UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the Fiscal Year Ended December 31, 2020

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

For the transition period from _____ to _____

Commission File No. 001-13726

CHESAPEAKE ENERGY CORPORATION

(Exact name of registrant as specified in its charter)

Oklahoma	**73-1395733**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

6100 North Western Avenue, Oklahoma City, Oklahoma	**73118**
(Address of principal executive offices)	(Zip Code)

(405) 848-8000

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	**Trading Symbol**	**Name of Each Exchange on Which Registered**
Common Stock, $0.01 par value per share	CHK	The Nasdaq Stock Market LLC
Class A Warrants to purchase Common Stock	CHKEW	The Nasdaq Stock Market LLC
Class B Warrants to purchase Common Stock	CHKEZ	The Nasdaq Stock Market LLC
Class C Warrants to purchase Common Stock	CHKEL	The Nasdaq Stock Market LLC

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large Accelerated Filer ☐ Accelerated Filer ☐ Non-accelerated Filer ☒

Smaller Reporting Company ☒ Emerging Growth Company ☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☒ No ☐

The aggregate market value of our common stock held by non-affiliates on June 30, 2020, was approximately $48 million. As of February 25, 2021, there were 97,907,081 shares of our $0.01 par value common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the 2021 Annual Meeting of Shareholders are incorporated by reference in Part III.

Glossary of Oil and Gas Terms

The terms defined in this section are used throughout this report.

Bankruptcy Code. Means title 11 of the United States Code, 11 U.S.C. §§ 101–1532, as amended.

Bankruptcy Court. The United States Bankruptcy Court for the Southern District of Texas.

Bbl. One stock tank barrel, or 42 U.S. gallons liquid volume, used herein in reference to crude oil or other liquid hydrocarbons.

Bboe. One billion barrels of oil equivalent.

Bcf. One billion cubic feet of natural gas.

Bcfe. One billion cubic feet of natural gas equivalent.

Btu. British thermal unit, which is the heat required to raise the temperature of a one-pound mass of water from 58.5 to 59.5 degrees Fahrenheit.

Boe. Barrel of oil equivalent. Natural gas proved reserves and production are converted to boe at 14.73 psia and 60 degrees. Boe is based on six mcf of natural gas to one bbl of oil or one bbl of NGL. This ratio reflects an energy content equivalency and not a price or revenue equivalency. Despite holding this ratio constant at six mcf to one bbl, prices have historically often been higher or substantially higher for oil than natural gas on an energy equivalent basis, although there have been periods in which they have been lower or substantially lower.

Chapter 11 Cases. When used with reference to a particular Debtor, the case pending for that Debtor under chapter 11 of the Bankruptcy Code in the Bankruptcy Court and when used with reference to all the Debtors, the procedurally consolidated chapter 11 cases pending for the Debtors in the Bankruptcy Court.

Completion. The process of treating a drilled well followed by the installation of permanent equipment for the production of oil, natural gas or natural gas liquids, or in the case of a dry well, the reporting to the appropriate authority that the well has been abandoned.

Confirmation Order. The order confirming the Fifth Amended Joint Chapter 11 Plan of Reorganization of Chesapeake Energy Corporation and its Debtor Affiliates, [Docket No. 2915] entered by the Bankruptcy Court on January 16, 2021.

Debtors. The Company, together with all of its direct and indirect subsidiaries that have filed the Chapter 11 Cases.

Developed Acreage. The number of acres which are allocated or assignable to producing wells or wells capable of production.

Dry Well. A well found to be incapable of producing either oil or natural gas in sufficient quantities to justify completion as an oil or natural gas well.

Effective Date. The first date, February 9, 2021, upon which all conditions precedent to the effectiveness of the Plan have been satisfied or waived in accordance with the Plan and no stay of the Confirmation Order is in effect.

Exit Credit Facility. The reserve-based revolving credit facility available upon emergence from bankruptcy.

Exploratory Well. A well drilled to find a new field or to find a new reservoir in a field previously found to be productive of oil or natural gas in another reservoir.

Formation. A succession of sedimentary beds that were deposited under the same general geologic conditions.

GAAP. Generally Accepted Accounting Principles in the United States.

Gross Acres or Gross Wells. The total acres or wells, as the case may be, in which a working interest is owned.

Mboe. One thousand barrels of oil equivalent.

Mcf. One thousand cubic feet.

Mmbbl. One million barrels of crude oil or other liquid hydrocarbons.

Mmboe. One million barrels of oil equivalent.

Mmbtu. One million btus.

Mmcf. One million cubic feet.

Natural Gas Liquids (NGL). Hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption or other methods in gas processing or cycling plants. Natural gas liquids primarily include ethane, propane, butane, isobutene, pentane, hexane and natural gasoline.

Net Acres or Net Wells. The sum of the fractional working interests owned in gross acres or gross wells.

NYMEX. New York Mercantile Exchange.

Petition Date. June 28, 2020, the date on which the Debtors commenced the Chapter 11 Cases.

Plan. The Fifth Amended Joint Chapter 11 Plan of Reorganization of Chesapeake Energy Corporation and its Debtor Affiliates, attached as Exhibit A to the Confirmation Order.

Play. A term applied to a portion of the exploration and production cycle following the identification by geologists and geophysicists of areas with potential oil, natural gas and NGL reserves.

Present Value of Estimated Future Net Revenues or PV-10 (non-GAAP). When used with respect to oil, natural gas and NGL reserves, present value of estimated future net revenues, or PV-10, means the estimated future gross revenue to be generated from the production of proved reserves, net of estimated production and future development costs, using prices calculated as the average oil and natural gas price during the preceding 12-month period prior to the end of the current reporting period, (determined as the unweighted arithmetic average of prices on the first day of each month within the 12-month period) and costs in effect at the determination date (unless such costs are subject to change pursuant to contractual provisions), without giving effect to non-property related expenses such as general and administrative expenses, debt service and future income tax expense or to depreciation, depletion and amortization, discounted using an annual discount rate of 10%.

Price Differential. The difference in the price of oil, natural gas or NGL received at the sales point and the NYMEX price.

Productive Well. A well that is not a dry well. Productive wells include producing wells and wells that are mechanically capable of production.

Proved Developed Reserves. Proved reserves that can be expected to be recovered through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well.

Proved Properties. Properties with proved reserves.

Proved Reserves. As used in this report, proved reserves has the meaning given to such term in Rule 4-10(a)(22) of Regulation S-X, which states in part proved oil and natural gas reserves are those quantities of oil and natural gas, 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, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation.

Proved Undeveloped Reserves (PUDs). Proved reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required. Reserves on undrilled acreage are limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.

Realized and Unrealized Gains and Losses on Oil, Natural Gas and NGL Derivatives. Realized gains and losses include the following items:(i) settlements and accruals for settlements of non-designated derivatives related to current period notional production revenues, (ii) prior period settlements for option premiums and for early-terminated derivatives originally scheduled to settle against current period notional production revenues, and (iii) gains and losses related to de-designated cash flow hedges originally designated to settle against current period notional production revenues. Unrealized gains and losses include the change in fair value of open derivatives scheduled to settle against future period notional production revenues (including current period settlements for option premiums and early-terminated derivatives) offset by amounts reclassified as realized gains and losses during the period. Although we no longer designate our derivatives as cash flow hedges for accounting purposes, we believe these definitions are useful to management and investors in determining the effectiveness of our price risk management program.

Realized and Unrealized Gains and Losses on Interest Rate Derivatives. Realized gains and losses include interest rate derivative settlements related to current period interest and the effect of gains and losses on early-terminated trades. Settlements of early-terminated trades are reflected in realized gains and losses over the original life of the hedged item. Unrealized gains and losses include changes in the fair value of open interest rate derivatives offset by amounts reclassified to realized gains and losses during the period.

Reservoir. A porous and permeable underground formation containing a natural accumulation of producible oil and/or natural gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs.

Restructuring. The financial restructuring of our debt and equity interests as of the date of the Plan, and certain other obligations pursuant to the Plan.

Royalty Interest. An interest in an oil and natural gas property entitling the owner to a share of oil, natural gas or NGL production free of costs of production.

Seismic. An exploration method of sending energy waves or sound waves into the earth and recording the wave reflections to indicate the type, size, shape and depth of subsurface rock formations.

Shale. Fine-grained sedimentary rock composed mostly of consolidated clay or mud. Shale is the most frequently occurring sedimentary rock.

SEC. The United States Securities and Exchange Commission.

Standardized Measure. The discounted future net cash flows relating to proved reserves based on the means of the estimated future gross revenue to be generated from the production of proved reserves, net of estimated production and future development costs, using prices calculated as the average oil and natural gas price during the preceding 12-month period prior to the end of the current reporting period (determined as the unweighted arithmetic average of prices on the first day of each month within the 12-month period). The standardized measure differs from the PV-10 measure only because the former includes the effects of estimated future income tax expenses.

Undeveloped Acreage. Acreage on which wells have not been drilled or completed to a point that would permit the production of economic quantities of oil and natural gas regardless of whether the acreage contains proved reserves.

Unproved Properties. Properties with no proved reserves.

Volumetric Production Payment ("VPP"). As we use the term, a volumetric production payment represents a limited-term overriding royalty interest in oil and natural gas reserves that: (i) entitles the purchaser to receive scheduled production volumes over a period of time from specific lease interests; (ii) is free and clear of all associated future production costs and capital expenditures; (iii) is nonrecourse to the seller (i.e., the purchaser's

only recourse is to the reserves acquired); (iv) transfers title of the reserves to the purchaser; and (v) allows the seller to retain the remaining reserves, if any, after the scheduled production volumes have been delivered.

WildHorse. WildHorse Resource Development Corporation. Immediately following the completion of our acquisition of WildHorse (the "First Merger"), WildHorse merged with and into Brazos Valley Longhorn, L.L.C., a newly formed Delaware limited liability company and wholly owned subsidiary of Chesapeake, which, together with the First Merger, we refer to as the "WildHorse Merger." For ease of reference, we use the term "WildHorse" to refer to WildHorse Resource Development Corporation prior to the acquisition and Brazos Valley Longhorn, L.L.C., "Brazos Valley Longhorn" or "BVL" after the acquisition, as applicable.

Working Interest. The operating interest which gives the owner the right to drill, produce and conduct operating activities on the property and a share of production.

Forward-Looking Statements

This report includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”). Forward-looking statements include our current expectations or forecasts of future events, including matters relating to the continuing effects of the COVID-19 pandemic and the impact thereof on our business, financial condition, results of operations and cash flows, the potential effects of the Restructuring on our operations, management, and employees, actions by, or disputes among or between, members of the Organization of Petroleum Exporting Countries (OPEC+) and other foreign, oil-exporting countries, market factors, market prices, our ability to meet debt service requirements, our ongoing evaluation and implementation of strategic alternatives, cost-cutting measures, reductions in capital expenditures, refinancing transactions, capital exchange transactions, asset divestitures, reductions in capital expenditures, operational efficiencies and future impairments and the other items discussed in the Introduction to Item 7 of Part II of this report. In this context, forward-looking statements often address our expected future business, financial performance and financial condition, and often contain words such as "expect," “could,” “may,” "anticipate," "intend," "plan," “ability,” "believe," "seek," "see," "will," "would," “estimate,” “forecast,” "target," “guidance,” “outlook,” “opportunity” or “strategy.”

Although we believe the expectations and forecasts reflected in our forward-looking statements are reasonable, they are inherently subject to numerous risks and uncertainties, most of which are difficult to predict and many of which are beyond our control. No assurance can be given that such forward-looking statements will be correct or achieved or that the assumptions are accurate or will not change over time. Particular uncertainties that could cause our actual results to be materially different than those expressed in our forward-looking statements include:

- the ability to execute on our business strategy following emergence from bankruptcy;
- the impact of the COVID-19 pandemic and its effect on our business, financial condition, employees, contractors, vendors and the global demand for oil and natural gas and U.S. and world financial markets;
- our ability to comply with the covenants under our Exit Credit Facility and other indebtedness;
- our ability to realize our anticipated annualized cash cost reductions;
- the volatility of oil, natural gas and NGL prices, which are affected by general economic and business conditions, as well as increased demand for (and availability of) alternative fuels and electric vehicles;
- uncertainties inherent in estimating quantities of oil, natural gas and NGL reserves and projecting future rates of production and the amount and timing of development expenditures;
- our ability to replace reserves and sustain production;
- drilling and operating risks and resulting liabilities;
- our ability to generate profits or achieve targeted results in drilling and well operations;
- the limitations our level of indebtedness may have on our financial flexibility;
- our inability to access the capital markets on favorable terms;
- the availability of cash flows from operations and other funds to finance reserve replacement costs or satisfy our debt obligations;

- adverse developments or losses from pending or future litigation and regulatory proceedings, including royalty claims;
- legislative and regulatory initiatives, including as a result of the change in the U.S. presidential administration, addressing environmental concerns, including initiatives addressing the impact of global climate change or further regulating hydraulic fracturing, methane emissions, flaring or water disposal;
- terrorist activities and/or cyber-attacks adversely impacting our operations;
- effects of purchase price adjustments and indemnity obligations; and
- other factors that are described under *Risk Factors* in Item 1A of this Annual Report on Form 10-K (this "Form 10-K" or this "report").

We caution you not to place undue reliance on the forward-looking statements contained in this report, which speak only as of the filing date, and we undertake no obligation to update this information. We urge you to carefully review and consider the disclosures in this report and our other filings with the SEC that attempt to advise interested parties of the risks and factors that may affect our business.

PART I

Item 1. *Business*

Unless the context otherwise requires, references to “Chesapeake”, the “Company”, “us”, “we” and “our” in this report are to Chesapeake Energy Corporation together with its subsidiaries. Our principal executive offices are located at 6100 North Western Avenue, Oklahoma City, Oklahoma 73118, and our main telephone number at that location is (405) 848-8000.

Our Business

We are an independent exploration and production company engaged in the acquisition, exploration and development of properties to produce oil, natural gas and NGLs from underground reservoirs. We own a large and geographically diverse portfolio of onshore U.S. unconventional natural gas and liquids assets, including interests in approximately 7,400 oil and natural gas wells. Our natural gas resource plays are the Marcellus Shale in the northern Appalachian Basin in Pennsylvania and the Haynesville/Bossier Shales in northwestern Louisiana. Our liquids-rich resource plays are the Eagle Ford Shale in South Texas and the stacked pay in the Powder River Basin in Wyoming.

On June 28, 2020, we and certain of our subsidiaries filed voluntary petitions for relief under chapter 11 of the Bankruptcy Code in the Bankruptcy Court. The Bankruptcy Court confirmed the Plan in a bench ruling on January 13, 2021 and entered the Confirmation Order on January 16, 2021. The Debtors emerged from bankruptcy on February 9, 2021. Upon emergence, all existing equity was canceled and new common stock was issued to the previous holders of our FLLO Term Loan Facility, Second Lien Notes, senior unsecured notes and certain general unsecured creditors whose claims were impaired as a result of our bankruptcy, as well as to other parties as set forth in the Plan, including to other parties participating in a $600 million rights offering. To facilitate our discussion in this report, we refer to the post-emergence reorganized company as the “Successor” and the pre-emergence company as the “Predecessor.” See Note 2 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of our bankruptcy and resulting reorganization.

Information About Us

We make available, free of charge on our website at *chk.com,* our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. From time to time, we also post announcements, updates, events, investor information and presentations on our website in addition to copies of all recent news releases. Documents and information on our website are not incorporated by reference herein.

The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers, including Chesapeake, that file electronically with the SEC.

Business Strategy

Consistent Returns, Sustainable Future

Our strategy is to create shareholder value by generating cash flow from our oil and natural gas development and production activities. We focus on improving margins through operating efficiencies and financial discipline and further improving our Environmental, Social and Corporate Governance (ESG) performance. To accomplish these goals, we intend to allocate our human resources and capital expenditures to projects we believe offer the highest cash return on capital invested, to deploy leading drilling and completion technology throughout our portfolio, and to take advantage of acquisition and divestiture opportunities to strengthen our portfolio. We also intend to continue to dedicate capital to projects that reduce the environmental impact of our oil and natural gas producing activities. We continue to seek opportunities to reduce cash costs (production, gathering, processing and transportation and general and administrative) per barrel of oil equivalent production through operational efficiencies, including but not limited to improving our production volumes from existing wells. We believe that we have emerged from Chapter 11 bankruptcy as a fundamentally stronger company, built to generate sustainable free cash flow with a strengthened balance sheet, geographically diverse asset base and continuously improving ESG performance.

Maintain low leverage and strong liquidity. Now that we have emerged from Chapter 11 bankruptcy, we expect to target a net leverage ratio, which is measured as our net debt as a ratio of trailing 12-month EBITDAX, of less

than 1x. We believe that maintaining low net leverage is integral to our business strategy and will allow us to maintain lower fixed costs, improve our margins and maintain the flexibility of our capital program.

Returns-focused capital reinvestment strategy. Our business focus will be on optimizing the development of our large, geographically diverse resource base with a prioritization of generating high cash returns on capital invested. As a result, we will target a long-term disciplined capital reinvestment rate, which we define as annual capital expenditures as a percentage of trailing 12-month EBITDAX, of 60% to 70%. We believe this level of reinvestment will be adequate to support our target long-term annual maintenance capital expenditure level, excluding capitalized interest, of $700 million to $750 million. We expect our maintenance capital program to yield in excess of annual production of 400 thousand barrels of oil equivalent per day and generate significant free cash flow at today's prevailing commodity market prices.

Low-cost operator with expected top-quartile cash costs. We expect to continue to focus on our cost reduction initiatives, targeting a long-term annual free cash flow yield of 30% to 40% of annual EBITDAX. Since filing the Chapter 11 Cases in June 2020, we have successfully renegotiated or terminated certain of our midstream contracts and commitments, which resulted in significant reduction to our anticipated gathering, processing and transportation expenses, cumulatively achieving approximately $4 billion in expected lifetime contract savings (or $2 billion discounted to present value, assuming a 10% annual discount rate). For 2019, our total cash costs, inclusive of gathering, processing and transportation, operating, general and administrative and interest expenses were $2.8 billion. Now that we have emerged from Chapter 11 bankruptcy, based on the termination or successful renegotiation of many of our gathering, processing and transportation contracts, as well as reductions in expected interest, operating and general and administrative expenses, we expect our annualized cash costs for 2021 to be reduced by approximately $1 billion relative to 2019.

Continue efforts to reduce greenhouse gas (GHG) emissions and operate in an environmentally responsible manner with a goal of net zero direct GHG emissions by 2035. We are committed to operating our business responsibly and protecting the environments in which we operate. We plan to eliminate routine flaring on all new wells completed in 2021 and beyond, and accomplish the same on all wells, enterprise-wide by 2025. We intend to reduce our methane loss rate to 0.09% and our GHG intensity to 5.5 by 2025, reductions of 47% and 33%, respectively, as compared to 2019.

Manage commodity price exposure and ensure stability through prudent hedging strategy. We employ a prudent hedging strategy, which is aligned with our capital expenditure program and is designed to manage our exposure to commodity price volatility, ensure the stability of our cash flows and mitigate our risks to realizing attractive cash returns on capital invested. As of February 25, 2021, and consistent with requirements of our DIP Credit Facility we have 19 mmbbls and 548 bcf of expected 2021, representing 77% and 74% of 2021 forecasted oil and natural gas production hedged at prices of $42.69/bbl and $2.67/mcf, respectively. Additionally, as of February 25, 2021, we have hedged 11 mmbbl and 273 bcf of expected 2022 oil and natural gas production at prices of $44.30/bbl and $2.53/mcf, respectively.

Operating Areas

We focus our acquisition, exploration, development and production efforts in the five geographic operating areas described below.

Marcellus - Northern Appalachian Basin in Pennsylvania.

Haynesville - Northwestern Louisiana (Gulf Coast).

Eagle Ford - South Texas.

Brazos Valley - Southeast Texas.

Powder River Basin - Stacked pay in Wyoming.

Well Data

As of December 31, 2020, we held an interest in approximately 7,400 gross productive wells, including 5,900 properties in which we held a working interest and 1,500 properties in which we held an overriding or royalty interest. Of the 5,900 (3,700 net) properties in which we held a working interest, 2,500 (1,400 net) properties were classified as productive natural gas wells and 3,400 (2,300 net) properties were classified as productive oil wells. During 2020 excluding sold properties, we operated 5,200 gross wells and held a non-operating working interest in 700 gross wells. We also drilled or participated in 188 gross (128 net) wells as operator and participated in another 17 gross (nominal net) wells completed by other operators. We operate approximately 97% of our current daily production volumes.

Drilling Activity

The following table sets forth the wells we drilled or participated in during the periods indicated. In the table, "gross" refers to the total wells in which we had a working interest and "net" refers to gross wells multiplied by our working interest:

	2020				2019				2018			
	Gross	%	Net	%	Gross	%	Net	%	Gross	%	Net	%
Development:												
Productive	203	100	126	100	414	100	271	100	363	99	227	99
Dry	—	—	—	—	—	—	—	—	2	1	1	1
Total	203	100	126	100	414	100	271	100	365	100	228	100
Exploratory:												
Productive	—	—	—	—	1	20	1	20	10	83	9	82
Dry	2	100	2	100	4	80	4	80	2	17	2	18
Total	2	100	2	100	5	100	5	100	12	100	11	100

The following table shows the wells we drilled or participated in by operating area:

	2020		2019		2018	
	Gross Wells	Net Wells	Gross Wells	Net Wells	Gross Wells	Net Wells
Marcellus	79	33	44	22	52	23
Haynesville	21	19	22	16	30	21
Eagle Ford	55	36	150	85	162	98
Brazos Valley	31	29	83	79	—	—
Powder River Basin	12	9	75	57	41	34
Mid-Continent	5	—	40	12	52	32
Utica	—	—	—	—	40	31
Other	2	2	5	5	—	—
Total	205	128	419	276	377	239

As of December 31, 2020, we had 55 gross (32 net) wells in the process of being drilled or completed.

Production Volumes, Sales Prices, Production Expenses and Gathering, Processing and Transportation Expenses

The following table sets forth information regarding our net production volumes, average sales price received for our production, average sales price of our production combined with our realized gains or losses on derivatives and production and gathering, processing and transportation expenses per boe for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
Net Production:			
Oil (mmbbl)	37	43	33
Natural gas (bcf)	685	728	832
NGL (mmbbl)	11	12	19
Oil equivalent (mmboe)	163	177	190
Average Sales Price of Production:			
Oil ($ per bbl)	$ 38.16	$ 59.16	$ 67.25
Natural gas ($ per mcf)	$ 1.73	$ 2.45	$ 2.99
NGL ($ per bbl)	$ 11.55	$ 15.62	$ 26.50
Oil equivalent ($ per boe)	$ 16.84	$ 25.57	$ 27.27
Average Sales Price (including realized gains (losses) on derivatives):			
Oil ($ per bbl)	$ 56.74	$ 60.00	$ 57.42
Natural gas ($ per mcf)	$ 1.97	$ 2.60	$ 3.00
NGL ($ per bbl)	$ 11.55	$ 15.62	$ 25.84
Oil equivalent ($ per boe)	$ 22.09	$ 26.42	$ 25.56
Expenses ($ per boe):			
Oil, natural gas and NGL production	$ 2.29	$ 2.94	$ 2.50
Oil, natural gas and NGL gathering, processing and transportation	$ 6.64	$ 6.13	$ 7.35

Oil, Natural Gas and NGL Reserves

The tables below set forth information as of December 31, 2020, with respect to our estimated proved reserves, the associated estimated future net revenue, the present value of estimated future net revenue ("PV-10") and the standardized measure of discounted future net cash flows ("standardized measure"). None of the estimated future net revenue, PV-10 nor the standardized measure are intended to represent the current market value of the estimated oil, natural gas and NGL reserves we own. All of our estimated reserves are located within the United States.

	December 31, 2020			
	Oil	Natural Gas	NGL	Total
	(mmbbl)	(bcf)	(mmbbl)	(mmboe)
Proved developed	158	3,196	51	742
Proved undeveloped	3	334	1	60
Total proved[a]	161	3,530	52	802

	Proved Developed	Proved Undeveloped	Total Proved
		($ in millions)	
Estimated future net revenue[b]	$ 4,519	$ 202	$ 4,721
Present value of estimated future net revenue (PV-10)[b]	$ 2,976	$ 111	$ 3,087
Standardized measure[b]			$ 3,086

(a) Marcellus, Eagle Ford, and Haynesville accounted for approximately 47%, 22%, and 18% respectively, of our estimated proved reserves by volume as of December 31, 2020.

