding	$ 2,880,327	$ 2,829,719

The increase in interest expense for the nine months ended September 30, 2021 compared to the same period in 2020 was primarily due to reduced capitalized interest resulting from changes in our development activities.

(Losses) Gains on Purchases or Exchanges of Debt. We recognized a net loss on purchases or exchanges of debt of $3.8 million during the nine months ended September 30, 2021 due to us repurchasing the remaining outstanding principal of our 2022 Notes. We recognized a net gain on purchases or exchanges of debt of $9.7 million during the nine months ended September 30, 2020 primarily due to us repurchasing a portion of our 2022 Notes, which resulted in a $14.3 million gain. This was partially offset by $3.6 million of fees related to the Exchange and a $1.0 million loss on the repurchase of a portion of our Convertible Notes. See Note 4, *Senior Notes* and *Convertible Notes*, of the notes to our condensed consolidated financial statements included in this report for further discussion of our repurchases and exchanges of debt.

Quantitative and Qualitative Disclosure 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 risk as well as how we view and manage our exposure to such risk. The term “market risk” refers to the risk of loss arising from adverse changes in natural gas, oil and NGL prices, customer credit and interest rates. The disclosures are not meant to be precise indicators of expected future losses, but rather indicators of reasonably possible losses.

Commodity Demand and Price Risk

Our primary market risk exposure is in the prices we receive for our natural gas, oil and NGL production. Realized pricing is primarily driven by spot regional market prices applicable to our natural gas, oil and NGL production. Pricing for natural gas, oil and NGL production is volatile and unpredictable, and we expect this volatility to continue in the future. The prices we expect to receive for our natural gas, oil and NGL production will depend on many factors outside of our control, including the supply of, and demand for, natural gas, oil and NGL, the level of economic activity in the United States and globally, the performance of specific industries and the volatility of natural gas, oil and NGL prices at various delivery points. During the nine months ended September 30, 2021 and 2020, the average daily Henry Hub spot market price of natural gas was $3.52 per mmbtu and $1.82 per mmbtu, respectively, and the average daily WTI oil price was $65.04 per bbl and $38.21 per bbl, respectively. Approximately 89% of our September 30, 2021 proved reserves were natural gas; therefore, changes in realized natural gas pricing will affect us more than changes in realized oil or NGL pricing.

We use derivative instruments to reduce our exposure to fluctuations in future commodity prices and to protect our anticipated operating cash flow against significant market movements or volatility. These contracts are financial instruments and do not require or allow for physical delivery of the hedged commodity. We do not use derivative instruments for speculative or trading purposes. Under the Credit Facility agreement, we are permitted to hedge up to 90% of our forecasted production for any month during the next 36 months. Additionally, we may enter into commodity derivative contracts with terms greater than 36 months, and for no longer than 66 months, for up to 80% of the forecasted production from our proved reserves for any month. As of September 30, 2021, approximately 1,471,000 mmbtu/d of our projected natural gas production for the remainder of 2021 were hedged at a weighted average floor price of $2.50 per mmbtu, and approximately 1,418,000 mmbtu/d of our projected natural gas production for 2022 were hedged at a weighted average floor price of $2.65 per mmbtu, excluding the sold puts on our three-way collars. Additionally, as of September 30, 2021, approximately 2,000 bbls/d of our projected oil production for the remainder of 2021 were hedged at a weighted average floor price of $54.89 per bbl, and approximately 5,000 bbls/d of our projected oil production for 2022 were hedged at a weighted average floor price of $57.50 per bbl. Our open hedge positions as of September 30, 2021 had maturities extending through December 2024. Additionally, we have basis swaps to mitigate portions of our basis exposure. Our market risk associated with commodity prices did not materially change from September 30, 2020 to September 30, 2021. See Note 5 of the notes to our condensed consolidated financial statements included in this report for a summary of our commodity hedge position as of September 30, 2021.

The fair value of our commodity derivative instruments is largely influenced by the future prices of natural gas, oil and NGL. The following table sets forth the changes in the fair value of our commodity derivative instruments due to a hypothetical 10% change in future prices as of September 30, 2021. However, any realized derivative gain or loss would be substantially offset by a decrease or increase, respectively, in the actual revenue received from the sale of our production associated with the derivative instrument.