(b) Estimated future net revenue represents the estimated future revenue to be generated from the production of proved reserves, net of estimated production and future development costs, using pricing differentials and costs under existing economic conditions as of December 31, 2020, and assuming commodity prices as set forth below. For the purpose of determining prices used in our reserve reports, we used the unweighted arithmetic average of the prices on the first day of each month within the 12-month period ended December 31, 2020. The prices used in our PV-10 measure were $39.57 of oil and $1.98 of natural gas, before basis differential adjustments. These prices should not be interpreted as a prediction of future prices, nor do they reflect the value of our commodity derivative instruments in place as of December 31, 2020. The amounts shown do not give effect to non-property-related expenses, such as corporate general and administrative expenses and debt service, or to depreciation, depletion and amortization. The present value of estimated future net revenue typically differs from the standardized measure because the former does not include the effects of estimated future income tax expense of $1 million as of December 31, 2020.

Management uses PV-10, which is calculated without deducting estimated future income tax expenses, as a measure of the value of the Company's current proved reserves and to compare relative values among peer companies. We also understand that securities analysts and rating agencies use this measure in similar ways. While estimated future net revenue and the present value thereof are based on prices, costs and discount factors which may be consistent from company to company, the standardized measure of discounted future net cash flows is dependent on the unique tax situation of each individual company. PV-10, a non-GAAP measure, should not be considered in isolation or as a substitute for the standardized measure of discounted future net cash flows or any other measure of a company's financial or operating performance presented in accordance with GAAP.

A comparison of the standardized measure of discounted future net cash flows to PV-10 is presented above. Neither PV-10 nor the standardized measure of discounted future net cash flows purport to represent the fair value of our proved oil and gas reserves.

As of December 31, 2020, our proved reserve estimates included 60 mmboe of reserves classified as proved undeveloped, compared to 726 mmboe as of December 31, 2019. Presented below is a summary of changes in our proved undeveloped reserves (PUDs) for 2020:

	Total (mmboe)
Proved undeveloped reserves, beginning of period	726
Extensions and discoveries	1
Revisions of previous estimates	(539)
Developed	(128)
Purchase of reserves-in-place	—
Proved undeveloped reserves, end of period	60

As of December 31, 2020, all PUDs were planned to be developed within five years of original recording. In 2020, we invested approximately $509 million to convert 128 mmboe of PUDs to proved developed reserves. During the first quarter of 2021, we estimate that we will invest approximately $126 million for PUD conversion. As a result of our entry into Chapter 11 bankruptcy and the limited duration of our DIP Credit Facility at December 31, 2020, we could not carry any PUD reserves past the maturity date of our DIP financing and we therefore recorded a downward revision of 539 mmboe of our previously reported PUD reserves. Given our liquidity and financial position post-emergence we expect to record more PUD reserves as of March 31, 2021.

The future net revenue attributable to our estimated PUDs was $202 million and the present value was $111 million as of December 31, 2020. These values were calculated assuming that we will expend approximately $126 million to develop these reserves during the first quarter of 2021.

Of our 742 mmboe of proved developed reserves as of December 31, 2020, approximately 6 mmboe, or 1%, were non-producing.

Our ownership interest used for calculating proved reserves and the associated estimated future net revenue assumes maximum participation by other parties to our farm-out and participation agreements.

Our estimated proved reserves and the standardized measure of discounted future net cash flows of the proved reserves as of December 31, 2020, 2019 and 2018, along with the changes in quantities and standardized measure of the reserves for each of the three years then ended, are shown in *Supplemental Disclosures About Oil, Natural Gas and NGL Producing Activities* included in Item 8 of this report. No estimates of proved reserves comparable to those included herein have been included in reports to any federal agency other than the SEC.

There are numerous uncertainties inherent in estimating quantities of proved reserves and in projecting future rates of production and timing of development expenditures, including many factors beyond our control. The reserve data represents only estimates. Reserve engineering is a subjective process of estimating underground accumulations of oil and natural gas that cannot be measured exactly, and the accuracy of any reserve estimate is a function of the quality of available data and of engineering and geological interpretation and judgment. As a result, estimates made by different engineers often vary. Accordingly, reserve estimates often differ from the actual quantities of oil, natural gas and NGL that are ultimately recovered. Furthermore, the estimated future net revenue from proved reserves and the associated present value are based upon certain assumptions, including prices, future production levels and costs that may not prove correct. Future prices and costs may be materially higher or lower than the prices and costs as of the date of any estimate. See *Supplemental Disclosures About Oil, Natural Gas and NGL Producing Activities* included in Item 8 of this report for further discussion of our reserve quantities.

Reserves Estimation

Our Corporate Reserves Department prepared approximately 13% by volume, and approximately 11% by value, of our estimated proved reserves disclosed in this report. Those estimates were based upon the best available production, engineering and geologic data.

Our Director – Corporate Reserves, is the technical person primarily responsible for overseeing the preparation of our reserve estimates and for coordinating any reserves work conducted by a third-party engineering firm. Her qualifications include the following:

- Over 18 years of practical experience in the oil and gas industry, with over 15 years in reservoir engineering;
- Bachelor of Science degree in Geology and Environmental Sciences;
- Master's Degree in Petroleum and Natural Gas Engineering;
- Executive MBA; and
- member in good standing of the Society of Petroleum Engineers.

We ensure that the key members of our Corporate Reserves Department have appropriate technical qualifications to oversee the preparation of reserves estimates. Each of our Corporate Reserves Engineers has significant engineering experience in reserve estimation. Our engineering technicians have a minimum of a four-year degree in mathematics, economics, finance or other technical/business/science field. We maintain a continuous education program for our engineers and technicians on new technologies and industry advancements as well as refresher training on basic skills and analytical techniques.

We maintain internal controls such as the following to ensure the reliability of reserves estimations:

- We follow comprehensive SEC-compliant internal policies to estimate and report proved reserves. Reserve estimates are made by experienced reservoir engineers or under their direct supervision. All material changes are reviewed and approved by Corporate Reserves Engineers.
- The Corporate Reserves Department reviews our proved reserves at the close of each quarter.
- Each quarter, Reservoir Managers, the Director – Corporate Reserves, the Vice Presidents of our business units, the Vice President of Corporate and Strategic Planning and the Executive Vice President – Exploration and Production review all significant reserves changes and all new proved undeveloped reserves additions.
- The Corporate Reserves Department reports independently of our operations.
- The five-year PUD development plan is reviewed and approved annually by the Director – Corporate Reserves and the Vice President of Corporate and Strategic Planning.

We engaged LaRoche Petroleum Consultants, Ltd., a third-party engineering firm, to prepare approximately 87% by volume, and approximately 89% by value, of our estimated proved reserves as of December 31, 2020. A copy of the report issued by the engineering firm is filed with this report as Exhibit 99.1. The qualifications of the technical person at the firm primarily responsible for overseeing the preparation of our reserve estimates are set forth below.

- Over 40 years of practical experience in the estimation and evaluation of reserves;
- licensed professional engineer in the State of Texas; and
- Bachelor of Science and Master of Science degrees in Petroleum Engineering.

Acreage

The following table sets forth our gross and net developed and undeveloped oil and natural gas leasehold and fee mineral acreage as of December 31, 2020. Gross acres are the total number of acres in which we own a working interest. Net acres refer to gross acres multiplied by our fractional working interest. Acreage numbers do not include our unexercised options to acquire additional acreage.

	Developed Leasehold		Undeveloped Leasehold		Fee Minerals		Total	
	Gross Acres	Net Acres	Gross Acres	Net Acres	Gross Acres	Net Acres	Gross Acres	Net Acres
	(in thousands)							
Marcellus	555	353	245	168	16	16	816	537
Haynesville	230	203	30	22	1	1	261	226
Eagle Ford	316	188	45	31	—	—	361	219
Brazos Valley	360	298	222	126	—	—	582	424
Powder River Basin	105	85	137	104	1	1	243	190
Other[(a)]	157	126	918	868	431	427	1,506	1,421
Total	1,723	1,253	1,597	1,319	449	445	3,769	3,017

(a) Includes 1.2 million net acres retained in the 2016 divestiture of our Devonian Shale assets, in which we retained all rights below the base of the Kope formation.

Most of our leases have a three- to five-year primary term, and we manage lease expirations to ensure that we do not experience unintended material expirations. Our leasehold management efforts include scheduling our drilling to establish production in paying quantities in order to hold leases by production, timely exercising our contractual rights to pay delay rentals to extend the terms of leases we value, planning noncore divestitures to high-grade our lease inventory and letting some leases expire that are no longer part of our development plans. The following table sets forth the expiration periods of gross and net undeveloped leasehold acres as of December 31, 2020:

	Acres Expiring	
	Gross Acres	Net Acres
	(in thousands)	
Years Ending December 31:		
2021	60	52
2022	30	30
2023	12	11
After 2023	83	82
Held-by-production[(a)]	1,412	1,144
Total	1,597	1,319

(a) Held-by-production acres will remain in force as production continues on the subject leases.

Marketing

The principal function of our marketing operations is to provide oil, natural gas and NGL marketing services, including commodity price structuring, securing and negotiating of gathering, hauling, processing and transportation services, contract administration and nomination services for us and other interest owners in Chesapeake-operated wells. The marketing operations also provide other services for our exploration and production activities, including services to enhance the value of oil and natural gas production by aggregating volumes sold to various intermediary markets, end markets and pipelines. This aggregation allows us to attract larger, more creditworthy customers that in turn assist in maximizing the prices received.

Generally, our oil production is sold under market-sensitive short-term or spot price contracts. Natural gas and NGL production are sold to purchasers under percentage-of-proceeds contracts, percentage-of-index contracts or spot price contracts. Under the terms of our percentage-of-proceeds contracts, we receive a percentage of the resale price received from the ultimate purchaser. Under our percentage-of-index contracts, the price we receive is tied to published indices.

We have entered into long-term gathering, processing, and transportation contracts with various parties that require us to deliver fixed, determinable quantities of production over specified periods of time. Certain of our contracts require us to make payments for any shortfalls in delivering or transporting minimum volumes under these commitments. See Note 6 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of commitments.

Major Customers

Sales to Valero Energy Corporation constituted approximately 17%, 12% and 10% of total revenues (before the effects of hedging) for the years ended December 31, 2020, 2019 and 2018, respectively. No other purchasers accounted for more than 10% of our total revenues in 2020, 2019 or 2018.

Competition

We compete with both major integrated and other independent oil and natural gas companies in all aspects of our business to explore, develop and operate our properties and market our production. Some of our competitors may have larger financial and other resources than us. Competitive conditions may be affected by future legislation and regulations as the United States develops new energy and climate-related policies. In addition, some of our competitors may have a competitive advantage when responding to factors that affect demand for oil and natural gas production, such as changing prices, domestic and foreign political conditions, weather conditions, the price and availability of alternative fuels, the proximity and capacity of natural gas pipelines and other transportation facilities and overall economic conditions. We also face indirect competition from alternative energy sources, including wind, solar and electric power. We believe that our technological expertise, combined with our exploration, land, drilling and production capabilities and the experience of our management team, enables us to compete effectively.

Public Policy and Government Regulation

All of our operations are conducted onshore in the United States. Our industry is subject to a wide range of regulations, laws, rules, taxes, fees and other policy implementation actions that have been pervasive and are under constant review for amendment or expansion. Numerous government agencies have issued extensive regulations that are binding on our industry, some of which carry substantial penalties for failure to comply. These laws and regulations increase the cost of doing business and consequently affect profitability. Additionally, currently unforeseen environmental incidents may occur or past non-compliance with environmental laws or regulations may be discovered. We actively monitor regulatory developments applicable to our industry in order to anticipate, design and implement required compliance activities and systems. The following are significant areas of government control and regulation affecting our operations.

Exploration and Production, Environmental, Health and Safety and Occupational Laws and Regulations

Our operations are subject to federal, tribal, state, and local laws and regulations. These laws and regulations relate to matters that include, but are not limited to, the following:

- reporting of workplace injuries and illnesses;
- industrial hygiene monitoring;

- worker protection and workplace safety;
- approval or permits to drill and to conduct operations;
- provision of financial assurances (such as bonds) covering drilling and well operations;
- calculation and disbursement of royalty payments and production taxes;
- seismic operations/data;
- location, drilling, cementing and casing of wells;
- well design and construction of pad and equipment;
- construction and operations activities in sensitive areas, such as wetlands, coastal regions or areas that contain endangered or threatened species, their habitats, or sites of cultural significance;
- method of well completion and hydraulic fracturing;
- water withdrawal;
- well production and operations, including processing and gathering systems;
- emergency response, contingency plans and spill prevention plans;
- emissions and discharges permitting;
- climate change;
- use, transportation, storage and disposal of fluids and materials incidental to oil and gas operations;
- surface usage, maintenance, monitoring and the restoration of properties associated with well pads, pipelines, impoundments and access roads;
- plugging and abandoning of wells; and
- transportation of production.

Shortly after taking office in January 2021, President Biden issued a series of executive orders designed to address climate change and requiring agencies to review environmental actions taken by the Trump administration, as well as a memorandum to departments and agencies to refrain from proposing or issuing rules until a departmental or agency head appointed or designated by the Biden administration has reviewed and approved the rule. These executive orders may result in the development of additional regulations or changes to existing regulations. Failure to comply with these laws and regulations can lead to the imposition of remedial liabilities, administrative, civil or criminal fines or penalties or injunctions limiting our operations in affected areas. Moreover, multiple environmental laws provide for citizen suits which allow environmental organizations to act in the place of the government and sue operators for alleged violations of environmental law. We consider the costs of environmental protection and safety and health compliance fundamental, manageable parts of our business. We have been able to plan for and comply with environmental, safety and health laws and regulations without materially altering our operating strategy or incurring significant unreimbursed expenditures. However, based on regulatory trends and increasingly stringent laws, our capital expenditures and operating expenses related to the protection of the environment and safety and health compliance have increased over the years and may continue to increase. We cannot predict with any reasonable degree of certainty our future exposure concerning such matters.

Our operations also are subject to conservation regulations, including the regulation of the size of drilling and spacing units or proration units, the number of wells that may be drilled in a unit, the rate of production allowable from oil and gas wells, and the unitization or pooling of oil and gas properties. In the United States, some states allow the forced pooling or integration of tracts to facilitate exploration, while other states rely on voluntary pooling of lands and leases, which may make it more difficult to develop oil and gas properties. In addition, federal and state conservation laws generally limit the venting or flaring of natural gas, and state conservation laws impose certain requirements regarding the ratable purchase of production. These regulations limit the amounts of oil and gas we can produce from our wells and the number of wells or the locations at which we can drill. For further discussion, see Item *1A. Risk Factors - We are subject to extensive governmental regulation, which can change and could adversely impact our business.*

Regulatory proposals in some states and local communities have been initiated to require or make more stringent the permitting and compliance requirements for hydraulic fracturing operations. Federal and state agencies

have continued to assess the potential impacts of hydraulic fracturing, which could spur further action toward federal, state and/or local legislation and regulation. Further restrictions of hydraulic fracturing could make it difficult or impossible to conduct our drilling and completion operations, and thereby reduce the amount of oil, natural gas and NGL that we are ultimately able to produce from our properties.

Certain of our U.S. natural gas and oil leases, primarily in our Powder River Basin operating area, are granted or approved by the federal government and administered by the Bureau of Land Management (BLM) or Bureau of Indian Affairs (BIA) of the Department of the Interior. Such leases require compliance with detailed federal regulations and orders that regulate, among other matters, drilling and operations on lands covered by these leases and calculation and disbursement of royalty payments to the federal government, tribes or tribal members. The federal government has been particularly active in recent years in evaluating and, in some cases, promulgating new rules and regulations regarding competitive lease bidding, venting and flaring, oil and gas measurement and royalty payment obligations for production from federal lands. In addition, on January 20, 2021, the Acting Secretary for the Department of the Interior signed an order effectively suspending new fossil fuel leasing and permitting on federal lands for 60 days. Then on January 27, 2021, President Biden issued an executive order indefinitely suspending new oil and natural gas leases on public lands or in offshore waters pending completion of a comprehensive review and reconsideration of federal oil and gas permitting and leasing practices. To the extent that the review results in the development of additional restrictions on drilling, limitations on the availability of leases, or restrictions on the ability to obtain required permits, it could have a material adverse impact on our operations.

Permitting activities on federal lands are also subject to frequent delays. Delays in obtaining permits or an inability to obtain new permits or permit renewals could inhibit our ability to execute our drilling and production plans. Failure to comply with applicable regulations or permit requirements could result in revocation of our permits, inability to obtain new permits and the imposition of fines and penalties.

For further discussion, see Item *1A. Risk Factors - Oil and natural gas drilling and producing operations can be hazardous and may expose us to liabilities.*

Title to Properties

Our title to properties is subject to royalty, overriding royalty, carried, net profits, working and other similar interests and contractual arrangements customary in the oil and natural gas industry, to liens for current taxes not yet due and to other encumbrances. As is customary in the industry in the case of undeveloped properties, only cursory investigation of record title is made at the time of acquisition. Drilling title opinions are usually prepared before commencement of drilling operations. We believe we have satisfactory title to substantially all of our active properties in accordance with standards generally accepted in the oil and natural gas industry. Nevertheless, we are involved in title disputes from time to time that may result in litigation.

Operating Hazards and Insurance

The oil and natural gas business involves a variety of operating risks, including the risk of fire, explosions, blow-outs, pipe failure, abnormally pressured formations and environmental hazards such as oil spills, natural gas leaks, ruptures or discharges of toxic gases. If any of these should occur, we could incur legal defense costs and could suffer substantial losses due to injury or loss of life, severe damage to or destruction of property, natural resources and equipment, pollution or other environmental damage, clean-up responsibilities, regulatory investigation and penalties, and suspension of operations. Our horizontal and deep drilling activities involve greater risk of mechanical problems than vertical and shallow drilling operations.

We maintain a control of well insurance policy with a $50 million single well limit and a $100 million multiple wells limit that insures against certain sudden and accidental risks associated with drilling, completing and operating our wells. This insurance may not be adequate to cover all losses or exposure to liability. We also carry a $250 million comprehensive general liability umbrella insurance policy. In addition, we maintain a $50 million pollution liability insurance policy providing coverage for gradual pollution related risks and in excess of the general liability policy for sudden and accidental pollution risks. We provide workers' compensation insurance coverage to employees in all states in which we operate. While we believe these policies are customary in the industry, they do not provide complete coverage against all operating risks, and policy limits scale to our working interest percentage in certain situations. In addition, our insurance does not cover penalties or fines that may be assessed by a governmental authority. A loss not fully covered by insurance could have a material adverse effect on our financial

position, results of operations and cash flows. Our insurance coverage may not be sufficient to cover every claim made against us or may not be commercially available for purchase in the future.

Facilities

We own an office complex in Oklahoma City and we own or lease various field offices in cities or towns in the areas where we conduct our operations.

Executive Officers

Robert D. Lawler, *President, Chief Executive Officer and Director*

Robert D. ("Doug") Lawler, 54, has served as President and Chief Executive Officer since June 2013. Prior to joining Chesapeake, Mr. Lawler served in multiple engineering and leadership positions at Anadarko Petroleum Corporation. His positions at Anadarko included Senior Vice President, International and Deepwater Operations and member of Anadarko's Executive Committee from July 2012 to May 2013; Vice President, International Operations from December 2011 to July 2012; Vice President, Operations for the Southern and Appalachia Region from March 2009 to July 2012; and Vice President, Corporate Planning from August 2008 to March 2009. Mr. Lawler began his career with Kerr-McGee Corporation in 1988 and joined Anadarko following its acquisition of Kerr-McGee in 2006.

Domenic J. Dell'Osso, Jr., *Executive Vice President and Chief Financial Officer*

Domenic J. ("Nick") Dell'Osso, Jr., 44, has served as Executive Vice President and Chief Financial Officer since November 2010. Mr. Dell'Osso served as our Vice President – Finance and Chief Financial Officer of our wholly owned midstream subsidiary, Chesapeake Midstream Development, L.P., from August 2008 to November 2010. Before joining Chesapeake, Mr. Dell'Osso was an energy investment banker with Jefferies & Co. from 2006 to 2008 and Banc of America Securities from 2004 to 2006.

Frank J. Patterson, *Executive Vice President – Exploration and Production*

Frank J. Patterson, 62, has served as Executive Vice President - Exploration and Production since August 2016. Previously, he served as Executive Vice President – Exploration and Northern Division since April 2016 and as Executive Vice President – Exploration, Technology & Land since May 2015. Before joining Chesapeake, Mr. Patterson served in various roles at Anadarko from 2006 to 2015, most recently as Senior Vice President – International Exploration. Prior to that he was Vice President – Deepwater Exploration at Kerr-McGee and Manager – Geology at Sun E&P/Oryx Energy.

James R. Webb, *Executive Vice President – General Counsel and Corporate Secretary*

James R. Webb, 53, has served as Executive Vice President – General Counsel and Corporate Secretary since January 2014. Previously, he served as Senior Vice President – Legal and General Counsel since October 2012 and as Corporate Secretary since August 2013. Mr. Webb first joined Chesapeake in May 2012 on a contract basis as Chief Legal Counsel. Prior to joining Chesapeake, Mr. Webb was an attorney with the law firm of McAfee & Taft from 1995 to October 2012.

William M. Buergler, *Senior Vice President and Chief Accounting Officer*

William Buergler, 48, has served as Senior Vice President and Chief Accounting Officer since August 2017. Previously, he served as Vice President - Tax since July 2014. Before joining Chesapeake, he worked for Ernst & Young LLP, where he served as a Partner since 2009.

Human Capital

One Team. One Chesapeake.

Our “One CHK” culture and company core values promote an inclusive, diverse and productive workplace. Working as One CHK defines Chesapeake’s culture. It is a culture that engages the power of our people, working cooperatively to put Chesapeake first and perform our best for the company. We had approximately 1,300 employees as of February 25, 2021.

Our Culture, Our Core Values

At Chesapeake, our employees are driven to create value every day in a safe and responsible manner. Our core values are the foundation of our culture and the driving force behind our goal to achieve ESG excellence. Serving as the lens through which we evaluate every business decision, our commitment to these values, in both words and actions builds a stronger, healthier Chesapeake, benefiting all our stakeholders. Our core values are:

- Integrity and Trust
- Respect
- Transparency and Open Communication
- Commercial Focus
- Change Leadership

Celebrating Inclusion and Diversity

We are committed to inclusion and diversity. We proactively embrace our diversity of people, thoughts and talents, and combine these strengths to pursue results and meaningful change for our company, employees and stakeholders, and we provide education and training for our employees on topics related to inclusion and diversity.

In 2019, Chesapeake joined a coalition of companies pledging to advance diversity and inclusion in the workplace. Through the Chief Executive Officer Action for Diversity & Inclusion™, Chief Executive Officer Doug Lawler committed himself and Chesapeake to cultivate a workplace in which diverse perspectives and experiences are welcomed and respected and where employees feel encouraged to discuss diversity and inclusion. As the first E&P Chief Executive Officer to sign the pledge, Mr. Lawler joins more than 550 signatories who are sharing best practices and learning opportunities to initiate real change within their organizations. On February 9, 2021, we formed a board committee dedicated to ESG oversight, including our inclusion and diversity efforts. Two of our seven directors are considered diverse, including one female and one “underrepresented minority” (as defined in Nasdaq’s newly proposed listing rule).

Stewards of Our Environment

Chesapeake is committed to protecting our country’s natural resources and reducing our environmental footprint. We have strict standards for environmental stewardship and a culture of environmental excellence among our employees and business partners. We recognize that ownership and accountability are key to helping ensure our work sites are safe and protective of the environment.

Our path to leading a responsible energy future begins with our goal to achieve net-zero direct greenhouse gas emissions by 2035. To meet this challenge, we have set meaningful initial steps including:

- Eliminating routine flaring from all new wells completed from 2021 forward, and enterprise-wide by 2025
- Reducing our methane intensity to 0.09% by 2025
- Reducing our GHG intensity to 5.5 by 2025

Safety First Every Day

Safety is more than a company metric, it is a value that drives our commitment to responsible operations. We set and deliver on strict safety standards, prioritizing safety for everyone every day. Our safety culture is modeled first by Mr. Lawler, with guidance and leadership from our Health, Safety, Environmental and Regulatory (HSER) team. Maintaining a safe work environment and promoting safe behaviors is a commitment that each of our

employees own together. We hold each other accountable to keeping our sites, our co-workers and our contractors safe.

One program that reinforces this philosophy of personal responsibility is Stop Work Authority. Through Stop Work Authority, every employee and contractor has the right and responsibility to stop work if conditions are unsafe or could cause harm to the environment. Creating an incident-free work environment starts with setting clear expectations among employees, contractors and suppliers regarding our safety standards, and working to equip these individuals with the skills necessary to promote safety in their areas of work. The foundation of our safety training efforts is our Stay Accident Free Every Day (S.A.F.E.) program, which encourages all workers on our locations to take personal responsibility for their safety and the safety of those around them. This behavior-based program addresses the activities that can often lead to safety incidents and encourages actions that create safe work sites and a safe corporate campus.

Ethical Business Conduct

Chesapeake works hard to maintain the confidence of our stakeholders. We earn this trust by acting in an ethical manner to protect our people, the environment and the communities where we operate. This starts by driving accountability through all levels of the company and having systems in place to uphold our high standards for conduct. Strong governance practices begin at the top providing our organization with clear guidelines to define standards for ethical behavior at every level. Each Chesapeake director or employee, regardless of position, must abide by Chesapeake's Code of Business Conduct (the "Code"), which is structured around our core values. Each year all employees must sign a Code certification confirming they have reviewed the Code and related policies, understand the high standards expected of them and will report actual or potential ethics concerns or Code violations.

Employee Wellness and Benefits

Supporting the individual well-being of our employees is foundational to our safety culture and success as a company. We champion healthy lifestyles and offer health resources. Across the company, employees are offered preventive programs and are encouraged to complete an annual screening for common health-related issues. We support our employees' and their families' health by offering full medical, dental, vision, prescription drug insurance for employees and their families, life insurance, short- and long-term disability coverage, and health savings and dependent care flexible spending accounts. We offer parental leave for the birth or adoption of a child, an adoption assistance program, alternate work schedules, a 401(k) savings plan with company match, flexible work hours, tuition reimbursement and access to a child development center and fitness center at market rates. Additionally, Chesapeake provides employees and their families access to a confidential Employee Assistance Program (EAP) which connects employees with trained counselors and other support professionals.

ITEM 1A. *Risk Factors*

There are numerous factors that affect our business and operating results, many of which are beyond our control. The following is a description of factors that we consider to be material and that might cause our future results to differ materially from those currently expected. The risks described below are not the only risks facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. If any of these risks actually occur, our business, financial position, operating results, cash flows, reserves and/or our ability to pay our debts and other liabilities could suffer, the trading price and liquidity of our securities could decline and you may lose all or part of your investment in our securities.

Risks Related to our Emergence from Bankruptcy

We recently emerged from bankruptcy, which may adversely affect our business and relationships.

It is possible that our having filed for bankruptcy and our recent emergence from bankruptcy may adversely affect our business and relationships with customers, vendors, contractors or employees. Due to uncertainties, many risks exist, including the following:

- key vendors or other contract counterparties may terminate their relationships with us or require additional financial assurances or enhanced performance from us;
- our ability to renew existing contracts and compete for new business may be adversely affected;
- our ability to attract, motivate and/or retain key executives may be adversely affected; and
- competitors may take business away from us, and our ability to attract and retain customers may be negatively impacted.

The occurrence of one or more of these events could have a material and adverse effect on our operations, financial condition and reputation. We cannot assure you that having been subject to bankruptcy protection will not adversely affect our operations in the future.

Our actual financial results after emergence from bankruptcy may not be comparable to our historical financial information as a result of the implementation of the Plan and the transactions contemplated thereby.

In connection with the disclosure statement we filed with the Bankruptcy Court, and the hearing to consider confirmation of the Plan, we prepared projected financial information to demonstrate to the Bankruptcy Court the feasibility of the Plan and our ability to continue operations upon our emergence from bankruptcy. Those projections were prepared solely for the purpose of bankruptcy proceedings and have not been, and will not be, updated on an ongoing basis and should not be relied upon by investors. At the time they were prepared, the projections reflected numerous assumptions concerning our anticipated future performance with respect to prevailing and anticipated market and economic conditions that were and remain beyond our control and that may not materialize. Projections are inherently subject to substantial and numerous uncertainties and to a wide variety of significant business, economic and competitive risks and the assumptions underlying the projections and/or valuation estimates may prove to be wrong in material respects. Actual results may vary significantly from those contemplated by the projections. As a result, investors should not rely on these projections.

Upon emergence from bankruptcy, the composition of our board of directors changed significantly.

The composition of our board of directors changed significantly upon emergence from bankruptcy. Our new board is comprised of the following members appointed by our new stockholders. Robert D. Lawler, Michael Wichterich, Timothy S. Duncan, Benjamin C. Duster, IV, Sarah Emerson, Matthew M. Gallagher and Brian Steck. While we expect to engage in an orderly transition process as we integrate newly appointed board members, our new board of directors may change views on strategic initiatives and a range of issues that will determine the future of the Company. As a result, the future strategy and plans of the Company may differ materially from those of the past.

Risks Related to Operating Our Business

Oil, natural gas and NGL prices fluctuate widely, and lower prices for an extended period of time are likely to have a material adverse effect on our business.

Our revenues, operating results, profitability, liquidity, leverage ratio and ability to grow and invest in capital expenditures depend primarily upon the prices we receive for the oil, natural gas and NGL we sell. We incur substantial expenditures to replace reserves, sustain production and fund our business plans. Low oil, natural gas and NGL prices can negatively affect the amount of cash available for capital expenditures, debt service and debt repayment and our ability to borrow money or raise additional capital and, as a result, could have a material adverse effect on our financial condition, results of operations, cash flows and reserves. In addition, periods of low oil and natural gas prices may result in a reduction of the carrying value of our oil and natural gas properties due to recognizing impairments in proved and unproved properties.

Wide fluctuations in oil, natural gas and NGL prices may result from factors that are beyond our control, including:

- domestic and worldwide supplies of oil, natural gas and NGL, including U.S. inventories of oil and natural gas reserves;
- weather conditions;
- changes in the level of consumer and industrial demand, including impacts from global or national health epidemics and concerns, such as the recent coronavirus;
- the price and availability of alternative fuels;
- technological advances affecting energy consumption;
- the effectiveness of worldwide conservation measures;
- the availability, proximity and capacity of pipelines, other transportation facilities and processing facilities;
- the level and effect of trading in commodity futures markets, including by commodity price speculators and others;
- U.S. exports of oil, natural gas, liquefied natural gas and NGL;
- the price and level of foreign imports;
- the nature and extent of domestic and foreign governmental regulations and taxes;
- the ability of the members of the Organization of Petroleum Exporting Countries (OPEC) and others to agree to and maintain oil price and production controls;
- increased use of competing energy products, including alternative energy sources;
- political instability or armed conflict in oil and natural gas producing regions;
- acts of terrorism; and
- domestic and global economic conditions.

These factors and the volatility of the energy markets make it extremely difficult to predict future oil, natural gas and NGL price movements. In addition, a prolonged extension of lower prices could reduce the quantities of reserves that we may economically produce.

The ongoing coronavirus (COVID-19) pandemic and related economic turmoil have affected and could continue to adversely affect our business, financial condition, results of operations and cash flows.

The global spread of COVID-19 created significant volatility, uncertainty, and economic disruption during 2020. The ongoing COVID-19 pandemic has reached more than 200 countries and has continued to be a rapidly evolving economic and public health situation. The pandemic has adversely impacted the entire global economy, and there is considerable uncertainty regarding how long the pandemic and related market conditions will persist and the extent and duration of governmental and other measures implemented to try to slow the spread of the virus, such as quarantines, shelter-in-place orders and business and government shutdowns. In certain cases, states that had begun taking steps to reopen their economies experienced a subsequent surge in cases of COVID-19, causing these states to cease such reopening measures in some cases and reinstitute restrictions in others. We have taken

certain precautionary measures intended to help minimize the risk to our employees, our business and the communities in which we operate, and we are actively assessing and planning for various operational contingencies in the event one or more of our operational employees experiences any symptoms consistent with COVID-19. However, we cannot guarantee that any actions taken by us will be effective in preventing future disruptions to our business. Moreover, future operations could be negatively affected if a significant number of our employees are quarantined as a result of exposure to the virus.

In addition, actions by our customers and derivative contract counterparties in response to COVID-19 and its economic impacts may also have an adverse impact on our business. We continue to regularly monitor the credit worthiness of such customers and derivative contract counterparties. Although we have not received notices from our customers or counterparties regarding non-performance issues or delays resulting from the pandemic, we may have to temporarily shut down or further reduce production, which could result in significant downtime and have significant adverse consequences for our business, financial condition, results of operations, and cash flows.

Furthermore, the impact of the pandemic, including a resulting reduction in demand for oil and natural gas, coupled with the sharp decline in commodity prices following the announcement of price reductions and production increases in March 2020 by members of OPEC+ has led to significant global economic contraction generally and in our industry in particular. While an agreement to cut production has since been announced by OPEC+ and its allies, the supply and demand imbalance created by such price reductions and production increases, coupled with the impact of COVID-19, has continued to result in a significant downturn in the oil and gas industry. Although OPEC+ agreed in April 2020 to cut oil production and has extended such production cuts through March 2021, crude oil prices have remained depressed as a result of the oversupply of oil, an increasingly utilized global storage network and the decrease in crude oil demand due to COVID-19. Oil and natural gas prices are expected to continue to be volatile as a result of the ongoing COVID-19 pandemic and as changes in oil and natural gas inventories, industry demand and national and economic performance are reported, and we cannot predict when prices will improve and stabilize. Due to numerous uncertainties, we cannot at this time predict the full impact that COVID-19 or the significant disruption and volatility currently being experienced in the oil and natural gas markets will have on our business, financial condition and results of operations.

The ultimate impact of COVID-19 will depend on future developments that cannot be anticipated, including, among others, the ultimate severity of the virus, the consequences of governmental and other measures designed to mitigate the spread of the virus, the development and availability of treatments and vaccines and the extent to which these treatments and vaccines may remain effective as potential new strains of the virus emerge, the duration of the pandemic, any further actions taken by members of OPEC+, actions taken by governmental authorities, customers, suppliers and other third parties, workforce availability, and the timing and extent of any return to normal economic and operating conditions.

If commodity prices remain depressed or drilling efforts are unsuccessful, we may be required to record write downs of the carrying value of our oil and natural gas properties.

We have been required to write down the carrying value of certain of our oil and natural gas properties in the past and there is a risk that we will be required to take additional writedowns in the future. Writedowns may occur in the future when oil and natural gas prices are low, or if we have downward adjustments to our estimated proved reserves, increases in our estimates of operating or development costs, or due to the anticipated sale of properties.

The successful efforts method of accounting requires that we periodically review the carrying value of our oil and natural gas properties for possible impairment. Impairment is recognized for the excess of book value over fair value when the book value of a proven property is greater than the expected undiscounted future net cash flows from that property and on acreage when conditions indicate the carrying value is not recoverable. We may be required to write down the carrying value of a property based on oil and natural gas prices at the time of the impairment review, or as a result of continuing evaluation of drilling results, production data, economics, divestiture activity, and other factors. A writedown constitutes a non-cash charge to earnings and does not impact cash or cash flows from operating activities; however, it reflects our long-term ability to recover an investment, reduces our reported earnings and increases certain leverage ratios. See *Impairment of Oil and Natural Gas Properties* included in Item 7 of this report for further information.

Significant capital expenditures are required to replace our reserves and conduct our business.

Our exploration, development and acquisition activities require substantial capital expenditures. We intend to fund our capital expenditures through cash flows from operations, and to the extent that is not sufficient, borrowings under our revolving credit facility. Our ability to generate operating cash flow is subject to a number of risks and variables, such as the level of production from existing wells, prices of oil, natural gas and NGL, our success in developing and producing new reserves and the other risk factors discussed herein. Our forecasted 2021 capital expenditures, inclusive of capitalized interest, are $670 - $740 million compared to our 2020 capital spending level of $920 million. Management continues to review operational plans for 2021 and beyond, which could result in changes to projected capital expenditures and projected revenues from sales of oil, natural gas and NGL. If we are unable to fund our capital expenditures as planned, we could experience a curtailment of our exploration and development activity, a loss of properties and a decline in our oil, natural gas and NGL reserves.

If we are not able to replace reserves, we may not be able to sustain production.

Our future success depends largely upon our ability to find, develop or acquire additional oil and natural gas reserves that are economically recoverable. Unless we replace the reserves we produce through successful development, exploration or acquisition activities, our proved reserves and production will decline over time. Thus, our future oil and natural gas reserves and production, and therefore our cash flow and income, are highly dependent on our success in efficiently developing our current reserves and economically finding or acquiring additional recoverable reserves.

The actual quantities of and future net revenues from our proved reserves may be less than our estimates.

The estimates of our proved reserves and the estimated future net revenues from our proved reserves included in this report are based upon various assumptions, including assumptions required by the SEC relating to oil, natural gas and NGL prices, drilling and operating expenses, capital expenditures, taxes and availability of funds. The process of estimating oil, natural gas and NGL reserves is complex and involves significant decisions and assumptions associated with geological, geophysical, engineering and economic data for each well. Therefore, these estimates are subject to future revisions.

Actual future production, oil, natural gas and NGL prices, revenues, taxes, development expenditures, operating expenses and quantities of recoverable oil, natural gas and NGL reserves most likely will vary from these estimates. Such variations may be significant and could materially affect the estimated quantities and present value of our proved reserves. In addition, we may adjust estimates of proved reserves to reflect production history, results of exploration and development drilling, prevailing oil and natural gas prices and other factors, many of which are beyond our control.

As of December 31, 2020, approximately 7% of our estimated proved reserves (by volume) were undeveloped. As a result of our entry into Chapter 11 bankruptcy and the limited duration of our DIP Credit Facility at December 31, 2020, these reserve estimates reflect our plans for capital expenditures to convert PUDs into proved developed reserves, including approximately $126 million, that can be funded within the maturity of our then-current financing. You should be aware that the estimated development costs may not equal our actual costs, development may not occur as scheduled and results may not be as estimated. If we choose not to develop our PUDs, or if we are not otherwise able to successfully develop them, we will be required to remove them from our reported proved reserves. In addition, under the SEC's reserve reporting rules, because PUDs generally may be booked only if they relate to wells scheduled to be drilled within five years of the date of booking, we may be required to remove any PUDs that are not developed within this five-year time frame.

You should not assume that the present values included in this report represent the current market value of our estimated reserves. In accordance with SEC requirements, the estimates of our present values are based on prices and costs as of the date of the estimates. The price on the date of estimate is calculated as the average oil and natural gas price during the 12 months ending in the current reporting period, determined as the unweighted arithmetic average of prices on the first day of each month within the 12-month period. The December 31, 2020 present value is based on a $39.57 per bbl of oil price and a $1.98 per mcf of natural gas price, before considering basis differential adjustments. Actual future prices and costs may be materially higher or lower than the prices and costs as of the date of an estimate.

The timing of both the production and the expenses from the development and production of oil and natural gas properties will affect both the timing of future net cash flows from our proved reserves and their present value. Any changes in demand for oil and natural gas, governmental regulations or taxation will also affect the future net cash flows from our production. In addition, the 10% discount factor that is required by the SEC to be used in calculating discounted future net cash flows for reporting purposes is not necessarily the most appropriate discount factor. Interest rates in effect from time to time and the risks associated with our business or the oil and gas industry in general will affect the appropriateness of the 10% discount factor.

Our development and exploratory drilling efforts and our well operations may not be profitable or achieve our targeted returns.

We have a substantial inventory of undeveloped properties. Development and exploratory drilling and production activities are subject to many risks, including the risk that commercially productive reservoirs will not be discovered. We have acquired undeveloped properties that we believe will enhance our growth potential and increase our earnings over time. However, we cannot assure you that all prospects will be economically viable or that we will not abandon our initial investments. Additionally, there can be no assurance that undeveloped properties acquired by us will be profitably developed, that new wells drilled by us in prospects that we pursue will be productive, or that we will recover all or any portion of our investment in such undeveloped properties or wells.

Drilling for oil and natural gas may involve unprofitable efforts, not only from dry wells but also from wells that are productive but do not produce sufficient commercial quantities to cover the drilling, operating and other costs. The cost of drilling, completing and operating a well is often uncertain, and many factors can adversely affect the economics of a well or property. Drilling and completion operations may be curtailed, delayed or canceled as a result of unexpected drilling conditions, title problems, equipment failures or accidents, shortages of midstream transportation, equipment or personnel, environmental issues, state or local bans or moratoriums on hydraulic fracturing and produced water disposal, federal restrictions on oil and gas leasing and permitting, and a decline in commodity prices, among others. The profitability of wells, particularly in certain of the areas in which we operate, will be reduced or eliminated if commodity prices decline. In addition, wells that are profitable may not meet our internal return targets, which are dependent upon the current and future market prices for oil, natural gas and NGL, costs associated with producing oil, natural gas and NGL and our ability to add reserves at an acceptable cost.

We rely to a significant extent on seismic data and other technologies in evaluating undeveloped properties and in conducting our exploration activities. The seismic data and other technologies we use do not allow us to know conclusively, prior to acquisition of undeveloped properties, or drilling a well, whether oil or natural gas is present or may be produced economically. If we incur significant expense in acquiring or developing properties that do not produce as expected or at profitable levels, it could have a material adverse effect on our results of operations and financial condition.

Certain of our undeveloped properties are subject to leases that will expire over the next several years unless production is established on units containing the acreage or the leases are renewed.

Leases on oil and natural gas properties typically have a term of three to five years, after which they expire unless, prior to expiration, a well is drilled and production of hydrocarbons in paying quantities is established. If our leases on our undeveloped properties expire and we are unable to renew the leases, we will lose our right to develop the related properties. Although we seek to actively manage our undeveloped properties, our drilling plans for these areas are subject to change based upon various factors, including drilling results, oil and natural gas prices, the availability and cost of capital, drilling and production costs, availability of drilling services and equipment, gathering system and pipeline transportation constraints and regulatory approvals. Low commodity prices may cause us to delay our drilling plans and, as a result, lose our right to develop the related properties.

Our commodity price risk management activities may limit the benefit we would receive from increases in commodity prices, may require us to provide collateral for derivative liabilities and involve risk that our counterparties may be unable to satisfy their obligations to us.

To manage our exposure to price volatility, we enter into oil, natural gas and NGL price derivative contracts. Our oil, natural gas and NGL derivative arrangements may limit the benefit we would receive from increases in commodity prices. The fair value of our oil, natural gas and NGL derivative instruments can fluctuate significantly between periods. Our decision to mitigate cash flow volatility through derivative arrangements, if any, is based in part on our view of current and future market conditions and our desire to stabilize cash flows necessary for the

development of our proved reserves. We may choose not to enter into derivatives if we believe the pricing environment for certain time periods is unfavorable. Additionally, we may choose to liquidate existing derivative positions prior to the expiration of their contractual maturities to monetize gain positions for the purpose of funding our capital program.

Most of our oil, natural gas and NGL derivative contracts are with counterparties under bilateral hedging arrangements. Under a majority of our arrangements, the collateral provided for our obligations is secured by the same hydrocarbon interests that secure our senior secured revolving credit facility. Our counterparties' obligations under the arrangements must be secured by cash or letters of credit to the extent that any mark-to-market amounts owed to us exceed defined thresholds. Collateral requirements are dependent to a large extent on oil and natural gas prices.

Oil, natural gas and NGL derivative transactions expose us to the risk that our counterparties, which are generally financial institutions, may be unable to satisfy their obligations to us. During periods of declining commodity prices, the value of our commodity derivative asset positions increase, which increases our counterparty exposure. Although the counterparties to our hedging arrangements are required to secure their obligations to us under certain scenarios, if any of our counterparties were to default on its obligations to us under the derivative contracts or seek bankruptcy protection, it could have an adverse effect on our ability to fund our planned activities and could result in a larger percentage of our future cash flows being exposed to commodity price changes.

Oil and natural gas operations are uncertain and involve substantial costs and risks.

Our operating activities are subject to numerous costs and risks, including the risk that we will not encounter commercially productive oil or gas reservoirs. Drilling for oil, natural gas and NGLs can be unprofitable, not only from dry holes, but from productive wells that do not return a profit because of insufficient revenue from production or high costs. Substantial costs are required to locate, acquire and develop oil and gas properties, and we are often uncertain as to the amount and timing of those costs. Our cost of drilling, completing, equipping and operating wells is often uncertain before drilling commences. Declines in commodity prices and overruns in budgeted expenditures are common risks that can make a particular project uneconomic or less economic than forecasted. While both exploratory and developmental drilling activities involve these risks, exploratory drilling involves greater risks of dry holes or failure to find commercial quantities of hydrocarbons. In addition, our oil and gas properties can become damaged, our operations may be curtailed, delayed or canceled and the costs of such operations may increase as a result of a variety of factors, including, but not limited to:

- unexpected drilling conditions, pressure conditions or irregularities in reservoir formations;
- equipment failures or accidents;
- fires, explosions, blowouts, cratering or loss of well control;
- the mishandling or underground migration of fluids and chemicals;
- adverse weather conditions and natural disasters, such as tornadoes, earthquakes, hurricanes and extreme temperatures;
- issues with title or in receiving governmental permits or approvals;
- restricted takeaway capacity for our production, including due to inadequate midstream infrastructure or constrained downstream markets;
- environmental hazards or liabilities;
- restrictions in access to, or disposal of, water used or produced in drilling and completion operations;
- shortages or delays in the availability of services or delivery of equipment; and
- unexpected or unforeseen changes in regulatory policy, and political or public opinion.

The occurrence of one or more of these factors could result in a partial or total loss of our investment in a particular property, as well as significant liabilities. While we may maintain insurance against some, but not all, of the risks described above, our insurance may not be adequate to cover casualty losses or liabilities, and our insurance does not cover penalties or fines that may be assessed by a governmental authority. For certain risks, such as political risk, business interruption, war, terrorism and piracy, we have limited or no insurance coverage.

Also, in the future we may not be able to obtain insurance at premium levels that justify its purchase. The occurrence of a significant event against which we are not fully insured may expose us to liabilities.

Moreover, certain of these events could result in environmental pollution and impact to third parties, including persons living in proximity to our operations, our employees and employees of our contractors, leading to possible injuries, death or significant damage to property and natural resources.

Conservation measures and technological advances could reduce demand for natural gas and oil.

Fuel conservation measures, alternative fuel requirements, increasing consumer demand for alternatives to natural gas and oil, technological advances in fuel economy and energy generation devices could reduce demand for natural gas and oil. The impact of the changing demand for natural gas and oil could adversely impact our earnings, cash flows and financial position.

Our ability to produce oil, natural gas and NGL economically and in commercial quantities could be impaired if we are unable to acquire adequate supplies of water for our operations or are unable to dispose of or recycle the water we use economically and in an environmentally safe manner.

Development activities, particularly hydraulic fracturing, require the use and disposal of significant quantities of water. In certain areas, there may be insufficient local aquifer capacity to provide a source of water for drilling activities. Water must be obtained from other sources and transported to the drilling site. Our inability to secure sufficient amounts of water, or to dispose of or recycle the water used in our operations, could adversely impact our operations in certain areas. The imposition of environmental initiatives and regulations could further restrict our ability to conduct certain operations such as hydraulic fracturing or disposal of waste, including, but not limited to, produced water, drilling fluids and other materials associated with the exploration, development or production of oil and natural gas.

The oil and gas exploration and production industry is very competitive, and some of our competitors have greater financial and other resources than we do.

We face competition in every aspect of our business, including, but not limited to, buying and selling reserves and leases, obtaining goods and services needed to operate our business and marketing oil, natural gas or NGL. Competitors include multinational oil companies, independent production companies and individual producers and operators. Some of our competitors have greater financial and other resources than we do. As a result, these competitors may be able to address these competitive factors more effectively or weather industry downturns more easily than we can. We also face indirect competition from alternative energy sources, including wind, solar and electric power.

Our performance depends largely on the talents and efforts of highly skilled individuals and on our ability to attract new employees and to retain and motivate our existing employees. Competition in our industry for qualified employees is intense. If we are unsuccessful in attracting and retaining skilled employees and managerial talent, our ability to compete effectively may be diminished. We also compete for the equipment required to explore, develop and operate properties. Typically, during times of rising commodity prices, drilling and operating costs will also increase. During these periods, there is often a shortage of drilling rigs and other oilfield equipment and services, which could adversely affect our ability to execute our development plans on a timely basis and within budget.

Risks related to potential acquisitions or dispositions may adversely affect our business.

From time to time, we evaluate acquisitions and dispositions of assets, businesses and other investments. These transactions may not result in the anticipated benefits or efficiencies. In addition, acquisitions may be financed by borrowings, requiring us to incur more debt, or by the issuance of our common stock. Any such acquisition or disposition involves risks and we cannot assure you that:

- any acquisition would be successfully integrated into our operations and internal controls;
- the due diligence conducted prior to an acquisition would uncover situations that could result in financial or legal exposure, such as title defects and potential environmental and other liabilities;
- post-closing purchase price adjustments will be realized in our favor;

- our assumptions about, among other things, reserves, estimated production, revenues, capital expenditures, operating, operating expenses and costs would be accurate;
- any investment, acquisition, disposition or integration would not divert management resources from the operation of our business; and
- any investment, acquisition, or disposition or integration would not have a material adverse effect on our financial condition, results of operations, cash flows or reserves.