($ in thousands)	Hypothetical 10% Increase in Future Prices	Hypothetical 10% Decrease in Future Prices
Natural gas	$ (512,777)	$ 500,572
Oil	$ (18,451)	$ 17,767
NGL	$ (10,242)	$ 10,242

All derivative instruments, other than those that meet the normal purchase and normal sale scope exception, are recorded at fair market value in accordance with GAAP and are included in our condensed consolidated balance sheets as assets or liabilities. Because we do not designate these derivatives as accounting hedges, they do not receive hedge accounting treatment; therefore, all mark-to-market gains or losses, as well as cash receipts or payments on settled derivative instruments, are recognized in our statements of operations within operating revenues as commodity derivative (loss) gain.

Although mark-to-market adjustments of derivative instruments cause earnings volatility, our cash flows are only impacted when the associated derivative contracts are settled or are monetized prior to settlement by making or receiving payments to or from the counterparty. We expect continued volatility in the fair value of our derivative instruments. As of September 30, 2021, the estimated fair value of our commodity derivative positions was a net liability of $2.14 billion comprised of current and long-term assets and liabilities.

By removing price volatility from a portion of our future expected production, we have mitigated, but not eliminated, the potential negative effects of changing prices on our operating cash flows for those periods. While mitigating the negative effects of falling commodity prices, these derivative contracts also limit the benefits we receive from the increases in commodity prices above the fixed hedge ceiling prices.

Counterparty Credit Risk

Our derivative instruments expose us to counterparty credit risk, which arises due to the risk of loss from counterparties not performing under the terms of a derivative contract. Adverse moves within the financial or commodities markets could negatively impact our counterparties' ability to fulfill obligations to us. To minimize such risk, we only enter into derivative contracts with counterparties that we determine are creditworthy, which includes performing both quantitative and qualitative assessments of these counterparties, based on their credit ratings and credit default swap rates where applicable. Additionally, our derivative contracts are with multiple counterparties, reducing our exposure to any individual counterparty.

Customer Credit Risk

We are subject to credit risk resulting from the concentration of our natural gas, oil and NGL receivables. If our largest customers stopped purchasing natural gas, oil or NGL from us, our revenues could decline and our operating results and financial condition could be adversely affected; however, we do not believe the loss of any single customer would materially impact our operating results, as natural gas, oil and NGL are fungible products with well-established markets and numerous customers. We historically have not incurred any material losses on our natural gas, oil and NGL receivables.

We also have joint interest receivables, which arise from billings to entities that own working interests in the wells we operate. These entities participate in our wells primarily based on their ownership in leases. We have little ability to control whether these entities will participate in our wells but can require these entities to prepay drilling costs. We historically have not incurred any material losses on our joint interest receivables.

Interest Rate Risk

Certain of our debt instruments bear interest at floating rates based on LIBOR, and the LIBOR component of our interest on these instruments exposes us to interest rate risk. Borrowings under the Credit Facility bear interest at a floating tiered rate based on facility usage plus the 1-month LIBOR, resulting in a weighted average interest rate of 2.34% as of September 30, 2021. Additionally, our 2025 Second Lien Term Loans bear interest at an annual rate of 9.00% plus 3-month LIBOR, with a 1.00% LIBOR floor, resulting in a weighted average interest rate of 10.00% as of September 30, 2021. Our market risk related to variable interest rates did not materially change from September 30, 2020 to September 30, 2021. We have entered into interest rate swaps through the end of 2021 to mitigate a significant portion of our exposure to volatility in the 1-month LIBOR. See Note 5 of the notes to our condensed consolidated financial statements included in this report for further discussion of our interest rate derivatives.

Inflation

Inflation in the United States has been relatively low in recent years and did not historically have a material impact on our results of operations, although it has recently become more of a factor in the U.S. economy. We tend to experience inflationary pressure on the cost of oilfield services and equipment as natural gas, oil and NGL prices and drilling activity increase.