If any of these risks materialize, the benefits of such acquisition or disposition may not be fully realized, if at all, and our financial condition, results of operations, cash flows and reserves could be negatively impacted.

Negative public perception regarding us or our industry could have an adverse effect on our operations.

Negative public perception regarding us or our industry resulting from, among other things, concerns raised by advocacy groups about hydraulic fracturing, waste disposal, oil spills, seismic activity, climate change, explosions of natural gas transmission lines and the development and operation of pipelines and other midstream facilities may lead to increased regulatory scrutiny, which may, in turn, lead to new state and federal safety and environmental laws, regulations, guidelines and enforcement interpretations. Additionally, environmental groups, landowners, local groups and other advocates may oppose our operations through organized protests, attempts to block or sabotage our operations or those of our midstream transportation providers, intervene in regulatory or administrative proceedings involving our assets or those of our midstream transportation providers, or file lawsuits or other actions designed to prevent, disrupt or delay the development or operation of our assets and business or those of our midstream transportation providers. These actions may cause operational delays or restrictions, increased operating costs, additional regulatory burdens and increased risk of litigation. Moreover, governmental authorities exercise considerable discretion in the timing and scope of permit issuance and the public may engage in the permitting process, including through intervention in the courts. Negative public perception could cause the permits we require to conduct our operations to be withheld, delayed or burdened by requirements that restrict our ability to profitably conduct our business. The change in presidential administrations and change in control of Congress may also result in increased restrictions on oil and gas production activities, which could materially adversely affect our industry and our financial condition and results of operations.

Recently, activists concerned about the potential effects of climate change have directed their attention towards sources of funding for fossil-fuel energy companies, which has resulted in certain financial institutions, funds and other sources of capital restricting or eliminating their investment in energy-related activities. Ultimately, this could make it more difficult to secure funding for exploration and production activities. Members of the investment community have also begun to screen companies such as ours for sustainability performance, including practices related to GHGs and climate change, before investing in our common units. Any efforts to improve our sustainability practices in response to these pressures may increase our costs, and we may be forced to implement technologies that are not economically viable in order to improve our sustainability performance and to meet the specific requirements to perform services for certain customers.

Our operations may be adversely affected by pipeline, trucking and gathering system capacity constraints and may be subject to interruptions that could adversely affect our cash flow.

In certain resource plays, the capacity of gathering and transportation systems is insufficient to accommodate potential production from existing and new wells. We rely heavily on third parties to meet our oil, natural gas and NGL gathering needs. Capital constraints could limit the construction of new pipelines and gathering systems and the providing or expansion of trucking services by third parties. Until this new capacity is available, we may experience delays in producing and selling our oil, natural gas and NGL. In such event, we might have to shut in our wells awaiting a pipeline connection or capacity or sell oil, natural gas or NGL production at significantly lower prices than those quoted on NYMEX or than we currently project, which would adversely affect our results of operations.

A portion of our oil, natural gas and NGL production in any region may be interrupted, or shut in, from time to time for numerous reasons, including weather conditions, accidents, loss of pipeline or gathering system access, field labor issues or strikes, or we might voluntarily curtail production in response to market conditions. If a substantial amount of our production is interrupted at the same time, it could materially adversely affect our cash flow.

Cyber-attacks targeting systems and infrastructure used by the oil and gas industry and related regulations may adversely impact our operations and, if we are unable to obtain and maintain adequate protection for our data, our business may be harmed.

Our business has become increasingly dependent on digital technologies to conduct certain exploration, development and production activities. We depend on digital technology to estimate quantities of oil, natural gas and NGL reserves, process and record financial and operating data, analyze seismic and drilling information, and communicate with our customers, employees and third-party partners. We have been the subject of cyber-attacks on our internal systems and through those of third parties in the past. Unauthorized access to our seismic data, reserves information, customer or employee data or other proprietary or commercially sensitive information could lead to data corruption, communication interruption, or other disruptions in our exploration or production operations or planned business transactions, any of which could have a material adverse impact on our results of operations. If our information technology systems cease to function properly or our cybersecurity is breached, we could suffer disruptions to our normal operations, which may include drilling, completion, production and corporate functions. A cyber-attack involving our information systems and related infrastructure, or that of our business associates, could result in supply chain disruptions that delay or prevent the transportation and marketing of our production, non-compliance leading to regulatory fines or penalties, loss or disclosure of, or damage to, our or any of our customer's or supplier's data or confidential information that could harm our business by damaging our reputation, subjecting us to potential financial or legal liability, and requiring us to incur significant costs, including costs to repair or restore our systems and data or to take other remedial steps.

Further, our increased reliance on remote access to our information systems as a result of the COVID-19 pandemic increases our exposure to potential cybersecurity breaches. As cyber-attacks continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any vulnerabilities to cyber-attacks. In addition, new laws and regulations governing data privacy and the unauthorized disclosure of confidential information pose increasingly complex compliance challenges and potentially elevate costs as we collect and store personal data related to royalty owners. Any failure to comply with these laws and regulations could result in significant penalties and legal liability. For example, the California Consumer Privacy Act ("CCPA") was signed into law on June 28, 2018 and largely took effect on January 1, 2020. The CCPA, among other things, contains new disclosure obligations for businesses that collect personal information about California residents and enhanced consumer protections for those individuals, and provides for statutory fines for data security breaches or other CCPA violations. Meanwhile, over fifteen other states have considered privacy laws like the CCPA.

An interruption in operations at our headquarters could adversely affect our business.

Our headquarters are located in Oklahoma City, Oklahoma, an area that experiences severe weather events, including tornadoes and earthquakes. Our information systems and administrative and management processes are primarily provided to our various drilling projects and producing wells throughout the United States from this location, which could be disrupted if a catastrophic event, such as a tornado, power outage or act of terror, destroyed or severely damaged our headquarters. Any such catastrophic event could harm our ability to conduct normal operations and could adversely affect our business.

Financial Risks Related to our Business

We have significant capital needs, and our ability to access the capital and credit markets to raise capital on favorable terms is limited by industry conditions.

Disruptions in the capital and credit markets, in particular with respect to the energy sector, could limit our ability to access these markets or may significantly increase our cost to borrow. Low commodity prices have caused and may continue to cause lenders to increase the interest rates under upstream operators' credit facilities, enact tighter lending standards, refuse to refinance existing debt around maturity on favorable terms or at all and may reduce or cease to provide funding to borrowers. Additionally, certain financial institutions have announced their intention to cease investment banking and corporate lending activities in the North American oil and gas sector. For example, on December 1, 2020, the Bank of Montreal announced its intention to wind down its investments in non-Canadian energy businesses and to cease all investment banking and corporate lending in the sector. If we are unable to access the capital and credit markets on favorable terms, it could have a material adverse effect on our business, financial condition, results of operations, cash flows and liquidity and our ability to repay or refinance our

debt. Additionally, challenges in the economy have led and could further lead to reductions in the demand for oil and gas, or further reductions in the prices of oil and gas, or both, which could have a negative impact on our financial position, results of operations and cash flows.

Restrictive covenants in certain of our debt agreements could limit our growth and our ability to finance our operations, fund our capital needs, respond to changing conditions and engage in other business activities that may be in our best interests.

Our debt agreements impose operating and financial restrictions on us. These restrictions limit our ability and that of our restricted subsidiaries to, among other things:

- incur additional indebtedness;
- make investments or loans;
- create liens;
- consummate mergers and similar fundamental changes;
- make restricted payments;
- make investments in unrestricted subsidiaries;
- enter into transactions with affiliates; and
- use the proceeds of asset sales.

We may be prevented from taking advantage of business opportunities that arise because of the limitations imposed on us by the restrictive covenants under certain of our debt agreements. The restrictions contained in the covenants could:

- limit our ability to plan for, or react to, market conditions, to meet capital needs or otherwise to restrict our activities or business plan; and
- adversely affect our ability to finance our operations, enter into acquisitions or divestitures to engage in other business activities that would be in our interest.

Changes in the method of determining the London Interbank Offered Rate (LIBOR), or the replacement of LIBOR with an alternative reference rate, may adversely affect interest expense related to outstanding debt.

Amounts drawn under certain of our debt instruments may bear interest at rates based on LIBOR. On July 27, 2017, the Financial Conduct Authority in the United Kingdom announced that it would phase out LIBOR as a benchmark by the end of 2021. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after 2021. The Credit Agreement adopts the hardwire approach for LIBOR replacement which provides that Term SOFR (or Daily Simple SOFR, to the extent Term SOFR is unavailable) will be used in the event of LIBOR cessation or upon an election to early opt-in, if SOFR becomes available. As SOFR is not currently available, the Credit Agreement also provides that in the event that SOFR is not available at the time of LIBOR cessation, the borrower and agent must agree on a successor rate subject to negative consent rights of the lenders. While the Credit Agreement provides a framework for a transition to an alternative rate, some uncertainty remains due to the current unavailability of SOFR and the inherent open-endedness of the amendment mechanism in the absence of SOFR. We are currently evaluating the impact of the potential replacement of the LIBOR interest rate. In addition, the overall financial markets may be disrupted as a result of the phase-out or replacement of LIBOR. Uncertainty as to the nature of such potential phase-out and alternative reference rates or disruption in the financial market could have a material adverse effect on our financial condition, results of operations and cash flows.

Legal and Regulatory Risks

We are subject to extensive governmental regulation, which can change and could adversely impact our business.

Our operations are subject to extensive federal, state, local and other laws, rules and regulations, including with respect to environmental matters, worker health and safety, wildlife conservation, the gathering and transportation of oil, gas and NGLs, conservation policies, reporting obligations, royalty payments, unclaimed

property and the imposition of taxes, and tribal laws for a minor portion of our acreage. Such regulations include requirements for permits to drill and to conduct other operations and for provision of financial assurances (such as bonds) covering drilling, completion and well operations. If permits are not issued, or if unfavorable restrictions or conditions are imposed on our drilling or completion activities, we may not be able to conduct our operations as planned. For example, on January 20, 2021, the Acting Secretary for the Department of the Interior signed an order effectively suspending new fossil fuel leasing and permitting on federal lands for 60 days. Then on January 27, 2021, President Biden issued an executive order indefinitely suspending new oil and natural gas leases on public lands or in offshore waters pending completion of a comprehensive review and reconsideration of federal oil and gas permitting and leasing practices. To the extent that the review results in the development of additional restrictions on drilling, limitations on the availability of leases, or restrictions on the ability to obtain required permits, it could have a material adverse impact on our operations. In addition, we may be required to make large, sometimes unexpected, expenditures to comply with applicable governmental laws, rules, regulations, permits or orders.

In addition, changes in public policy have affected, and in the future could further affect, our operations. Regulatory developments could, among other things, restrict production levels, impose price controls, change environmental protection requirements and increase taxes, royalties and other amounts payable to the government. Our operating and compliance costs could increase further if existing laws and regulations are revised, reinterpreted, or if new laws and regulations become applicable to our operations. We do not expect that any of these laws and regulations will affect our operations materially differently than they would affect other companies with similar operations, size and financial strength. Although we are unable to predict changes to existing laws and regulations, such changes could significantly impact our profitability, financial condition and liquidity. This is particularly true of changes related to pipeline safety, hydraulic fracturing and climate change, as discussed below.

Pipeline Safety. The pipeline assets in which we own interests are subject to stringent and complex regulations related to pipeline safety and integrity management. The Pipeline and Hazardous Materials Safety Administration (PHMSA) has established a series of rules that require pipeline operators to develop and implement integrity management programs for gas, NGL and condensate transmission pipelines as well as for certain low stress pipelines and gathering lines transporting hazardous liquids, such as oil, that, in the event of a failure, could affect “high consequence areas.” Recent PHMSA rules have also extended certain requirements for integrity assessments and leak detections beyond high consequence areas. Further, legislation funding PHMSA through 2023 requires the agency to engage in additional rulemaking to amend the integrity management program, emergency response plan, operation and maintenance manual, and pressure control recordkeeping requirements for gas distribution operators; to create new leak detection and repair program obligations; and to set new minimum federal safety standards for onshore gas gathering lines. At this time, we cannot predict the cost of these requirements or other potential new or amended regulations, but they could be significant. Moreover, violations of pipeline safety regulations can result in the imposition of significant penalties.

Hydraulic Fracturing. Several states have adopted or are considering adopting regulations that could impose more stringent permitting, public disclosure and/or well construction requirements on hydraulic fracturing operations. We cannot predict whether additional federal, state or local laws or regulations applicable to hydraulic fracturing will be enacted in the future and, if so, what actions any such laws or regulations would require or prohibit. If additional levels of regulation or permitting requirements were imposed on hydraulic fracturing operations, our business and operations could be subject to delays, increased operating and compliance costs and potential bans. Additional regulation could also lead to greater opposition to hydraulic fracturing, including litigation.

Climate Change. Continuing political and social attention to the issue of climate change has resulted in legislative, regulatory and other initiatives to reduce greenhouse gas emissions, such as carbon dioxide and methane. Policy makers at both the U.S. federal and state levels have introduced legislation and proposed new regulations designed to quantify and limit the emission of greenhouse gases through inventories, limitations and/or taxes on greenhouse gas emissions. EPA and the BLM have issued regulations for the control of methane emissions, which also include leak detection and repair requirements, for the oil and gas industry; however, in September 2018, BLM published a final rule to repeal certain requirements of these regulations. Similarly, in September 2019, EPA published a rule proposing to reconsider certain aspects of its regulations for the control of methane emissions. Nevertheless, several states in which we operate have imposed limitations designed to reduce methane emissions from oil and gas exploration and production activities. Legislative and state initiatives to date have generally focused on the development of renewable energy standards and/or cap-and-trade and/or carbon tax

programs. Renewable energy standards (also referred to as renewable portfolio standards) require electric utilities to provide a specified minimum percentage of electricity from eligible renewable resources, with potential increases to the required percentage over time. The development of a federal renewable energy standard, or the development of additional or more stringent renewable energy standards at the state level could reduce the demand for oil and gas, thereby adversely impacting our earnings, cash flows and financial position. A cap-and-trade program generally would cap overall greenhouse gas emissions on an economy- wide basis and require major sources of greenhouse gas emissions or major fuel producers to acquire and surrender emission allowances. A federal cap and trade program or expanded use of cap and trade programs at the state level could impose direct costs on us through the purchase of allowances and could impose indirect costs by incentivizing consumers to shift away from fossil fuels. In addition, federal or state carbon taxes could directly increase our costs of operation and similarly incentivize consumers to shift away from fossil fuels.

In addition, activists concerned about the potential effects of climate change have directed their attention at sources of funding for fossil-fuel energy companies, which has resulted in an increasing number of financial institutions, funds and other sources of capital restricting or eliminating their investment in oil and natural gas activities. Ultimately, this would make it more difficult and expensive to secure funding for exploration and production activities. Members of the investment community have also begun to screen companies such as ours for sustainability performance, including practices related to greenhouse gases and climate change, before investing in our common stock. Any efforts to improve our sustainability practices in response to these pressures may increase our costs, and we may be forced to implement technologies that are not economically viable in order to improve our sustainability performance and to meet the specific requirements to perform services for certain customers.

These various legislative, regulatory and other activities addressing greenhouse gas emissions could adversely affect our business, including by imposing reporting obligations on, or limiting emissions of greenhouse gases from, our equipment and operations, which could require us to incur costs to reduce emissions of greenhouse gases associated with our operations. Limitations on greenhouse gas emissions could also adversely affect demand for oil and gas, which could lower the value of our reserves and have a material adverse effect on our profitability, financial condition and liquidity.

Environmental matters and related costs can be significant.

As an owner, lessee or operator of oil and gas properties, we are subject to various federal, state, tribal and local laws and regulations relating to discharge of materials into, and protection of, the environment. These laws and regulations may, among other things, impose liability on us for the cost of remediating pollution that results from our operations. Environmental laws may impose strict, joint and several liability, and failure to comply with environmental laws and regulations can result in the imposition of administrative, civil or criminal fines and penalties, as well as injunctions limiting operations in affected areas. Any future costs associated with these matters are uncertain and will be governed by several factors, including future changes to regulatory requirements. Changes in or additions to public policy regarding the protection of the environment could have a significant impact on our operations and profitability.

Increasing attention to environmental, social and governance matters may impact our business, financial results or stock price.

In recent years, increasing attention has been given to corporate activities related to ESG matters in public discourse and the investment community. A number of advocacy groups, both domestically and internationally, have campaigned for governmental and private action to promote change at public companies related to ESG matters, including through the investment and voting practices of investment advisers, public pension funds, universities and other members of the investing community. These activities include increasing attention and demands for action related to climate change and promoting the use of energy saving building materials. A failure to comply with investor or customer expectations and standards, which are evolving, or if we are perceived to not have responded appropriately to the growing concern for ESG issues, regardless of whether there is a legal requirement to do so, could also cause reputational harm to our business and could have a material adverse effect on us.

In addition, organizations that provide information to investors on corporate governance and related matters have developed ratings systems for evaluating companies on their approach to ESG matters. These ratings are used by some investors to inform their investment and voting decisions. Unfavorable ESG ratings may lead to

increased negative investor sentiment toward us and our industry and to the diversion of investment to other industries, which could have a negative impact on our stock price and our access to and costs of capital.

The taxation of independent producers is subject to change, and changes in tax law could increase our cost of doing business.

We are subject to taxation by various governmental authorities at the federal, state and local levels in the jurisdictions in which we do business. New legislation could be enacted by any of these governmental authorities making it more costly for us to produce oil and natural gas by increasing our tax burden. The new presidential administration has called for changes to fiscal and tax policies which could lead to comprehensive tax reform. New federal legislation could be proposed that, if enacted, would impact federal income tax law applicable to the deduction of intangible drilling and development costs, percentage depletion and bonus depreciation. Other proposals changing federal income tax law could include a new corporate minimum tax based on book income, an increase to the corporate tax rate and the elimination of certain tax credits. If enacted, certain of these proposals could have a correlative impact on state income taxes. In addition, state and local authorities could enact new legislation that would increase various taxes such as sales, severance and ad valorem taxes as well as accelerate the collection of such taxes.

Trading in our new common stock, additional issuances of new common stock and certain other stock transactions could lead to a second, potentially more restrictive annual limitation on the utilization of our tax attributes such as net operating loss carryforwards, disallowed business interest carryforwards, tax credits and possibly other tax basis items. Increased restriction of these items reduces their ability to offset future taxable income, which may result in an increase to income tax liabilities.

Upon emergence from bankruptcy on February 9, 2021, the Company experienced an ownership change under Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), as all of the common stock and preferred stock of the Predecessor, or the old loss corporation, was canceled and replaced with new common stock of the Successor, or the new loss corporation (the “First Ownership Change”). As such, an annual limitation will be computed based on the fair market value of the new equity immediately after emergence multiplied by the long-term tax-exempt rate in effect for the month of February 2021. This annual limitation will restrict the future utilization of our net operating loss (NOL) carryforwards, disallowed business interest carryforwards and tax credits that existed at the time of emergence.

Based on current estimates, we believe the Company was in a net unrealized built-in gain position at the time of the First Ownership Change. This is due in large part to currently existing rules allowing a taxpayer to compare its tax basis to the face value of pre-emergence debt. Should the Company’s final calculations confirm that it was, in fact, in a net unrealized built-in gain position at such time, the annual limitation will be increased by each year’s recognized built-in gains, if any, occurring within a five-year period following the First Ownership Change, but only to the extent of the net unrealized built-in gain which existed at the time of the First Ownership Change.

In the event a second ownership change occurs and the Company is in a net unrealized built-in loss position at the time of the second ownership change, then a new and potentially more restrictive annual limitation would apply. Upon a second ownership change, the Company would likely have significantly less debt and as such a determination of its net unrealized built-in gain or loss position will likely not utilize its debt level and will be based solely upon the comparison of its tax basis to the fair market value of its assets. Depending on the market conditions and the Company’s tax basis, a second ownership change may result in a net unrealized built-in loss. The annual limitation in such a case would also be applied to certain of the Company’s tax attributes other than just NOL carryforwards, disallowed business interest carryforwards and tax credits. For example, a portion of tax depreciation, depletion and amortization would also be subject to the annual limitation for a five-year period following the ownership change but only to the extent of the net unrealized built-in loss existing at the time of the second ownership change. Whether the new annual limitation would be more restrictive would depend on the value of our stock and the long-term tax-exempt rate in effect at the time of a second ownership change. If the new annual limitation is more restrictive it would apply to certain of the tax attributes existing at the time of the second ownership change including those remaining from the time of the First Ownership Change.

Further, should the Company be in a net unrealized built-in gain position at the time of a second ownership change, the proposed regulations issued on September 10, 2019, and on January 14, 2020, under Section 382(h) of the Code (the “Proposed Regulations”) would, if finalized in their present form, change the currently existing rules

and limit the potential increases to the annual limitation amount for certain built-in gains existing at the time of an ownership change, (unless the transition relief provisions of the Proposed Regulations are applicable), thereby possibly reducing the ability to utilize tax attributes significantly.

Some states impose similar limitations on tax attribute utilization upon experiencing an ownership change.

General Risk Factors

A deterioration in general economic, business or industry conditions would have a material adverse effect on our results of operations, liquidity and financial condition.

Historically, concerns about global economic growth have had a significant impact on global financial markets and commodity prices. If the economic climate in the United States or abroad deteriorates, worldwide demand for petroleum products could diminish, which could impact the price at which we can sell our production, affect the ability of our vendors, suppliers and customers to continue operations and materially adversely impact our results of operations, liquidity and financial condition.

Terrorist activities could materially and adversely affect our business and results of operations.

Terrorist attacks and the threat of terrorist attacks, whether domestic or foreign attacks, as well as military or other actions taken in response to these acts, could cause instability in the global financial and energy markets. Continued hostilities in the Middle East and the occurrence or threat of terrorist attacks in the United States or other countries could adversely affect the global economy in unpredictable ways, including the disruption of energy supplies and markets, increased volatility in commodity prices, or the possibility that the infrastructure on which we rely could be a direct target or an indirect casualty of an act of terrorism, and, in turn, could materially and adversely affect our business and results of operations.

ITEM 1B. *Unresolved Staff Comments*

Not applicable.

ITEM 2. *Properties*

Information regarding our properties is included in Item 1. Business and in the Supplementary Information included in Item 8 of this report.

ITEM 3. *Legal Proceedings*

Chapter 11 Proceedings

Commencement of the Chapter 11 Cases automatically stayed the proceedings and actions against us that are described below, in addition to actions seeking to collect pre-petition indebtedness or to exercise control over the property of the Company's bankruptcy estates. The Plan in the Chapter 11 Cases, which became effective on February 9, 2021, provided for the treatment of claims against the Company's bankruptcy estates, including pre-petition liabilities that had not been satisfied or addressed during the Chapter 11 Cases. See Note 2 of the notes to our consolidated financial statements included in Item 8 of this report for additional information.

Litigation and Regulatory Proceedings

We were involved in a number of litigation and regulatory proceedings as of the Petition Date. Many of these proceedings were in early stages, and many of them sought damages and penalties, the amount of which is currently indeterminate. See Note 6 of the notes to our consolidated financial statements included in Item 8 of this report for information regarding our estimation and provision for potential losses related to litigation and regulatory proceedings.

Business Operations. We are involved in various lawsuits and disputes incidental to our business operations, including commercial disputes, personal injury claims, royalty claims, property damage claims and contract actions. The majority of these prepetition legal proceedings, including the matters below, have been settled during the Chapter 11 Cases or will be resolved in connection with the claims reconciliation process before the Bankruptcy Court. Any allowed claim related to such prepetition litigation will be treated in accordance with the Plan.

We and other natural gas producers have been named in various lawsuits alleging underpayment of royalties and other shares of the proceeds of production. The lawsuits against us allege, among other things, that we used below-market prices, made improper deductions, utilized improper measurement techniques, entered into arrangements with affiliates that resulted in underpayment of amounts owed in connection with the production and sale of natural gas and NGL, or similar theories. These lawsuits include cases filed by individual royalty owners and putative class actions, some of which seek to certify a statewide class. The lawsuits seek compensatory, consequential, treble, and punitive damages, restitution and disgorgement of profits, declaratory and injunctive relief regarding our payment practices, pre-and post-judgment interest, and attorney's fees and costs. Royalty plaintiffs have varying provisions in their respective leases, oil and gas law varies from state to state, and royalty owners and producers differ in their interpretation of the legal effect of lease provisions governing royalty calculations. We have resolved a number of these claims through negotiated settlements of past and future royalty obligations and have prevailed in various other lawsuits. We are currently defending numerous lawsuits seeking damages with respect to underpayment of royalties or other shares of the proceeds of production in multiple states where we have operated, including those discussed below.

On December 9, 2015, the Commonwealth of Pennsylvania, by the Office of Attorney General, filed a lawsuit in the Bradford County Court of Common Pleas related to royalty underpayment and lease acquisition and accounting practices with respect to properties in Pennsylvania. The lawsuit, which primarily relates to the Marcellus Shale and Utica Shale, alleges that we violated the Pennsylvania Unfair Trade Practices and Consumer Protection Law (UTPCPL) by making improper deductions and entering into arrangements with affiliates that resulted in underpayment of royalties. The lawsuit includes other UTPCPL claims and antitrust claims, including that a joint exploration agreement to which we are a party established unlawful market allocation for the acquisition of leases. The lawsuit seeks statutory restitution, civil penalties and costs, as well as a temporary injunction from exploration and drilling activities in Pennsylvania until restitution, penalties and costs have been paid, and a permanent injunction from further violations of the UTPCPL.

Putative statewide class actions in Pennsylvania and Ohio and purported class arbitrations in Pennsylvania have been filed on behalf of royalty owners asserting various claims for damages related to alleged underpayment of royalties as a result of the divestiture of substantially all of our midstream business and most of our gathering assets in 2012 and 2013. These cases include claims for violation of and conspiracy to violate the federal Racketeer Influenced and Corrupt Organizations Act and for an unlawful market allocation agreement for mineral rights, intentional interference with contractual relations, and violations of antitrust laws related to purported markets for gas mineral rights, operating rights and gas gathering sources. These lawsuits seek in aggregate compensatory, consequential, treble, and punitive damages, restitution and disgorgement of profits, declaratory and injunctive relief regarding our royalty payment practices, pre-and post-judgment interest, and attorney's fees and costs. On December 20, 2017 and August 9, 2018, we reached tentative settlements to resolve all Pennsylvania civil royalty cases for a total at that time of approximately $36 million. Subsequent to our Bankruptcy Filing the parties reopened settlement discussions.

We believe losses are reasonably possible in certain of the pending royalty cases for which we have not accrued a loss contingency, but we are currently unable to estimate an amount or range of loss or the impact the actions could have on our future results of operations or cash flows. Uncertainties in pending royalty cases generally include the complex nature of the claims and defenses, the potential size of the class in class actions, the scope and types of the properties and agreements involved, and the applicable production years.

On July 24, 2018, Healthcare of Ontario Pension Plan (HOOPP) filed a demand for arbitration with the American Arbitration Association regarding HOOPP's purchase of our interest in Chaparral Energy, Inc. stock for $215 million on January 5, 2014. HOOPP claims that we engaged in material misrepresentations and fraud, and that we violated the Exchange Act and Oklahoma Uniform Securities Act. HOOPP seeks either rescission or $215 million in monetary damages, and in either case, interest, attorney's fees, disgorgement and punitive damages. We intend to vigorously defend these claims.

On January 29, 2020, a well control incident occurred at one of our wellsites in Burleson County, Texas, causing the deaths of three of our contractors' employees and injuring a fourth. In connection with this incident, eleven lawsuits have been brought against us and our contractors alleging negligence, gross negligence, and breach of contract, and seeking wrongful death damages, survival statute damages, exemplary damages, and interest. Ten of the suits have been filed in Dallas County, Texas. A joint motion to consolidate filed by all the parties in nine of the ten Dallas County lawsuits is currently pending before the Texas Multidistrict Litigation Panel. The

eleventh suit is pending in Burleson County, Texas. The proceedings are in their early stages and are all stayed due to the pending bankruptcy. Our general and excess liability insurance policies provide coverage for third party bodily injury and wrongful death claims, and the contracts between us and our contractors with respect to the well contain customary cross-indemnification provisions.

Environmental Contingencies

The nature of the oil and gas business carries with it certain environmental risks for us and our subsidiaries. We have implemented various policies, programs, procedures, training and audits to reduce and mitigate such environmental risks. We conduct periodic reviews, on a company-wide basis, to assess changes in our environmental risk profile. Environmental reserves are established for environmental liabilities for which economic losses are probable and reasonably estimable. We manage our exposure to environmental liabilities in acquisitions by using an evaluation process that seeks to identify pre-existing contamination or compliance concerns and address the potential liability. Depending on the extent of an identified environmental concern, we may, among other things, exclude a property from the transaction, require the seller to remediate the property to our satisfaction in an acquisition or agree to assume liability for the remediation of the property.

We are named as a defendant in numerous lawsuits in Oklahoma alleging that we and other companies have engaged in activities that have caused earthquakes. These lawsuits seek compensation for injury to real and personal property, diminution of property value, economic losses due to business interruption, interference with the use and enjoyment of property, annoyance and inconvenience, personal injury and emotional distress. In addition, they seek the reimbursement of insurance premiums and the award of punitive damages, attorneys' fees, costs, expenses and interest. We are vigorously defending these claims. Any allowed claim related to such prepetition litigation will be treated in accordance with the Plan.

We are in discussions with the Pennsylvania Department of Environmental Protection (PADEP) regarding gas migration in the vicinity of certain of our wells in Wyoming County, Pennsylvania. We believe we are close to identifying agreed-upon steps to resolve PADEP's concerns regarding the issue. In addition to these steps, resolution of the matter may result in monetary sanctions of more than $300,000.

Other Matters

Based on management's current assessment, we are of the opinion that no pending or threatened lawsuit or dispute relating to our business operations is likely to have a material adverse effect on our future consolidated financial position, results of operations or cash flows. The final resolution of such matters could exceed amounts accrued, however, and actual results could differ materially from management's estimates.

ITEM 4. *Mine Safety Disclosures*

The information concerning mine safety violations and other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17CFR 229.104) is included in Exhibit 95.1 to this Form 10-K.

PART II

ITEM 5. *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Common Stock

Our common stock was previously listed on the New York Stock Exchange (the "NYSE") under the symbol "CHK." As a result of our failure to satisfy the continued listing requirements of the NYSE, on June 29, 2020, our common stock ceased to trade on the NYSE. Since June 30, 2020, our common stock has been quoted on the OTC Pink Marketplace maintained by the OTC Markets Group, Inc. under the symbol "CHKAQ." On July 20, 2020, the NYSE filed a Form 25 with the SEC to delist our common stock, senior notes and cumulative convertible preferred stock from the NYSE. The delisting was effective 10 days after the Form 25 was filed and our common stock, senior notes and cumulative convertible preferred stock were deregistered under Section 12(b) of the Exchange Act on October 18, 2020. Our common stock was canceled on February 9, 2021 as a result of our Chapter 11 proceedings.

On February 9, 2021, subsequent to our emergence from Bankruptcy, there were 97,906,968 outstanding shares of common stock of the Successor listed on the Nasdaq Stock Market LLC under the symbol CHK. In addition, on February 9, 2021, we had 11,111,111 Class A Warrants, 12,345,679 Class B Warrants and 9,768,527 Class C Warrants outstanding that are exercisable for one share of common stock per warrant at the initial exercise prices of $27.63, $32.13 and $36.18 per share, respectively. The warrants are immediately exercisable and will expire on February 9, 2026.

Dividends

We ceased paying dividends on our common stock in the third quarter of 2015.

Unregistered Sales of Equity Securities and Use of Proceeds

There were no repurchases or unregistered sales of our common stock during the quarter ended December 31, 2020.

Shareholders

As of February 25, 2021, there were approximately 122 holders of record of our common stock.

ITEM 6. *Selected Financial Data*

The following table sets forth selected consolidated financial data of Chesapeake as of and for the years ended December 31, 2020, 2019, 2018, 2017 and 2016. The table below should be read in conjunction with *Management's Discussion and Analysis of Financial Condition and Results of Operations* and our consolidated financial statements, including the notes thereto, appearing in Items 7 and 8, respectively, of this report.

	Years Ended December 31,				
	2020	2019	2018	2017	2016
	($ in millions, except per share data)				
STATEMENT OF OPERATIONS DATA:					
Total revenues	$ 5,296	$ 8,595	$ 10,030	$ 10,039	$ 8,705
Net income (loss) available to common stockholders[(a)]	$ (9,756)	$ (416)	$ 133	$ (631)	$ (4,018)
EARNINGS (LOSS) PER COMMON SHARE:[(b)]					
Basic	$ (998.26)	$ (49.97)	$ 29.26	$ (139.32)	$ (1,051.83)
Diluted	$ (998.26)	$ (49.97)	$ 29.26	$ (139.32)	$ (1,051.83)
CASH DIVIDEND DECLARED PER COMMON SHARE	$ —	$ —	$ —	$ —	$ —
BALANCE SHEET DATA (AT END OF PERIOD):					
Total assets	$ 6,584	$ 16,193	$ 12,735	$ 14,925	$ 17,048
Long-term debt, net of current maturities	$ —	$ 9,073	$ 7,341	$ 9,921	$ 9,938
Total equity (deficit)	$ (5,341)	$ 4,401	$ 2,133	$ 1,943	$ 2,565

(a) Includes $8.535 billion, $11 million, $131 million, $814 million and $563 million of impairments of oil and gas properties and other fixed assets for the years ended December 31, 2020, 2019, 2018, 2017 and 2016, respectively.

(b) Amounts have been retroactively adjusted to reflect a 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 of the notes to our consolidated financial statements included in Item 8 of this report for additional information.

ITEM 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

The following discussion and analysis presents management's perspective of our business, financial condition and overall performance. This information is intended to provide investors with an understanding of our past performance, current financial condition and outlook for the future and should be read in conjunction with Item 8 of this report.

Introduction

We are an independent exploration and production company engaged in the acquisition, exploration and development of properties to produce oil, natural gas and NGLs from underground reservoirs. We own a large and geographically diverse portfolio of onshore U.S. unconventional natural gas and liquids assets, including interests in approximately 7,400 oil and natural gas wells. Our natural gas resource plays are the Marcellus Shale in the northern Appalachian Basin in Pennsylvania and the Haynesville/Bossier Shales in northwestern Louisiana. Our liquids-rich resource plays are the Eagle Ford Shale in South Texas and the stacked pay in the Powder River Basin in Wyoming.

Recent Developments

Voluntary Reorganization Under Chapter 11

On June 28, 2020, the Debtors filed voluntary petitions for relief under the Bankruptcy Code in the Bankruptcy Court. On June 29, 2020, the Bankruptcy Court entered an order authorizing the joint administration of the Chapter 11 Cases under the caption *In re Chesapeake Energy Corporation*, Case No. 20-33233 (DRJ). Subsidiaries with noncontrolling interests, consolidated variable interest entities and certain de minimis subsidiaries (collectively, the "Non-Filing Entities") were not part of the Chapter 11 Cases. The Debtors and the Non-Filing Entities continued to operate in the ordinary course of business during the Chapter 11 Cases.

During the Chapter 11 Cases, the Debtors operated as debtors-in-possession in accordance with the applicable provisions of the Bankruptcy Code. The Bankruptcy Court granted first day motions filed by us that were designed primarily to mitigate the impact of the Chapter 11 Cases on our operations, customers and employees. As a result, we were able to conduct normal business activities and pay all associated obligations for the period following the Bankruptcy filing and were authorized to pay owner royalties, employee wages and benefits, and certain vendors and suppliers in the ordinary course for goods and services provided. During the pendency of the Chapter 11 Cases, all transactions outside the ordinary course of business required the prior approval of the Bankruptcy Court.

For the duration of the Chapter 11 Cases, our operations and ability to develop and execute our business plan were subject to the risks and uncertainties associated with the Chapter 11 process as described in Item 1A. "Risk Factors." As a result of these risks and uncertainties, the number of our shares of common stock and stockholders, assets, liabilities, officers and/or directors could be significantly different following the outcome of the Chapter 11 Cases, and the description of our operations, properties and capital plans included in this Form 10-Q may not accurately reflect our operations, properties and capital plans following the Chapter 11 Cases.

During the Chapter 11 Cases, we expected our financial results to continue to be volatile as Restructuring activities and expenses, contract terminations and rejections, and claims assessments significantly impact our consolidated financial statements. As a result, our historical financial performance is likely not indicative of our financial performance after the date of the Petition Date. In addition, we incurred significant professional fees and other costs in connection with preparation for the Chapter 11 Cases.

On October 13, 2020, we filed a notice with the Bankruptcy Court that we reached an agreement with Tapstone Energy, LLC ("Tapstone Energy") as the "Stalking Horse" bidder to sell our Mid-Continent asset for $85 million in a Section 363 transaction under the Bankruptcy Code. An auction supervised by the Bankruptcy Court was held on November 10, 2020, in which other pre-qualified buyers submitted bids for the asset. We presented the results of the auction process to the Bankruptcy Court and the sale was approved on November 13, 2020. On December 11, 2020, we closed the transaction with Tapstone Energy for $130 million, subject to post-closing adjustments which resulted in the recognition of a gain of approximately $27 million.

On November 22, 2020, we filed notice with the Bankruptcy Court that we had reached an agreement with The Williams Companies, Inc. ("Williams") to transfer certain Haynesville assets, including interests in 144 producing wells and approximately 50,000 net acres, in exchange for improved midstream contract terms with respect to assets we retained. On December 15, 2020, the Court approved the transaction with Williams and the exchange resulted in the recognition of loss of approximately $128 million based on the difference between the carrying value of the assets and the fair value of the assets surrendered. The exchange was executed to obtain sufficient savings on midstream obligations as required by the Plan. Therefore, the loss was recorded to reorganization items, net in our consolidated statements of operations.

See Item 1. Business, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 2 of the notes to our consolidated financial statements included in Item 8 of this report for a discussion of our Chapter 11 proceedings.

COVID-19 Pandemic and Impact on Global Demand for Oil and Natural Gas

The global spread of COVID-19 created significant volatility, uncertainty, and economic disruption during 2020. The pandemic has reached more than 200 countries and territories and has resulted in widespread adverse impacts on the global economy and on our customers and other parties with whom we have business relations. There remains considerable uncertainty regarding how long the pandemic and related market conditions will persist. In certain cases, states that had begun taking steps to reopen their economies experienced a subsequent surge in cases of COVID-19, causing these states to cease such reopening measures in some cases and reinstitute restrictions in others. To date, we have experienced limited operational impacts as a result of COVID-19 or the related governmental restrictions.

As an essential business under the guidelines issued by each of the states in which we operate, we have been allowed to continue operations. As a result, in mid-March of 2020, we restricted access to all of our offices and for a period of time directed employees to work remotely to the extent possible. We began to re-open our offices in phases beginning in mid-May of 2020, and we have implemented special precautions to minimize the risk to our employees of exposure. These actions have allowed us to maintain the engagement and connectivity of our personnel. However, due to severe impacts from the COVID-19 pandemic on the global demand for oil and natural gas, financial results may not necessarily be indicative of operating results for the 2020 fiscal year or for any other future period. Moreover, future operations could be negatively affected if a significant number of our employees are quarantined as a result of exposure to the virus.

Our first priority in our response to this crisis has been the health and safety of our employees and those of our other business counterparties. We have implemented preventative measures and developed corporate and regional response plans to minimize unnecessary risk of exposure and prevent infection, while supporting our employees, contractors and vendors to the best of our ability. We have a business continuity team tasked with responding to health, safety and environmental matters and personnel issues, and we have activated this business continuity team to address the impacts of the pandemic on our business as they develop. We also have modified certain business practices (including those related to employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences) to protect the health and safety of our employees and contractors and the communities in which we operate by conforming to government restrictions and best practices encouraged by the Centers for Disease Control and Prevention, the World Health Organization and other governmental and regulatory authorities.

There is considerable uncertainty regarding how long the pandemic and related market conditions will persist and the extent and duration of governmental and other measures implemented to try to slow the spread of the virus, such as large-scale travel bans and restrictions, border closures, quarantines, shelter-in-place orders and business and government shutdowns. One of the largest impacts of the pandemic has been a significant reduction in global demand for oil and, to a lesser extent, natural gas. In addition, in the first half of 2020, oil prices declined significantly due to an increase in supply emanating from a disagreement on production cuts among members of OPEC+ and certain non-OPEC oil-producing countries. The resulting oversupply and the reduced demand in response to COVID-19 have together caused prices in the oil and gas market to remain depressed. Oil and natural gas prices are expected to continue to be volatile as a result of the near-term production instability and the ongoing COVID-19 pandemic and as changes in oil and natural gas inventories, industry demand and global and national economic performance are reported. The supply and demand imbalance has disrupted the oil and natural gas exploration and production industry and other industries that serve exploration and production companies. We

expect to see continued volatility in oil and natural gas prices for the foreseeable future, and such volatility has adversely impacted and is expected to continue to adversely impact our business, cash flows, liquidity, financial condition and results of operations.

As of the date of this Form 10-K, our efforts to respond to the challenges presented by the conditions described above and minimize the impacts to our business have yielded positive results. We have moved quickly to implement strategies to reduce costs, increase operational efficiencies and lower our capital spending. In 2020, we reduced our workforce by 25%. In connection with this reduction, we recorded non-recurring charges of approximately $44 million for the year ended December 31, 2020, and we anticipate an estimated annualized savings of approximately $70 million. In February 2021, we reduced our workforce by an additional 15%. In addition, due to the significant drop in oil prices and midstream constraints in 2020, we shut in wells and delayed 38 turn-in-lines, which reduced our oil production by approximately 50%, 25% and 10% in May, June and July, respectively. In response to recent improvements in market conditions, we have returned most wells to production and intend to complete most of our drilled but uncompleted wells by the second quarter of 2021. We anticipate our capital expenditures for the remainder of the year will be focused primarily on our natural gas assets. We have not received any funding under the CARES Act or other federal programs to support our operations and do not anticipate that we will. We are continuing to address concerns to protect the health and safety of our employees and those of our customers and other business counterparties, and this includes changes to comply with health-related guidelines as they are modified and supplemented.

We cannot predict the full impact that COVID-19 or the current significant disruption and volatility in the oil and natural gas markets will have on our business, cash flows, liquidity, financial condition and results of operations. The ultimate impact of the pandemic will depend on future developments that cannot be anticipated, including, among others, the ultimate severity of the virus, the consequences of governmental and other measures designed to mitigate the spread of the virus, the development and availability of treatments and vaccines and the extent to which these treatments and vaccines may remain effective as potential new strains of the virus emerge, the duration of the pandemic, any actions taken by members of Organization of Petroleum Exporting Countries (OPEC+) and other foreign, oil-exporting countries, actions taken by governmental authorities, customers and other thirds parties, workforce availability, and the timing and extent of any return to normal economic and operating conditions. For additional discussion regarding risks associated with the COVID-19 pandemic, see Item 1A “Risk Factors” in this report.

Cancellation of Rights Plan

On April 23, 2020, our Board of Directors declared a dividend of one Right payable on May 4, 2020 for each share of our common stock outstanding on May 4, 2020 to the shareholders of record on that date (the “Rights”). In connection with the distribution of the Rights, we entered into a Rights Agreement with Computershare Trust Company, N.A., as rights agent (the “Rights Agreement”). Each Right entitles the registered holder to purchase from us Preferred Shares.

The Rights Agreement was intended to protect value by preserving our ability to use our tax attributes to offset potential future income taxes for federal income tax purposes. Our ability to use our tax attributes would have been substantially limited if we had experienced an ownership change under Section 382 of the Code prior to emergence from bankruptcy on February 9, 2021. The Rights Agreement reduced the likelihood of an ownership change by deterring any person or group of affiliated or associated persons from acquiring beneficial ownership of 4.9% or more of the outstanding shares of our common stock.

In connection with the adoption of the Rights Agreement the Company filed a Certificate of Designations of Series B Preferred Stock with the Secretary of State of the State of Oklahoma setting forth the rights, powers, and preferences of the Series B Preferred Stock issuable upon exercise of the Rights (the “Preferred Shares”). On the Plan Effective Date, the Company filed a Certificate of Elimination with the Secretary of State of the State of Oklahoma eliminating the Preferred Shares and returning them to authorized but undesignated shares of the Company’s preferred stock. The foregoing is a summary of the terms of the Certificate of Elimination. The summary does not purport to be complete and is qualified in its entirety by reference to the Certificate of Elimination.

Liquidity and Capital Resources

Liquidity Overview

Our primary sources of capital resources and liquidity have historically consisted of internally generated cash flows from operations, borrowings under certain credit agreements, dispositions of non-core assets and the capital markets when conditions are favorable. Our ability to issue additional indebtedness, dispose of assets or access the capital markets was substantially limited during the Chapter 11 Cases and required court approval in most instances. Accordingly, our liquidity depended mainly on cash generated from operating activities and available funds under the DIP Credit Facility discussed below.

The Bankruptcy Filing constituted an event of default under certain of our secured and unsecured debt obligations. As a result of the Bankruptcy Filing, the principal and interest due under these debt instruments became immediately due and payable. However, pursuant to Section 362 of the Bankruptcy Code, the creditors were stayed from taking any action as a result of such defaults.

Recent Events Affecting Liquidity

On June 28, 2020, prior to the commencement of the Chapter 11 Cases, the Company entered into a commitment letter (the "Commitment Letter") with certain of the lenders under our pre-petition revolving credit facility and/or their affiliates (collectively, the "Commitment Parties"), pursuant to which, and subject to the satisfaction of certain customary conditions, including the approval of the Bankruptcy Court, the Commitment Parties agreed to provide the Debtors with a post-petition senior secured super-priority debtor-in-possession revolving credit facility in an aggregate principal amount of up to approximately $2.104 billion (the "DIP Credit Facility"), consisting of a revolving loan facility of new money in an aggregate principal amount of up to $925 million, which includes a sub-facility of up to $200 million for the issuance of letters of credit, and an up to approximately $1.179 billion term loan that reflects the roll-up of a portion of our outstanding borrowings under the pre-petition revolving credit facility. Pursuant to the Commitment Letter, the Commitment Parties also committed to provide, subject to certain conditions, an up to $2.5 billion exit credit facility, consisting of an up to $1.75 billion revolving credit facility (the "Exit Revolving Facility") and an up to $750 million senior secured term loan facility (the "Exit Term Loan Facility" and, together with the Exit Revolving Facility, the "Exit Credit Facilities"). The terms and conditions of the DIP Credit Facility are set forth in the senior secured super-priority debtor-in-possession credit agreement (the "DIP Credit Agreement") attached to the Commitment Letter. The DIP Credit Facility provided us the capital necessary to fund our operations during the Chapter 11 reorganization proceedings. The proceeds of the DIP Credit Facility were used for, among other things, post-petition working capital, permitted capital investments, general corporate purposes, letters of credit, administrative costs, premiums, expenses and fees for the transactions contemplated by the Chapter 11 Cases, payment of court approved adequate protection obligations, and other such purposes consistent with the DIP Credit Facility. On July 1, 2020, the Company, as borrower, entered into the DIP Credit Agreement along with the Debtor guarantors party thereto, MUFG Union Bank, N.A., as agent, and the other lender, issuer, and agent parties thereto. On September 15, 2020, we entered into the first amendment to the DIP Credit Agreement. The amendment, among other things, amended the maximum hedging covenant to allow the Debtors to enter into additional non-speculative hedge agreements based on forecasted production. See Note 2 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of our DIP Credit Facility.

As of December 31, 2020, we had a cash balance of $279 million, as compared to $6 million as of December 31, 2019, and a net working capital deficit of $1.986 billion as of December 31, 2020, as compared to a net working capital deficit of $1.141 billion as of December 31, 2019. Additionally, our DIP Credit Facility was approved by the Bankruptcy Court on July 31, 2020 which allowed us up to $925 million of borrowing capacity. As of December 31, 2020, we had no outstanding borrowings under our DIP Credit Facility. See Note 5 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of our debt obligations, including principal and carrying amounts of our notes.

Post-Emergence Debt

The Bankruptcy Court confirmed the Plan in a bench ruling on January 13, 2021 and entered the Confirmation Order on January 16, 2021. The Debtors emerged from bankruptcy on February 9, 2021. Upon emergence, all existing equity was canceled and new common stock was issued to the previous holders of our term loan, second lien notes, senior notes and certain general unsecured creditors.

On the Effective Date, pursuant to the terms of the Plan, the Company, as borrower, entered into a reserve-based credit agreement (the "Credit Agreement") providing for a reserve-based credit facility (the "Exit Credit Facility") with an initial borrowing base of $2.5 billion. The borrowing base will be redetermined semiannually on or around May 1 and November 1 of each year and the next scheduled redetermination will be on or about October 1, 2021. The aggregate initial elected commitments of the lenders under the Exit Credit Facility will be $1.75 billion of revolving Tranche A Loans (the "Tranche A Loans") and $220 million of fully funded Tranche B Loans (the "Tranche B Loans").

The Exit Credit Facility provides for a $200.0 million sublimit of the aggregate commitments that are available for the issuance of letters of credit. The Exit Credit Facility bears interest at the ABR (alternate base rate) or LIBOR, at our election, plus an applicable margin (ranging from 2.25–3.25% per annum for ABR loans and 3.25–4.25% per annum for LIBOR loans, subject to a 1.00% LIBOR floor), depending on the percentage of the borrowing base then being utilized. The Tranche A Loans mature 3 years after the Effective Date and the Tranche B Loans mature 4 years after the Effective Date. The Tranche B Loans can be repaid if no Tranche A Loans are outstanding

On February 2, 2021, the Company, issued $500 million aggregate principal amount of its 5.5% Senior Notes due 2026 (the "2026 Notes") and $500 million aggregate principal amount of its 5.875% Senior Notes due 2029 (the "2029 Notes" and, together with the 2026 Notes, the "Notes"). The offering of the Notes was part of a series of exit financing transactions being undertaken in connection with the Debtors' Chapter 11 Cases and meant to provide the exit financing originally intended to be provided by the Exit Term Loan Facility pursuant to the Commitment Letter.

Based upon the business plan approved by the Court and our hedging activities we expect to generate adequate cash flows from operating activities to fully fund all investing activities without incremental borrowings under our Exit Credit Facility.

Derivative and Hedging Activities

Our results of operations and cash flows are impacted by changes in market prices for oil, natural gas and NGL. To mitigate a portion of our exposure to adverse market price changes, we enter into various derivative instruments. Our oil, natural gas and NGL derivative activities, when combined with our sales of oil, natural gas and NGL, allow us to better predict the total revenue we expect to receive.

As of February 25, 2021, we had downside oil price protection on approximately 19 mmbbls through swaps at $42.69 per bbl. We had downside natural gas price protection on 548 bcf through swaps and collars at an average price of $2.67 per mcf.

Oil Derivatives[a]

Year	Type of Derivative Instrument	Notional Volume (mmbbls)	Average NYMEX/Basis Price
2021	Fixed-price swaps	19	$42.69
2021	Basis protection swaps[b]	5	$0.61
2022	Fixed-price swaps	11	$44.30
2022	Basis protection swaps[b]	2	$0.09
2023	Fixed-price swaps	2	$47.17

Natural Gas Derivatives[a]

Year	Type of Derivative Instrument	Notional Volume (bcf)	Average NYMEX/Basis Price
2021	Fixed-price swaps[c]	518	$2.67
2021	Two-way collars	30	$2.80/$3.29
2021	Basis protection swaps	119	($0.57)
2022	Fixed-price swaps	249	$2.55
2022	Two-way collars	23	$2.30/$2.94
2022	Basis protection swaps	30	$0.18
2023	Fixed-price swaps	45	$2.75
2023	Basis protection swaps	4	$0.75

(a) Includes amounts settled in January and February 2021.

(b) Includes CMA WTI Roll swaps.

(c) Includes non-NYMEX fixed-price swaps.

See Note 14 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of derivatives and hedging activities.

Contractual Obligations and Off-Balance Sheet Arrangements

From time to time, we enter into arrangements and transactions that can give rise to contractual obligations and off-balance sheet commitments. The table below summarizes our contractual cash obligations for both recorded obligations and certain off-balance sheet arrangements and commitments as of December 31, 2020:

	Payments Due By Period				
	Total	2021	2022-2023	2024-2025	2026 and Beyond
	($ in millions)				
Long-term debt:					
Principal[(a)]	$ 9,096	$ 2,472	$ 440	$ 4,702	$ 1,482
Interest[(a)]	2,375	607	1,130	560	78
Finance lease obligation[(b)]	10	10	—	—	—
Operating lease obligations[(c)]	30	28	2	—	—
Operating commitments[(d)]	5,102	872	1,326	992	1,912
Standby letters of credit	54	54	—	—	—
Other	12	6	6	—	—
Total contractual cash obligations[(e)]	$ 16,679	$ 4,049	$ 2,904	$ 6,254	$ 3,472

(a) The maturities of our debt obligations and associated interest reflect their original expiration dates and do not reflect any acceleration due to any events of default pertaining to these obligations. See Note 5 of the notes to our consolidated financial statements included in Item 8 of this report for a description of our long-term debt.

(b) See Note 8 of the notes to our consolidated financial statements included in Item 8 of this report for a description of our finance lease obligation.

(c) See Note 8 of the notes to our consolidated financial statements included in Item 8 of this report for a description of our operating lease obligations.

(d) See Note 6 of the notes to our consolidated financial statements included in Item 8 of this report for a description of our gathering, processing and transportation agreements and service contract commitments.

(e) This table does not include derivative liabilities or the estimated discounted liability for future dismantlement, abandonment and restoration costs of oil and natural gas properties. See Notes 14 and 22, respectively, of the notes to our consolidated financial statements included in Item 8 of this report for more information on our derivatives and asset retirement obligations.

Capital Expenditures

For the year ending December 31, 2021, we currently expect to bring or have online approximately 110 to 125 gross wells across five to six rigs and plan to invest between approximately $670 – $740 million in capital expenditures. We expect that approximately 80% of our 2021 capital expenditures will be directed toward our natural gas assets. We currently plan to fund our 2021 capital program through cash on hand, expected cash flow from our operations and borrowings under our Exit Revolver. We may alter or change our plans with respect to our capital program and expected capital expenditures based on developments in our business, our financial position, our industry or any of the markets in which we operate.

Credit Risk

Our customers and counterparties are experiencing uncertain economic conditions which may impact their ability to make payments to us, which could adversely affect our business, cash flows, liquidity, financial condition and results of operations. We monitor the creditworthiness of all our customers and counterparties and we generally require letters of credit or parent guarantees for receivables from parties deemed to have sub-standard credit, unless the credit risk can otherwise be mitigated.

Sources of Funds

The following table presents the sources of our cash and cash equivalents for the years ended December 31, 2020, 2019 and 2018. See Note 3 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of divestitures of oil and natural gas assets.

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Cash provided by operating activities	$ 1,164	$ 1,623	$ 1,730
Proceeds from issuances of debt, net	—	1,563	1,236
Proceeds from revolving credit facility borrowings, net	339	496	—
Proceeds from divestitures of proved and unproved properties, net	136	130	2,231
Proceeds from sales of other property and equipment, net	14	6	147
Proceeds from sales of investments	—	—	74
Total sources of cash and cash equivalents	$ 1,653	$ 3,818	$ 5,418

Cash Flow from Operating Activities

Cash provided by operating activities was $1.164 billion, $1.623 billion and $1.730 billion in 2020, 2019 and 2018, respectively. The decrease in 2020 is primarily the result of lower prices for the oil, natural gas and NGL we sold. The decrease in 2019 is primarily the result of lower prices for the oil, natural gas and NGL we sold as well as certain cash expenditures related to our WildHorse acquisition. Changes in cash flow from operations are largely due to the same factors that affect our net income, excluding various non-cash items, such as depreciation, depletion and amortization, certain impairments, gains or losses on sales of fixed assets, deferred income taxes and mark-to-market changes in our derivative instruments. See further discussion below under *Results of Operations*.

Debt issuances

The following table reflects the proceeds received from issuances of debt in 2020, 2019 and 2018. See Note 5 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion.

	Years Ended December 31,					
	2020		2019		2018	
	Principal Amount of Debt Issued	Net Proceeds	Principal Amount of Debt Issued	Net Proceeds	Principal Amount of Debt Issued	Net Proceeds
	($ in millions)					
Term loan	$ —	$ —	$ 1,500	$ 1,455	$ —	$ —
Senior secured second lien notes	—	—	120	108	—	—
Senior notes	—	—	—	—	1,250	1,236
Total	$ —	$ —	$ 1,620	$ 1,563	$ 1,250	$ 1,236

Divestitures of Proved and Unproved Properties

In 2020, we divested our Mid-Continent asset for $130 million and certain non-core assets for approximately $6 million. In 2019, we divested certain non-core assets for approximately $130 million. In 2018, we divested $2.231 billion of proved and unproved properties including $1.868 billion for our Utica Shale properties in Ohio. Proceeds from these transactions were used to repay debt and fund our development program. See Note 3 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion.

Uses of Funds

The following table presents the uses of our cash and cash equivalents for the years ended December 31, 2020, 2019 and 2018:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Oil and Natural Gas Expenditures:			
Drilling and completion costs	$ 1,111	$ 2,180	$ 1,848
Acquisitions of proved and unproved properties	9	35	128
Total oil and natural gas expenditures	1,120	2,215	1,976
Other Uses of Cash and Cash Equivalents:			
Cash paid to purchase debt	94	1,073	2,813
DIP credit facility and exit facilities financing costs	109	—	—
Business combination, net	—	353	—
Payments on revolving credit facility borrowings, net	—	—	362
Extinguishment of other financing	—	—	122
Additions to other property and equipment	22	48	21
Cash paid for preferred stock dividends	22	91	92
Other	13	36	27
Total other uses of cash and cash equivalents	260	1,601	3,437
Total uses of cash and cash equivalents	$ 1,380	$ 3,816	$ 5,413

Drilling and Completion Costs

Our drilling and completion costs decreased in 2020 compared to 2019 primarily as a result of decreased drilling and completion activity mainly in our liquids-rich plays. We spud, completed, and connected wells at a higher average working interest in 2019 compared to 2018 due to the divestiture of the Utica asset and the acquisition of the Brazos Valley asset. Our average operated rig count was 8 rigs and spud wells were 167 in 2020 compared to an average operated rig count of 18 rigs and 333 spud wells in 2019 and 17 rigs and 322 spud wells in 2018. We completed 188 operated wells in 2020 compared to 370 in 2019 and 351 in 2018.

Business Combination - Acquisition of WildHorse

In 2019, we acquired WildHorse for approximately 3.6 million reverse stock split adjusted shares of our common stock and $381 million less $28 million of cash held by WildHorse as of the acquisition date. See Note 3 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of the acquisition.

Cash Paid to Purchase Debt

In 2020, we repurchased approximately $160 million aggregate principal amount of our senior notes for $94 million. In 2019, we repurchased $698 million principal amount of our BVL Senior Notes for $693 million and retired our BVL revolving credit facility for $1.028 billion. We also repaid upon maturity $380 million principal amount of our Floating Rate Senior Notes due April 2019. In 2018, we used $2.813 billion of cash to repurchase $2.701 billion principal amount of debt.

DIP Credit Facility Financing Costs

In 2020, we paid $109 million of one-time fees to lenders to establish our DIP Credit Facility and Exit Credit Facility.

Extinguishment of Other Financing

In 2018, we repurchased previously conveyed overriding royalty interests (ORRIs) from the CHK Utica, L.L.C. investors and extinguished our obligation to convey future ORRIs to the investors for combined consideration of $199 million. The cash paid was bifurcated between extinguishment of the obligation and acquisition of the ORRI.

Dividends

We paid dividends of $22 million, $91 million and $92 million on our preferred stock during 2020, 2019 and 2018, respectively. On April 17, 2020, we announced that we were suspending payment of dividends on each series of our outstanding convertible preferred stock. Pursuant to the restructuring support agreement associated with our Chapter 11 Cases (the “Restructuring Support Agreement”), each holder of an equity interest in Chesapeake had such interest canceled, released, and extinguished without any distribution. See Note 2 of the notes to our consolidated financial statements included in Item 8 of this report for additional information about the Chapter 11 Cases.

Results of Operations

Year ended December 31, 2020 compared to the year ended December 31, 2019

Below is a discussion of changes in our results of operations for 2020 compared to 2019. A discussion of changes in our results of operations for 2019 compared to 2018 has been omitted from this Form 10-K, but may be found in *Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations* of our Form 10-K for the year ended December 31, 2019 as filed with the SEC on February 27, 2020.

Oil, Natural Gas and NGL Production and Average Sales Prices

	2020								
	Oil		Natural Gas		NGL		Total		
	mbbl per day	$/bbl	mmcf per day	$/mcf	mbbl per day	$/bbl	mboe per day	%	$/boe
Marcellus	—	—	1,052	1.64	—	—	175	39	9.82
Haynesville	—	—	521	1.83	—	—	87	20	10.99
Eagle Ford	50	39.12	135	2.28	18	12.56	91	20	27.47
Brazos Valley	36	37.30	50	0.86	6	6.02	50	11	28.13
Powder River Basin	13	36.64	58	1.92	4	14.94	26	6	24.22
Retained assets[a]	99	38.14	1,816	1.73	28	11.46	429	96	16.80
Divested assets[b]	4	37.92	56	1.87	3	12.36	16	4	17.85
Total	103	38.16	1,872	1.73	31	11.55	445	100 %	16.84

	2019								
	Oil		Natural Gas		NGL		Total		
	mbbl per day	$/bbl	mmcf per day	$/mcf	mbbl per day	$/bbl	mboe per day	%	$/boe
Marcellus	—	—	946	2.48	—	—	158	32	14.88
Haynesville	—	—	672	2.42	—	—	112	23	14.53
Eagle Ford	58	61.22	153	2.73	19	17.04	102	21	41.72
Brazos Valley	33	59.29	49	1.79	5	8.04	47	10	44.96
Powder River Basin	19	54.28	86	2.47	5	16.63	38	8	34.31
Retained assets[a]	110	59.47	1,906	2.46	29	15.37	457	94	25.51
Divested assets[b]	8	55.30	89	2.09	5	17.66	27	6	26.65
Total	118	59.20	1,995	2.45	34	15.62	484	100 %	25.58

(a) Includes assets retained as of December 31, 2020.

(b) Divested assets include Mid-Continent assets in 2020.

Oil, Natural Gas and NGL Sales

	Years Ended December 31,				
	2020	change			2019
		($ in millions)			
Oil	$ 1,427	(44)	%	$	2,543
Natural gas	1,188	(33)	%		1,782
NGL	130	(32)	%		192
Oil, natural gas and NGL sales	$ 2,745	(39)	%	$	4,517

The decrease in the price received per boe in 2020 resulted in a $1.423 billion decrease in revenues, and decreased sales volumes resulted in a $349 million decrease in revenues, for a total net decrease in revenues of $1.772 billion. See Note 9 of the notes to our consolidated financial statements included in Item 8 of this report for a complete discussion of oil, natural gas and NGL sales.

Oil, Natural Gas and NGL Derivatives

	Years Ended December 31,		
	2020		2019
	($ in millions)		
Oil derivatives – realized gains (losses)	$ 694	$	36
Oil derivatives – unrealized gains (losses)	(140)		(248)
Total gains (losses) on oil derivatives	554		(212)
Natural gas derivatives – realized gains (losses)	161		114
Natural gas derivatives – unrealized gains (losses)	(119)		103
Total gains (losses) on natural gas derivatives	42		217
Total gains (losses) on oil, natural gas and NGL derivatives	$ 596	$	5

See Note 14 of the notes to our consolidated financial statements included in Item 8 of this report for a complete discussion of our derivative activity.

Marketing Revenues and Expenses

	Years Ended December 31,		
	2020	change	2019
	($ in millions)		
Marketing revenues	$ 1,869	(53)%	$ 3,967
Marketing expenses	1,889	(53)%	4,003
Marketing margin	$ (20)	44 %	$ (36)

Marketing revenues and expenses decreased in 2020 primarily as a result of decreased oil, natural gas and NGL prices received in our marketing operations and less volumes being marketed. Marketing margin increased primarily due to improved margins related to non-equity transactions.

Other Revenue

	Years Ended December 31,	
	2020	2019
	($ in millions)	
Other revenue	$ 56	$ 63

Other revenue primarily relates to the amortization of deferred VPP revenue. In 2020, we sold the assets related to our remaining VPP and extinguished the liability related to the production volume delivery obligation. See Note 7 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of our VPPs.

Gains on Sales of Assets

	Years Ended December 31,	
	2020	2019
	($ in millions)	
Gains on sales of assets	$ 30	$ 43

In 2020, we filed a notice with the Bankruptcy Court that we reached an agreement with Tapstone Energy to sell our Mid-Continent asset in a transaction under Section 363 the Bankruptcy Code. An auction supervised by the Bankruptcy Court was held on November 10, 2020 in which other pre-qualified buyers submitted bids for the asset. We presented the results of the auction process to the Bankruptcy Court and the sale was approved on November 13, 2020. On December 11, 2020, we closed the transaction with Tapstone Energy for $130 million, subject to post-closing adjustments, which resulted in the recognition of a gain of approximately $27 million.

In 2019, we received proceeds of approximately $136 million, net of post-closing adjustments, and recognized a net gain of approximately $43 million, primarily for the sale of non-core oil and natural gas properties.

See Note 3 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of these transactions.

Oil, Natural Gas and NGL Production Expenses

	Years Ended December 31,				
	2020	change			2019
		($ in millions)			
Oil, natural gas and NGL production expenses					
Marcellus	$ 32	—	%	$	32
Haynesville	36	(12)	%		41
Eagle Ford	112	(38)	%		180
Brazos Valley	89	(8)	%		97
Powder River Basin	42	(42)	%		72
Retained Assets[a]	311	(26)	%		422
Divested Assets[b]	62	(37)	%		98
Total oil, natural gas and NGL production expenses	$ 373	(28)	%	$	520
		($ per boe)			
Oil, natural gas and NGL production expenses					
Marcellus	$ 0.50	(11)	%	$	0.56
Haynesville	$ 1.14	14	%	$	1.00
Eagle Ford	$ 3.37	(30)	%	$	4.83
Brazos Valley	$ 4.86	(14)	%	$	5.66
Powder River Basin	$ 4.41	(15)	%	$	5.17
Retained Assets[a]	$ 1.98	(22)	%	$	2.53
Divested Assets[b]	$ 10.52	5	%	$	9.99
Total oil, natural gas and NGL production expenses per boe	$ 2.29	(22)	%	$	2.94

(a) Includes assets retained as of December 31, 2020.

(b) Divested assets include our Mid-Continent assets in 2020.

The absolute and per unit decrease was primarily the result of production curtailments and reduced workover activity in our liquids-rich operating areas due to lower commodity prices.

Oil, Natural Gas, and NGL Gathering, Processing and Transportation Expenses

	Years Ended December 31,	
	2020	2019
	($ in millions, except per unit)	
Oil, natural gas and NGL gathering, processing and transportation expenses	$ 1,082	$ 1,082
Oil ($ per bbl)	$ 4.00	$ 3.20
Natural gas ($ per mcf)	$ 1.28	$ 1.21
NGL ($ per bbl)	$ 4.90	$ 5.32
Total ($ per boe)	$ 6.64	$ 6.13

The per unit increase for oil and natural gas gathering, processing and transportation expenses was primarily due to the increase in transportation expense related to oil deficiency fees for our Eagle Ford operating area and production curtailments.

Severance and Ad Valorem Taxes

	Years Ended December 31,		
	2020	change	2019
	($ in millions, except per unit)		
Severance taxes	$ 87	(40) %	$ 144
Ad valorem taxes	62	(23) %	80
Severance and ad valorem taxes	$ 149	(33) %	$ 224
Severance taxes per boe	$ 0.53	(35) %	$ 0.81
Ad valorem taxes per boe	0.38	(17) %	0.46
Severance and ad valorem taxes per boe	$ 0.91	(28) %	$ 1.27

The decrease in severance taxes was primarily due to the reduction in value as a result of decreased prices in areas where tax is calculated on net revenue instead of production. The decrease in ad valorem taxes is primarily due to lower assessed property values for 2020 compared to 2019.

Exploration Expense

	Years Ended December 31,		
	2020	change	2019
	($ in millions)		
Impairments of unproved properties	$ 411	1,184 %	$ 32
Dry hole expense	7	(72)%	25
Geological and geophysical expense and other	9	(67)%	27
Exploration expense	$ 427	408 %	$ 84

The increase in exploration expense was the result of non-cash impairment charges of $411 million in unproved properties, primarily in our liquids-rich operating areas of $266 million. Our development plans contained significant reductions in future capital assigned to the liquids-rich plays resulting in a lack of intent and ability to develop unproved properties in the next five years. Additionally, a non-cash impairment charge of $144 million with respect to our Haynesville assets was recorded due to unfavorable economic conditions and capital constraints.

General and Administrative Expenses

	Years Ended December 31,				
	2020	change			2019
	($ in millions, except per unit)				
Gross overhead	$ 578	(15)	%	$	682
Allocated to production expenses	(186)	(12)	%		(212)
Allocated to marketing expenses	(11)	(21)	%		(14)
Allocated to exploration expenses	—	(100)	%		(11)
Allocated to sand mine expense	(3)	(57)	%		(7)
Capitalized general and administrative expenses	(71)	(3)	%		(73)
Reimbursed from third parties	(40)	(20)	%		(50)
General and administrative expenses, net	$ 267	(15)	%	$	315
General and administrative expenses, net per boe	$ 1.63	(8)	%	$	1.78

Gross overhead decreased primarily due to our reduction in workforce in 2020.

Separation and Other Termination Costs

In 2020 and 2019, we incurred charges of approximately $44 million and $12 million, respectively, related to one-time termination benefits for certain employees.

Provision for Legal Contingencies

	Years Ended December 31,	
	2020	2019
	($ in millions)	
Provision for legal contingencies	$ 27	$ 19

The 2020 and 2019 amounts consist of accruals for loss contingencies related to royalty claims.

Depreciation, Depletion and Amortization

	Years Ended December 31,				
	2020	change			2019
	($ in millions, except per unit)				
Depreciation, depletion and amortization	$ 1,097	(52)	%	$	2,264
Depreciation, depletion and amortization per boe	$ 6.72	(48)	%	$	12.82

The absolute and per unit decreases in 2020 are primarily the result of an $8.446 billion impairment recognized in 2020 on our proved oil and natural gas properties due to lower forecasted commodity prices, which reduced the depletable carrying value.

Impairments

	Years Ended December 31,	
	2020	2019
	($ in millions)	
Impairments of oil and gas properties	$ 8,446	$ 8
Impairments of other fixed assets	89	3
Total impairments	$ 8,535	$ 11

Oil and natural gas properties. In 2020, we recorded impairments of proved oil and natural gas properties related to Eagle Ford, Brazos Valley, Powder River Basin, Mid-Continent and other non-core assets, all of which were due to lower forecasted commodity prices.

Other fixed assets. In 2020, we recorded a $76 million impairment of our sand mine assets that support our Brazos Valley operating area for the difference between the fair value and carrying value of the assets as well as a $13 million impairment of compressor inventory due to a lack of a current market for compressors.

See Note 18 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of our impairments.

Other Operating Expense

	Years Ended December 31,				
	2020	change			2019
	($ in millions)				
Other operating expense	$ 109	18	%	$	92

In 2020, we terminated certain gathering, processing and transportation contracts and recognized a non-recurring $80 million expense related to the contract terminations. The contract terminations removed approximately $169 million of future commitments related to gathering, processing and transportation agreements.

In 2019, we recorded approximately $37 million of costs related to our acquisition of WildHorse which consisted of consulting fees, financial advisory fees, legal fees and travel and lodging expenses. In addition, we recorded approximately $38 million of severance expense as a result of the acquisition of WildHorse. A majority of the WildHorse executives and employees were terminated at the time of acquisition. These executives and employees were entitled to severance benefits in accordance with existing employment agreements.

Interest Expense

	Years Ended December 31,	
	2020	2019
	($ in millions, except per unit)	
Interest expense on DIP credit facility	$ 3	$ —
Interest expense on senior notes	239	578
Interest expense on term loan	71	4
Interest expense on pre-petition revolving credit facility	89	96
Amortization of discount, issuance costs and other	31	3
Amortization of premium	(87)	(5)
Realized gains on interest rate derivatives	—	(5)
Unrealized losses on interest rate derivatives	—	4
Capitalized interest	(15)	(24)
Total interest expense	$ 331	$ 651
Interest expense per boe	$ 2.03	$ 3.68
Average pre-petition revolving credit facility	$ 1,887	$ 1,934
Average DIP credit facility	$ 1	$ —
Average senior notes borrowings	n/a	$ 7,857
Average term loan borrowings	n/a	$ 37

The decrease in interest expense on senior notes is due to our Chapter 11 proceedings. We have not paid or recognized interest expense on any outstanding debt that was reclassified to liabilities subject to compromise.

See Note 5 of the notes to our consolidated financial statements included in Item 8 of this report for a discussion of our debt instruments.

Gains (Losses) on Investments

FTS International Inc. (NYSE: FTSI). In 2018, FTS International, Inc. (FTSI) completed an initial public offering. Due to the offering, the ownership percentage of our equity method investment in FTSI decreased from approximately 29% to 24% and resulted in a gain of $78 million. In addition, we sold approximately 4.3 million shares of FTSI in the offering for net proceeds of approximately $74 million and recognized a gain of $61 million decreasing our ownership percentage to approximately 20%.

In 2019, the hydraulic fracturing industry experienced challenging operating conditions resulting in the current fair value of our investment in FTSI falling below book value of $65 million and remaining below that value as of the end of the year. Based on FTSI's 2019 operating results and FTSI's share price of $1.04 per share as of December 31, 2019, we determined that the reduction in fair value was other-than-temporary and recognized an impairment of our investment in FTSI of approximately $43 million.

In 2020, the hydraulic fracturing industry experienced challenging operating conditions resulting in FTSI filing for Chapter 11 bankruptcy, and we recognized an impairment of our entire investment of $23 million. FTSI emerged from bankruptcy on November 19, 2020 and this restructuring resulted in a reduction of the common stock we owned in FTSI from 20% to less than 2%. The decreased ownership percentage and the loss of significant influence required us to measure the investment at fair value.

JWH Midstream LLC (JWH). In 2019, in connection with the acquisition of WildHorse, we obtained a 50% membership interest in JWH Midstream LLC (JWH). The carrying value of our investment in JWH, which was being accounted for as an equity method investment, was approximately $17 million. In 2019, we paid approximately $7 million to terminate our involvement in the partnership. This removed us from any future obligations related to this

joint venture and, therefore, we impaired the full value of the investment and recognized approximately $24 million of impairment expense in 2019.

See Note 17 of the notes to our consolidated financial statements included in Item 8 of this report for a discussion of our investments.

Gains (Losses) on Purchases or Exchanges of Debt. In 2020, we repurchased approximately $160 million aggregate principal amount of senior notes for $95 million and recorded an aggregate gain of approximately $65 million. In 2019, we privately negotiated exchanges of approximately $507 million principal amount of our outstanding senior notes for 235,563,519 shares of common stock and $186 million principal amount of our outstanding convertible senior notes for 73,389,094 shares of common stock. We recorded an aggregate net gain of approximately $64 million associated with the exchanges. Additionally, in various transactions throughout 2019, we repurchased approximately $698 million principal amount of the BVL Senior Notes, recognizing a net $10 million gain on the transactions.

Other Income. In 2019, we recognized $9 million of other income from the sale of seismic data licenses to third parties. The remaining amount in 2019 was from other non-operating miscellaneous income.

Reorganization Items, Net

	Years Ended December 31, 2020
	($ in millions)
Provision for allowed claims	$ (879)
Write off of unamortized debt premiums (discounts)	518
Write off of unamortized debt issuance costs	(61)
Debt and equity financing fees	(145)
Loss on divested assets	(128)
Legal and professional fees	(113)
Gain on settlement of pre-petition accounts payable	15
Loss on settlement of pre-petition revenues payable	(3)
Reorganization items, net	$ (796)

We have incurred and will continue to incur significant expenses, gains and losses associated with our reorganization, primarily the write-off of unamortized debt issuance costs and related unamortized premiums and discounts, debt and equity financing fees, provision for allowed claims and legal and professional fees incurred subsequent to the Chapter 11 Filings for the reorganization process.

Income Tax Expense (Benefit). We recorded an income tax benefit of $19 million and $331 million in 2020 and 2019, respectively. The income tax benefit for 2020 consists of a reversal of the income tax expense recorded in 2019 of $10 million relating to Texas no longer being in a net deferred tax asset position for the period ended December 31, 2019. Texas reverted back to being in a net deferred tax asset position which was offset by a valuation allowance for the period ended December 31, 2020 which resulted in the reversal. The $19 million also includes a current state income tax benefit of $6 million and a $3 million benefit for amounts which were previously sequestered or anticipated to be sequestered by the Internal Revenue Service (IRS) against certain refunds of alternative minimum tax (AMT) credits. The IRS announced on January 16, 2020, that refunds of AMT credits should not have been subject to sequestration. All previously sequestered funds have been received. The income tax benefit for 2019 consists mainly of a $314 million partial release of the valuation allowance maintained against our net deferred tax asset position. The partial release was a consequence of recording a net deferred tax liability of $314 million resulting from the business combination accounting for WildHorse. Other material items included in the 2019 income tax benefit include a benefit for the reversal of a liability for unrecognized tax benefits of $32 million partially offset by an expense of $10 million associated with the aforementioned deferred tax position in Texas and a current state income tax expense of $6 million. See Note 10 of the notes to our consolidated financial statements included in Item 8 of this report for a discussion of income tax expense (benefit).

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States require us to make estimates and assumptions. The accounting estimates and assumptions we consider to be most significant to our financial statements are discussed below. Our management has discussed each critical accounting estimate with the Audit Committee of our Board of Directors.

Bankruptcy Proceedings. We have applied Accounting Standards Codification (ASC) 852, *Reorganizations* ("ASC 852") in preparing our consolidated financial statements. ASC 852 requires that the financial statements, for periods subsequent to the Chapter 11 Cases, distinguish transactions and events that are directly associated with the reorganization from the ongoing operations of the business. Accordingly, certain revenues, expenses, realized gains and losses and provisions for losses that are realized or incurred in the bankruptcy proceedings, including losses related to executory contracts that were approved for rejection by the Bankruptcy Court, and unamortized deferred financing costs, premiums and discount associated with debt classified as liabilities subject to compromise, are recorded in reorganization items, net on our accompanying consolidated statements of operations. In addition, pre-petition obligations that may be impacted by the bankruptcy reorganization process have been classified on our consolidated balance sheets as of December 31, 2020 as liabilities subject to compromise. These liabilities are reported at the amounts we anticipate will be allowed by the Bankruptcy Court, even if they may be settled for lesser amounts. See Note 2 of the notes to our consolidated financial statements included in Item 8 of this report for more information.

Oil and Natural Gas Reserves. Estimates of oil and natural gas reserves and their values, future production rates, future development costs and commodity pricing differentials are the most significant of our estimates. The accuracy of any reserve estimate is a function of the quality of data available and of engineering and geological interpretation and judgment. In addition, estimates of reserves may be revised based on actual production, results of subsequent exploration and development activities, recent commodity prices, operating costs and other factors. These revisions could materially affect our financial statements. The volatility of commodity prices results in increased uncertainty inherent in these estimates and assumptions. Changes in oil, natural gas or NGL prices could result in actual results differing significantly from our estimates. See *Supplemental Disclosures About Oil, Natural Gas, and NGL Producing Activities* included in Item 8 of this report for further information.

Impairments. Long-lived assets used in operations, including proved oil and gas properties, are assessed for impairment whenever changes in facts and circumstances indicate a possible significant deterioration in future cash flows expected to be generated by an asset group. Individual assets are grouped for impairment purposes based on a judgmental assessment of the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets. If there is an indication the carrying amount of an asset may not be recovered, the asset is assessed by management through an established process in which changes to significant assumptions such as prices, volumes, and future development plans are reviewed. If, upon review, the sum of the undiscounted pre-tax cash flows is less than the carrying value of the asset group, the carrying value is written down to estimated fair value by discounting using a weighted average cost of capital. Because there usually is a lack of quoted market prices for long-lived assets, the fair value of impaired assets is assessed by management using the income approach. Level 3 inputs associated with the calculation of discounted cash flows used in the impairment analysis include our estimate of future crude oil and natural gas prices, production costs, development expenditures, anticipated production of proved reserves and other relevant data. Additionally, we utilize NYMEX strip pricing, adjusted for differentials, to value the reserves.

Income Taxes. The amount of income taxes recorded requires interpretations and application of complex rules and regulations pertaining to federal, state and local taxing jurisdictions. Income taxes are accounted for using the asset and liability method as required by GAAP. We recognize deferred tax assets and liabilities for temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements. Deferred tax assets for NOL carryforwards and disallowed business interest carryforwards have also been recognized. We routinely assess the realizability of our deferred tax assets and reduce such assets by a valuation allowance if it is more likely than not that all or some portion of the deferred tax assets will not be realized. In assessing the need for additional valuation allowances or adjustments to existing valuation allowances, we consider the weight of all available evidence, both positive and negative, concerning the realization of the deferred tax asset. Among the more significant types of evidence that we consider are:

- taxable income projections in future years;
- reversal of existing deferred tax liabilities against deferred tax assets and whether the carryforward period is so brief that it would limit realization of the tax benefit;
- future sales and operating cost projections that will produce more than enough taxable income to realize the deferred tax asset based on existing sales prices and cost structures; and
- our earnings history exclusive of any loss that creates a future deductible amount coupled with evidence indicating that the loss is an aberration rather than a continuing condition.

Our judgments and assumptions in estimating future taxable income include such factors as future operating conditions and commodity prices when determining if deferred tax assets are more likely than not to be realized.

We also routinely assess potential uncertain tax positions and, if required, establish accruals for such positions. Accounting guidance for recognizing and measuring uncertain tax positions requires that a more likely than not threshold condition be met on a tax position, based solely on its technical merits of being sustained, before any benefit of the uncertain tax position can be recognized in the financial statements. Guidance is also provided regarding de-recognition, classification and disclosure of these uncertain tax positions. If a tax position does not meet or exceed the more likely than not threshold then no benefit can be recorded. We accrue any applicable interest related to uncertain tax positions as a component of interest expense. Penalties, if any, related to uncertain tax positions would be recorded in other expense. Additional information about uncertain tax positions appears in Note 10 of the notes to our consolidated financial statements included in Item 8 of this report.

Contingencies. We are subject to various legal proceedings, claims, and liabilities that arise in the ordinary course of business. Except for contingencies acquired in a business combination, which are recorded at fair value at the time of acquisition, we accrue losses when such losses are probable and reasonably estimable. If we determine that a loss is probable and cannot estimate a specific amount for that loss, but can estimate a range of loss, the best estimate within the range is accrued. If no amount within the range is a better estimate than any other, the minimum amount of the range is accrued. Our in-house legal personnel regularly assess contingent liabilities and, in certain circumstances, consult with third-party legal counsel or consultants to assist in the evaluation of our liability for these contingencies.

We make judgments and estimates when we establish liabilities for litigation and other contingent matters. Estimates of litigation-related liabilities are based on the facts and circumstances of the individual case and on information currently available to us. The extent of information available varies based on the status of the litigation and our evaluation of the claim and legal arguments. In future periods, a number of factors could significantly change our estimate of litigation-related liabilities, including discovery activities; briefings filed with the relevant court; rulings from the court made pre-trial, during trial, or at the conclusion of any trial; and similar cases involving other plaintiffs and defendants that may set or change legal precedent. As events unfold throughout the litigation process, we evaluate the available information and may consult with third-party legal counsel to determine whether liability accruals should be established or adjusted.

ITEM 7A. *Quantitative and Qualitative Disclosures About Market Risk*

The primary objective of the following information is to provide forward-looking quantitative and qualitative information about our exposure to market risk. The term market risk relates to our risk of loss arising from adverse changes in oil, natural gas, and NGL prices and interest rates. These disclosures are not meant to be precise indicators of expected future losses, but rather indicators of reasonably possible losses. The forward-looking information provides indicators of how we view and manage our ongoing market risk exposures.

Commodity Price Risk

Our results of operations and cash flows are impacted by changes in market prices for oil, natural gas and NGL, which have historically been volatile. To mitigate a portion of our exposure to adverse price changes, we enter into various derivative instruments. Our oil, natural gas and NGL derivative activities, when combined with our sales of oil, natural gas and NGL, allow us to predict with greater certainty the revenue we will receive. We believe our derivative instruments continue to be highly effective in achieving our risk management objectives.

We determine the fair value of our derivative instruments utilizing established index prices, volatility curves and discount factors. These estimates are compared to counterparty valuations for reasonableness. Derivative transactions are also subject to the risk that counterparties will be unable to meet their obligations. This non-performance risk is considered in the valuation of our derivative instruments, but to date has not had a material impact on the values of our derivatives. Future risk related to counterparties not being able to meet their obligations has been partially mitigated under our commodity hedging arrangements that require counterparties to post collateral if their obligations to us are in excess of defined thresholds. The values we report in our financial statements are as of a point in time and subsequently change as these estimates are revised to reflect actual results, changes in market conditions and other factors. See Note 14 of the notes to our consolidated financial statements included in Item 8 of this report for further discussion of the fair value measurements associated with our derivatives.

For the year ended December 31, 2020, oil, natural gas, and NGL revenue, excluding any effect of our derivative instruments, were $1.4 billion, $1.2 billion, and $130 million, respectively. Based on 2020 production, oil, natural gas, and NGL revenue for the year ended December 31, 2020 would have increased or decreased by approximately $140 million, $120 million, and $13 million, respectively, for each 10% increase or decrease in prices. As of December 31, 2020, the fair values of our oil and gas derivatives were net assets of $19 million and net liabilities of $137 million, respectively. A 10% increase in forward oil prices would decrease the valuation of oil derivatives by $187 million while a 10% decrease would increase the valuation by $185 million. A 10% increase in forward gas prices would decrease the valuation of gas derivatives by approximately $129 million while a 10% decrease would increase the valuation by $129 million. This fair value change assumes volatility based on prevailing market parameters at December 31, 2020. See Note 14 of the notes to our consolidated financial statements included in Item 8 of this report for further information on our open derivative positions.

Interest Rate Risk

Our exposure to interest rate changes relates primarily to borrowings under our pre-petition revolving credit facility and DIP Credit Facility. Interest was payable on borrowings under the pre-petition revolving credit facility and DIP Credit Facility based on a floating rate. See Note 5 of the notes to our consolidated financial statements included in Item 8 of this report for additional information. As of December 31, 2020, we had $1.929 billion in borrowings outstanding under our pre-petition revolving credit facility and no outstanding borrowings under our DIP Credit Facility. A 1.0% increase in interest rates based on the variable borrowings as of December 31, 2020 would result in an increase in our interest expense of approximately $19 million per year. Changes in interest rates do affect the fair value of our fixed-rate debt.

ITEM 8. ***Financial Statements and Supplementary Data***

INDEX TO FINANCIAL STATEMENTS
CHESAPEAKE ENERGY CORPORATION (DEBTOR-IN-POSSESSION)

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Chesapeake Energy Corporation

Opinions on the Financial Statements

We have audited the accompanying consolidated balance sheets of Chesapeake Energy Corporation and its subsidiaries (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2020, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Subsequent Event

As discussed in Note 2 to the consolidated financial statements, Chesapeake Energy Corporation and certain of its subsidiaries (collectively the "Debtors") filed voluntary petitions on June 28, 2020 with the United States Bankruptcy Court for the Southern District of Texas ("Bankruptcy Court") for relief under the provisions of Chapter 11 of the United States Code Bankruptcy Code. The Bankruptcy Court confirmed the Debtors joint plan of reorganization on January 16, 2021 and the Debtors emerged from Bankruptcy on February 9, 2021.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

The Impact of Proved Oil and Natural Gas Reserves on Proved Oil and Natural Gas Properties, Net

As described in Note 1 to the consolidated financial statements, the Company's property and equipment, net balance was $5.2 billion as of December 31, 2020, and depreciation, depletion, and amortization (DD&A) expense for the year ended December 31, 2020 was $1.1 billion, both of which substantially related to proved oil and natural gas properties. The Company follows the successful efforts method of accounting for its oil and natural gas producing activities. Under this method, all capitalized well costs and leasehold costs of proved oil and natural gas properties are depreciated by the units-of-production (UOP) method based on total estimated proved developed reserves and proved reserves, respectively. As disclosed by management, estimates of oil and natural gas reserves and their values, future production rates, future development costs and commodity pricing differentials are the most significant of management's estimates. The accuracy of any reserve estimate is a function of the quality of data available and of engineering and geological interpretation and judgment. In addition, estimates of reserves volumes may be revised based on actual production, results of subsequent exploration and development activities, recent commodity prices, operating costs and other factors. The estimates of oil and natural gas reserves have been developed by specialists, specifically petroleum engineers.

The principal considerations for our determination that performing procedures relating to the impact of proved oil and natural gas reserves on proved oil and natural gas properties, net is a critical audit matter are (i) the significant judgment by management, including the use of specialists, when developing the estimates of proved oil and natural gas reserves, which in turn led to (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence obtained related to the data, methods, and assumptions used by management and its specialists in developing the estimates of proved oil and natural gas reserves volumes and the assumptions applied to the data related to the commodity pricing differentials and future development costs.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimates of proved oil and natural gas reserves. The work of management's specialists was used in performing the procedures to evaluate the reasonableness of the proved oil and natural gas reserve volumes. As a basis for using this work, the specialists' qualifications were understood and the Company's relationship with the specialists was assessed. The procedures performed also included evaluation of the methods and assumptions used by the specialists, tests of the data used by the specialists, and an evaluation of the specialists' findings. These procedures also included, among others, testing the completeness and accuracy of the data related to commodity pricing differentials and future development costs. Additionally, these procedures included evaluating whether the assumptions applied to the aforementioned data were reasonable considering the past performance of the Company.

Impairment Assessment of Certain Proved Oil and Natural Gas Properties

As described in Notes 1 and 18 to the consolidated financial statements, the property and equipment, net balance was $5.2 billion as of December 31, 2020, and impairment expense for the year ended December 31, 2020 was $8.5 billion, both of which substantially related to proved oil and natural gas properties. When circumstances indicate that the carrying value of proved oil and natural gas properties may not be recoverable, management compares unamortized capitalized costs to the expected undiscounted pre-tax future cash flows for the associated assets grouped at the lowest level for which identifiable cash flows are independent of cash flows of other assets. If the expected undiscounted pre-tax future cash flows are lower than the unamortized capitalized costs, the capitalized costs are reduced to fair value. Fair value is generally estimated using an income approach. The expected future cash flows used for impairment assessment and related fair value measurements are typically based on judgmental assessments of future production volumes, commodity prices, operating costs, weighted average cost of capital and capital investment plans, considering all available information at the date of assessment.

The principal considerations for our determination that performing procedures relating to the impairment assessment of certain proved oil and natural gas properties is a critical audit matter are (i) the significant judgment by management, including the use of specialists, when developing the fair value measurement of proved oil and natural gas properties; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to future production volumes, commodity prices, and operating costs, as well as the weighted average cost of capital; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of certain controls relating to management's proved oil and natural gas properties impairment assessment. These procedures also included, among others (i) testing management's process for developing the fair value measurement of proved oil and natural gas properties; (ii) evaluating the appropriateness of the income approach model; (iii) testing the completeness and accuracy of underlying data used in the model; and (iv) evaluating the reasonableness of significant assumptions used by management related to future production volumes, commodity prices, and operating costs, as well as the weighted average cost of capital. Evaluating the reasonableness of management's assumptions related to future commodity prices involved comparing the prices against observable market data and evaluating differentials through inspection of the underlying contracts. Evaluating future operating costs involved evaluating the reasonableness of the assumptions as compared to the past performance of the Company. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's income approach model and weighted average cost of capital. The work of management's specialists was used in performing the procedures to evaluate the reasonableness of the proved oil and natural gas reserve volumes as stated in the Critical Audit Matter titled "The Impact of Proved Oil and Natural Gas Reserves on Proved Oil and Natural Gas Properties, Net" and the reasonableness of the future production volumes. As a basis for using this work, the specialists' qualifications were understood and, the Company's relationship with the specialists was assessed. The procedures performed also included evaluation of the methods and assumptions used by the specialists, tests of the data used by the specialists and an evaluation of the specialists' findings.

/s/ PricewaterhouseCoopers LLP
Oklahoma City, Oklahoma
March 1, 2021

We have served as the Company's auditor since 1992.

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2020	**2019**
ASSETS	**($ in millions)**	
CURRENT ASSETS:		
Cash and cash equivalents ($0 and $2 attributable to our VIE)	$ 279	$ 6
Accounts receivable, net	746	990
Short-term derivative assets	19	134
Other current assets	64	121
Total Current Assets	1,108	1,251
PROPERTY AND EQUIPMENT:		
Oil and natural gas properties, at cost based on successful efforts accounting:		
Proved oil and natural gas properties ($0 and $755 attributable to our VIE)	25,734	30,765
Unproved properties	1,550	2,173
Other property and equipment	1,754	1,810
Total Property and Equipment, at Cost	29,038	34,748
Less: accumulated depreciation, depletion and amortization ($0 and ($713) attributable to our VIE)	(23,806)	(20,002)
Property and equipment held for sale, net	10	10
Total Property and Equipment, Net	5,242	14,756
Other long-term assets	234	186
TOTAL ASSETS	$ 6,584	$ 16,193

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED BALANCE SHEETS – (Continued)

	December 31,	
	2020	2019
LIABILITIES AND EQUITY (DEFICIT)	**($ in millions)**	
CURRENT LIABILITIES:		
Accounts payable	$ 346	$ 498
Current maturities of long-term debt, net	1,929	385
Accrued interest	3	75
Short-term derivative liabilities	93	2
Other current liabilities ($0 and $1 attributable to our VIE)	723	1,432
Total Current Liabilities	3,094	2,392
Long-term debt, net	—	9,073
Long-term derivative liabilities	44	2
Asset retirement obligations, net of current portion	139	200
Other long-term liabilities	5	125
Liabilities subject to compromise	8,643	—
Total Liabilities	11,925	11,792
CONTINGENCIES AND COMMITMENTS (Note 6)		
EQUITY (DEFICIT):		
Stockholders' Equity (deficit):		
Preferred stock, $0.01 par value, 20,000,000 shares authorized: 5,563,458 and 5,563,458 shares outstanding	1,631	1,631
Common stock, $0.01 par value, 22,500,000 and 15,000,000 shares authorized: 9,780,547 and 9,772,793 shares issued[(a)]	—	—
Additional paid-in capital	16,937	16,973
Accumulated deficit	(23,954)	(14,220)
Accumulated other comprehensive income	45	12
Less: treasury stock, at cost; 0 and 26,224 common shares[(a)]	—	(32)
Total Stockholders' Equity (Deficit)	(5,341)	4,364
Noncontrolling interests	—	37
Total Equity (Deficit)	(5,341)	4,401
TOTAL LIABILITIES AND EQUITY (DEFICIT)	$ 6,584	$ 16,193

(a) Amounts and shares have been retroactively adjusted to reflect a 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES - (DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2020	2019	2018
	($ in millions except per share data)		
REVENUES AND OTHER:			
Oil, natural gas and NGL	$ 3,341	$ 4,522	$ 5,155
Marketing	1,869	3,967	5,076
Total Revenues	5,210	8,489	10,231
Other	56	63	63
Gains (losses) on sales of assets	30	43	(264)
Total Revenues and Other	5,296	8,595	10,030
OPERATING EXPENSES:			
Oil, natural gas and NGL production	373	520	474
Oil, natural gas and NGL gathering, processing and transportation	1,082	1,082	1,398
Severance and ad valorem taxes	149	224	189
Exploration	427	84	162
Marketing	1,889	4,003	5,158
General and administrative	267	315	335
Separation and other termination costs	44	12	38
Provision for legal contingencies	27	19	26
Depreciation, depletion and amortization	1,097	2,264	1,737
Impairments	8,535	11	131
Other operating expense	109	92	—
Total Operating Expenses	13,999	8,626	9,648
INCOME (LOSS) FROM OPERATIONS	(8,703)	(31)	382
OTHER INCOME (EXPENSE):			
Interest expense	(331)	(651)	(633)
Gains (losses) on investments	(20)	(71)	139
Gains on purchases or exchanges of debt	65	75	263
Other income	16	39	67
Reorganization items, net	(796)	—	—
Total Other Expense	(1,066)	(608)	(164)
INCOME (LOSS) BEFORE INCOME TAXES	(9,769)	(639)	218
INCOME TAX EXPENSE (BENEFIT):			
Current income taxes	(9)	(26)	—
Deferred income taxes	(10)	(305)	(10)
Total Income Tax Expense (Benefit)	(19)	(331)	(10)
NET INCOME (LOSS)	(9,750)	(308)	228
Net (income) loss attributable to noncontrolling interests	16	—	(2)
NET INCOME (LOSS) ATTRIBUTABLE TO CHESAPEAKE	(9,734)	(308)	226
Preferred stock dividends	(22)	(91)	(92)
Loss on exchange of preferred stock	—	(17)	—
Earnings allocated to participating securities	—	—	(1)
NET INCOME (LOSS) AVAILABLE TO COMMON STOCKHOLDERS	$ (9,756)	$ (416)	$ 133
EARNINGS (LOSS) PER COMMON SHARE:[(a)]			
Basic	$ (998.26)	$ (49.97)	$ 29.26
Diluted	$ (998.26)	$ (49.97)	$ 29.26
WEIGHTED AVERAGE COMMON AND COMMON EQUIVALENT SHARES OUTSTANDING (in thousands):[(a)]			
Basic	9,773	8,325	4,546
Diluted	9,773	8,325	4,546

(a) All share and per share information has been retroactively adjusted to reflect a 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
NET INCOME (LOSS)	$ (9,750)	$ (308)	$ 228
OTHER COMPREHENSIVE INCOME, NET OF INCOME TAX:			
Reclassification of losses on settled derivative instruments[(a)]	33	35	34
Other Comprehensive Income	33	35	34
COMPREHENSIVE INCOME (LOSS)	(9,717)	(273)	262
COMPREHENSIVE (INCOME) LOSS ATTRIBUTABLE TO NONCONTROLLING INTERESTS	16	—	(2)
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO CHESAPEAKE	$ (9,701)	$ (273)	$ 260

(a) Deferred tax activity incurred in other comprehensive income was offset by a valuation allowance.

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
CASH FLOWS FROM OPERATING ACTIVITIES:			
NET INCOME (LOSS)	$ (9,750)	$ (308)	$ 228
ADJUSTMENTS TO RECONCILE NET INCOME (LOSS) TO CASH PROVIDED BY OPERATING ACTIVITIES:			
Depreciation, depletion and amortization	1,097	2,264	1,737
Deferred income tax benefit	(10)	(305)	(10)
Derivative (gains) losses, net	(596)	(3)	26
Cash receipts (payments) on derivative settlements, net	884	202	(345)
Stock-based compensation	21	30	32
(Gains) losses on sales of assets	(30)	(43)	264
Impairments	8,535	11	131
Non-cash reorganization items, net	(213)	—	—
Exploration	417	49	96
(Gains) losses on investments	20	63	(139)
Gains on purchases or exchanges of debt	(65)	(79)	(263)
Other	(61)	(4)	(118)
Decrease in accounts receivable and other assets	303	376	16
(Decrease) increase in accounts payable, accrued liabilities and other	612	(630)	75
Net Cash Provided By Operating Activities	1,164	1,623	1,730
CASH FLOWS FROM INVESTING ACTIVITIES:			
Drilling and completion costs	(1,111)	(2,180)	(1,848)
Business combination, net	—	(353)	—
Acquisitions of proved and unproved properties	(9)	(35)	(128)
Proceeds from divestitures of proved and unproved properties	136	130	2,231
Additions to other property and equipment	(22)	(48)	(21)
Proceeds from sales of other property and equipment	14	6	147
Proceeds from sales of investments	—	—	74
Net Cash Provided By (Used In) Investing Activities	(992)	(2,480)	455

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF CASH FLOWS – (Continued)

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from pre-petition revolving credit facility borrowings	3,656	10,676	11,697
Payments on pre-petition revolving credit facility borrowings	(3,317)	(10,180)	(12,059)
Proceeds from DIP credit facility borrowings	60	—	—
Payments on DIP credit facility borrowings	(60)	—	—
DIP credit facility and exit facilities financing costs	(109)	—	—
Proceeds from issuance of senior notes, net	—	108	1,236
Proceeds from issuance of term loan, net	—	1,455	—
Cash paid to purchase debt	(94)	(1,073)	(2,813)
Extinguishment of other financing	—	—	(122)
Cash paid for preferred stock dividends	(22)	(91)	(92)
Other	(13)	(36)	(33)
Net Cash Provided By (Used In) Financing Activities	101	859	(2,186)
Net increase (decrease) in cash and cash equivalents	273	2	(1)
Cash and cash equivalents, beginning of period	6	4	5
Cash and cash equivalents, end of period	$ 279	$ 6	$ 4

Supplemental disclosures to the consolidated statements of cash flows are presented below:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
SUPPLEMENTAL CASH FLOW INFORMATION:			
Cash paid for reorganization items, net	$ 140	$ —	$ —
Interest paid, net of capitalized interest	$ 224	$ 691	$ 664
Income taxes paid, net of refunds received	$ —	$ (6)	$ (3)
SUPPLEMENTAL DISCLOSURE OF SIGNIFICANT NON-CASH INVESTING AND FINANCING ACTIVITIES:			
Change in accrued drilling and completion costs	$ (216)	$ (19)	$ 174
Put option premium on equity backstop agreement	$ 60	$ —	$ —
Operating lease obligations recognized	$ 32	$ —	$ —
Common stock issued for business combination	$ —	$ 2,037	$ —
Debt exchanged for common stock	$ —	$ 693	$ —
Preferred stock exchanged for common stock	$ —	$ 40	$ —
Change in senior notes exchanged	$ —	$ 971	$ —
Acquisition of other property and equipment including assets under finance lease	$ —	$ —	$ 27

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
PREFERRED STOCK:			
Balance, beginning of period	$ 1,631	$ 1,671	$ 1,671
Exchange/conversions of 100, 40,000 and 0 shares of preferred stock for common stock	—	(40)	—
Balance, end of period	1,631	1,631	1,671
COMMON STOCK:[(a)]			
Balance, beginning of period	—	—	—
Common shares issued for WildHorse Merger	—	—	—
Exchange of senior notes and convertible notes	—	—	—
Balance, end of period	—	—	—
ADDITIONAL PAID-IN CAPITAL:[(a)]			
Balance, beginning of period	16,973	14,387	14,446
Common shares issued for WildHorse Merger	—	2,037	—
Stock-based compensation	(14)	27	33
Exchange of contingent convertible notes for 0, 366,945 and 0 shares of common stock	—	135	—
Exchange of senior notes for 0, 1,177,817 and 0 shares of common stock	—	440	—
Exchange of preferred stock for 0, 51,839, and 0 shares of common stock	—	40	—
Equity component of contingent convertible notes repurchased	—	(2)	—
Dividends on preferred stock	(22)	(91)	(92)
Balance, end of period	16,937	16,973	14,387
RETAINED EARNINGS (ACCUMULATED DEFICIT):			
Balance, beginning of period	(14,220)	(13,912)	(14,130)
Net income (loss) attributable to Chesapeake	(9,734)	(308)	226
Cumulative effect of change in accounting principle	—	—	(8)
Balance, end of period	(23,954)	(14,220)	(13,912)
ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS):			
Balance, beginning of period	12	(23)	(57)
Hedging activity	33	35	34
Balance, end of period	45	12	(23)

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

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY - (Continued)

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
TREASURY STOCK – COMMON:[(a)]			
Balance, beginning of period	(32)	(31)	(31)
Purchase of 17,901, 14,391, and 7,550 shares for company benefit plans	(2)	(7)	(4)
Release of 44,126, 4,398 and 2,519 shares from company benefit plans	34	6	4
Balance, end of period	—	(32)	(31)
TOTAL STOCKHOLDERS' EQUITY (DEFICIT)	(5,341)	4,364	2,092
NONCONTROLLING INTERESTS:			
Balance, beginning of period	37	41	44
Net income attributable to noncontrolling interests	(16)	—	2
Distributions to noncontrolling interest owners	—	(4)	(5)
Divestiture of underlying assets	(21)	—	—
Balance, end of period	—	37	41
TOTAL EQUITY (DEFICIT)	$ (5,341)	$ 4,401	$ 2,133

(a) Amounts and shares have been retroactively adjusted to reflect a 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

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

1. Basis of Presentation and Summary of Significant Accounting Policies

Description of Company

Chesapeake Energy Corporation ("Chesapeake", "we," "our", "us" or the "Company") is an oil and natural gas exploration and production company engaged in the acquisition, exploration and development of properties for the production of oil, natural gas and natural gas liquids (NGL) from underground reservoirs. Our operations are located onshore in the United States. To facilitate our financial statement presentations, we refer to the post-emergence reorganized company in these consolidated financial statements and footnotes as the "Successor" for periods subsequent to February 9, 2021, and to the pre-emergence company as "Predecessor" for periods on or prior to February 9, 2021. As discussed in Note 2 below, we filed the Chapter 11 Cases on the Petition Date and subsequently operated as a debtor-in-possession, in accordance with applicable provisions of the Bankruptcy Code, until emergence on February 9, 2021.

Basis of Presentation

The accompanying consolidated financial statements of Chesapeake were prepared in accordance with GAAP and include the accounts of our direct and indirect wholly owned subsidiaries and entities in which Chesapeake has a controlling financial interest. Intercompany accounts and balances have been eliminated. The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern.

Accounting During Bankruptcy

We have applied Accounting Standards Codification (ASC) 852, *Reorganizations,* in preparing the consolidated financial statements. ASC 852 requires that the financial statements, for periods subsequent to the filing of a petition of Chapter 11 Cases, distinguish transactions and events that are directly associated with the reorganization from the ongoing operations of the business. Accordingly, certain revenues, expenses, realized gains and losses and provisions for losses that are realized or incurred during the bankruptcy proceedings, including losses related to executory contracts that were approved for rejection by the Bankruptcy Court, and unamortized deferred financing costs, premiums and discounts associated with debt classified as liabilities subject to compromise, are recorded as reorganization items, net on our accompanying consolidated statements of operations. In addition, pre-petition obligations that may be impacted by the Chapter 11 process have been classified on the consolidated balance sheet as of December 31, 2020 as liabilities subject to compromise. These liabilities are reported at the amounts we anticipate will be allowed by the Bankruptcy Court, even if they may be settled for lesser amounts. See Note 2 for more information regarding reorganization items.

Accounting Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the related disclosures in the financial statements. Management evaluates its estimates and related assumptions regularly, including those related to the impairment of oil and natural gas properties, oil and natural gas reserves, derivatives, income taxes, unevaluated properties not subject to evaluation, impairment of other property and equipment, environmental remediation costs, asset retirement obligations, litigation and regulatory proceedings and fair values. Changes in facts and circumstances or additional information may result in revised estimates, and actual results may differ significantly from these estimates.

Consolidation

We consolidate entities in which we have a controlling financial interest. We consolidate subsidiaries in which we hold, directly or indirectly, more than 50% of the voting rights and variable interest entities ("VIEs") in which we are the primary beneficiary. We consolidate a VIE when we are the primary beneficiary, which is the party that has both (i) the power to direct the activities that most significantly impact the VIE's economic performance and (ii) through its interests in the VIE, the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. In order to determine whether we own a variable interest in a VIE, we perform a qualitative analysis of the entity's design, organizational structure, primary decision makers and relevant agreements. We continually monitor our consolidated VIE to determine if any events have occurred that could cause the primary beneficiary to change. See Note 11 for further discussion of our VIE. We use the equity method of accounting to record our net interests where we have the ability to exercise significant influence through our investment but lack a controlling financial interest. Under the equity method, our share of net income (loss) is included in our consolidated statements of operations according to our equity ownership or according to the terms of the applicable governing instrument. Undivided interests in oil and natural gas properties are consolidated on a proportionate basis.

Segments

Operating segments are defined as components of an enterprise that engage in activities from which it may earn revenues and incur expenses for which separate operational financial information is available and is regularly evaluated by the chief operating decision maker for the purpose of allocating an enterprise's resources and assessing its operating performance. We have concluded that we have only one reportable operating segment, which is exploration and production because our marketing activities are ancillary to our operations.

Noncontrolling Interests

Noncontrolling interests represent third-party equity ownership in certain of our consolidated subsidiaries and are presented as a component of equity. See Note 11 for further discussion of noncontrolling interests.

Cash and Cash Equivalents

For purposes of the consolidated financial statements, we consider investments in all highly liquid instruments with original maturities of three months or less at the date of purchase to be cash equivalents.

Accounts Receivable

Our accounts receivable are primarily from purchasers of oil, natural gas and NGL and from exploration and production companies that own interests in properties we operate. This industry concentration could affect our overall exposure to credit risk, either positively or negatively, because our purchasers and joint working interest owners may be similarly affected by changes in economic, industry or other conditions. We monitor the creditworthiness of all our counterparties and we generally require letters of credit or parent guarantees for receivables from parties deemed to have sub-standard credit, unless the credit risk can otherwise be mitigated. We utilize an allowance method in accounting for bad debt based on historical trends in addition to specifically identifying receivables that we believe may be uncollectible. See Note 9 for further discussion of our accounts receivable.

Oil and Natural Gas Properties

We follow the successful efforts method of accounting for our oil and natural gas properties. Under this method, exploration costs such as exploratory geological and geophysical costs, expiration of unproved leasehold, delay rentals and exploration overhead are expensed as incurred. All costs related to production, general corporate overhead and similar activities are also expensed as incurred. All property acquisition costs and development costs are capitalized when incurred.

Exploratory drilling costs are initially capitalized, or suspended, pending the determination of proved reserves. If proved reserves are found, drilling costs remain capitalized and are classified as proved properties. Costs of unsuccessful wells are charged to exploration expense. For exploratory wells that find reserves that cannot be classified as proved when drilling is completed, costs continue to be capitalized as suspended exploratory drilling costs if there have been sufficient reserves found to justify completion as a producing well and sufficient progress is

being made in assessing the reserves and the economic and operational viability of the project. If we determine that future appraisal drilling or development activities are unlikely to occur, associated suspended exploratory well costs are expensed. In some instances, this determination may take longer than one year. We review the status of all suspended exploratory drilling costs quarterly. Costs to develop proved reserves, including the costs of all development wells and related equipment used in the production of oil and natural gas are capitalized.

Costs of drilling and equipping successful wells, costs to construct or acquire facilities, and associated asset retirement costs are depreciated using the unit-of-production ("UOP") method based on total estimated proved developed oil and gas reserves. Costs of acquiring proved properties, including leasehold acquisition costs transferred from unproved properties, are depleted using the UOP method based on total estimated proved developed and undeveloped reserves.

Proceeds from the sales of individual oil and natural gas properties and the capitalized costs of individual properties sold or abandoned are credited and charged, respectively, to accumulated depreciation, depletion and amortization, if doing so does not materially impact the depletion rate of an amortization base. Generally, no gain or loss is recognized until an entire amortization base is sold. However, a gain or loss is recognized from the sale of less than an entire amortization base if the disposition is significant enough to materially impact the depletion rate of the remaining properties in the amortization base.

When circumstances indicate that the carrying value of proved oil and natural gas properties may not be recoverable, we compare unamortized capitalized costs to the expected undiscounted pre-tax future cash flows for the associated assets grouped at the lowest level for which identifiable cash flows are independent of cash flows of other assets. If the expected undiscounted pre-tax future cash flows, based on our estimate of future crude oil and natural gas prices, operating costs, anticipated production from proved reserves and other relevant data, are lower than the unamortized capitalized costs, the capitalized costs are reduced to fair value. Fair value is generally estimated using the income approach described in the ASC 820, *Fair Value Measurements*. If applicable, we utilize prices and other relevant information generated by market transactions involving assets and liabilities that are identical or comparable to the item being measured as the basis for determining fair value. The expected future cash flows used for impairment reviews and related fair value measurements are typically based on judgmental assessments of commodity prices, pricing adjustments for differentials, operating costs, capital investment plans, future production volumes, and estimated proved reserves, considering all available information at the date of review. These assumptions are applied to develop future cash flow projections that are then discounted to estimated fair value, using a market-based weighted average cost of capital. We have classified these fair value measurements as Level 3 in the fair value hierarchy.

Other Property and Equipment

Other property and equipment consists primarily of buildings and improvements, land, vehicles, computers, a sand mine, natural gas compressors under finance lease and office equipment. Major renewals and betterments are capitalized while the costs of repairs and maintenance are charged to expense as incurred. Other property and equipment costs, excluding land, are depreciated on a straight-line basis and recorded within depreciation, depletion and amortization in the consolidated statement of operations. Natural gas compressors under finance lease are depreciated over the shorter of their estimated useful lives or the term of the related lease.

Realization of the carrying value of other property and equipment is reviewed for possible impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Assets are determined to be impaired if a forecast of undiscounted estimated future net operating cash flows directly related to the asset, including any disposal value, is less than the carrying amount of the asset. If any asset is determined to be impaired, the loss is measured as the amount by which the carrying amount of the asset exceeds its fair value. An estimate of fair value is based on the best information available, including prices for similar assets and discounted cash flow. See Note 16 for further discussion of other property and equipment.

Capitalized Interest

Interest from external borrowings is capitalized on significant investments in major development projects until the asset is ready for service using the weighted average borrowing rate of outstanding borrowings. Capitalized interest is determined by multiplying our weighted average borrowing cost on debt by the average amount of qualifying costs incurred. Capitalized interest is depreciated over the useful lives of the assets in the same manner as the depreciation of the underlying asset.

Accounts Payable

Included in accounts payable as of December 31, 2019 are liabilities of approximately $57 million representing the amount by which checks issued, but not yet presented to our banks for collection, exceeded balances in applicable bank accounts. There were no corresponding liabilities as of December 31, 2020 due to our $279 million cash balance.

Debt Issuance Costs

Costs associated with the arrangement of our Exit Credit Facility were included in other long-term assets and will be amortized over the life of the facility using the straight-line method. The Exit Credit Facility unamortized issuance costs as of December 31, 2020 were $33 million and will begin amortization upon emergence from bankruptcy when the facility becomes fully available.

Costs associated with the issuance and amendments of our pre-petition revolving credit facility were included in other long-term assets and the remaining unamortized issuance costs were amortized over the life of the facility using the straight-line method. The remaining unamortized issuance costs as of December 31, 2019 totaled $27 million. Costs associated with the issuance of our senior notes were included in long-term debt and the remaining unamortized issuance costs were being amortized over the life of the senior notes using the effective interest method. The remaining unamortized issuance costs as of December 31, 2019 totaled $44 million. In 2020, our Chapter 11 Cases constituted an event of default under our pre-petition revolving credit facility and our senior notes, and non-cash adjustments were made to write off all related unamortized debt issuance costs which are included in reorganization items, net in the accompanying consolidated statements of operations for the year ended December 31, 2020. See Note 2 and Note 5 herein for further discussion of our Chapter 11 Cases and debt issuance costs, respectively.

Litigation Contingencies

We are subject to litigation and regulatory proceedings, claims and liabilities that arise in the ordinary course of business. We accrue losses associated with litigation and regulatory claims when such losses are probable and reasonably estimable. If we determine that a loss is probable and cannot estimate a specific amount for that loss but can estimate a range of loss, our best estimate within the range is accrued. Estimates are adjusted as additional information becomes available or circumstances change. We do not reduce these liabilities for potential insurance or third-party recoveries. If applicable, we accrue receivables for probable insurance or third-party recoveries. Legal defense costs associated with loss contingencies are expensed in the period incurred. See Note 6 for further discussion of litigation contingencies.

Environmental Remediation Costs

We record environmental reserves for estimated remediation costs related to existing conditions from past operations when the responsibility to remediate is probable and the costs can be reasonably estimated. Expenditures that create future benefits or contribute to future revenue generation are capitalized. See Note 6 for discussion of environmental contingencies.

Asset Retirement Obligations

We recognize liabilities for obligations associated with the retirement of tangible long-lived assets that result from the acquisition, construction and development of the assets. We recognize the fair value of a liability for a retirement obligation in the period in which the liability is incurred. For oil and natural gas properties, this is the period in which an oil or natural gas well is acquired or drilled. The liability is then accreted each period until the liability is settled or the well is sold, at which time the liability is removed. The related asset retirement cost is capitalized as part of the carrying amount of our oil and natural gas properties. See Note 22 for further discussion of asset retirement obligations.

Revenue Recognition

Revenue from the sale of oil, natural gas and NGL is recognized upon the transfer of control of the products, which is typically when the products are delivered to customers. Revenue is recognized net of royalties due to third parties in an amount that reflects the consideration we expect to receive in exchange for those products.

Revenue from contracts with customers includes the sale of our oil, natural gas and NGL production (recorded as oil, natural gas and NGL revenues in the consolidated statements of operations) as well as the sale of certain of our joint interest holders' production which we purchase under joint operating arrangements (recorded in marketing revenues in the consolidated statements of operations). In connection with the marketing of these products, we obtain control of the oil, natural gas and NGL we purchase from other interest owners at defined delivery points and deliver the product to third parties, at which time revenues are recorded.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 days. There are no significant judgments that significantly affect the amount or timing of revenue from contracts with customers.

We also earn revenue from other sources, including from a variety of derivative and hedging activities to reduce our exposure to fluctuations in future commodity prices and to protect our expected operating cash flow against significant market movements or volatility, (recorded within oil, natural gas and NGL revenues in the consolidated statements of operations) as well as a variety of oil, natural gas and NGL purchase and sale contracts with third parties for various commercial purposes, including credit risk mitigation and satisfaction of our pipeline delivery commitments (recorded within marketing revenues in the consolidated statements of operations).

In circumstances where we act as an agent rather than a principal, our results of operations related to oil, natural gas and NGL marketing activities are presented on a net basis. See Note 9 for further discussion of revenue recognition.

Fair Value Measurements

Certain financial instruments are reported on a recurring basis at fair value on our consolidated balance sheets. We also use fair value measurements on a nonrecurring basis when a qualitative assessment of our assets indicates a potential impairment. Under fair value measurement accounting guidance, fair value is defined as the amount that would be received from the sale of an asset or paid for the transfer of a liability in an orderly transaction between market participants (i.e., an exit price). To estimate an exit price, a three-level hierarchy is used. The fair value hierarchy prioritizes the inputs, which refer broadly to assumptions market participants would use in pricing an asset or a liability, into three levels. Level 1 inputs are unadjusted quoted prices in active markets for identical assets and liabilities and have the highest priority. Level 2 inputs are inputs other than quoted prices within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability and have the lowest priority.

The valuation techniques that may be used to measure fair value include a market approach, an income approach and a cost approach. A market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. An income approach uses valuation techniques to convert future amounts to a single present amount based on current market expectations, including present value techniques, option-pricing models and the excess earnings method. The cost approach is based on the amount that currently would be required to replace the service capacity of an asset (replacement cost).

The carrying values of financial instruments comprising cash and cash equivalents, accounts payable and accounts receivable approximate fair values due to the short-term maturities of these instruments. See Notes 5 and 14 for further discussion of fair value measurements.

Derivatives

Derivative instruments are recorded at fair value, and changes in fair value are recognized currently in earnings unless specific hedge accounting criteria are followed. As of December 31, 2020, none of our open derivative instruments were designated as cash flow hedges.

Derivative instruments reflected as current in the consolidated balance sheets represent the estimated fair value of derivatives scheduled to settle over the next twelve months based on market prices/rates as of the respective balance sheet dates. Cash settlements of our derivative instruments are generally classified as operating cash flows unless the derivatives are deemed to contain, for accounting purposes, a significant financing element at contract inception, in which case these cash settlements are classified as financing cash flows in the accompanying consolidated statement of cash flows. All of our derivative instruments are subject to master netting arrangements by contract type which provide for the offsetting of asset and liability positions within each contract type, as well as

related cash collateral if applicable, by counterparty. Therefore, we net the value of our derivative instruments by contract type with the same counterparty in the accompanying consolidated balance sheets.

We have established the fair value of our derivative instruments using established index prices, volatility curves and discount factors. These estimates are compared to our counterparty values for reasonableness. The values we report in our financial statements are as of a point in time and subsequently change as these estimates are revised to reflect actual results, changes in market conditions and other factors. Derivative transactions are subject to the risk that counterparties will be unable to meet their obligations. This non-performance risk is considered in the valuation of our derivative instruments, but to date has not had a material impact on the values of our derivatives. See Note 14 for further discussion of our derivative instruments.

Share-Based Compensation

Our share-based compensation program consists of restricted stock, stock options, performance share units and cash restricted stock units granted to employees and restricted stock granted to non-employee directors under our Long Term Incentive Plan. We recognize the cost of employee services received in exchange for restricted stock and stock options based on the fair value of the equity instruments as of the grant date. For employees, this value is amortized over the vesting period, which is generally three years from the grant date. For directors, although restricted stock grants vest over three years, this value is recognized immediately as there is a non-substantive service condition for vesting. Because performance share units are settled in cash, they are classified as a liability in our consolidated financial statements and are measured at fair value as of the grant date and re-measured at fair value at the end of each reporting period. These fair value adjustments are recognized as general and administrative expense in the consolidated statements of operations.

To the extent compensation expense relates to employees directly involved in the acquisition of oil and natural gas leasehold and development activities, these amounts are capitalized to oil and natural gas properties. Amounts not capitalized to oil and natural gas properties are recognized as general and administrative expense, oil, natural gas and NGL production expense, exploration expense, or marketing expense, based on the employees involved in those activities. See Note 12 for further discussion of share-based compensation.

Liability Management

Liability management expense includes third party legal and professional service fees incurred for our activities to restructure our debt and in preparation for our bankruptcy petition. As a result of our Chapter 11 Cases, such expenses, to the extent that they were incremental and directly related to our bankruptcy reorganization, are reflected in reorganization items, net in our consolidated statements of operations.

2. Chapter 11 Proceedings

On June 28, 2020, the Debtors filed voluntary petitions for relief under the Bankruptcy Code in the Bankruptcy Court. On June 29, 2020, the Bankruptcy Court entered an order authorizing the joint administration of the Chapter 11 Cases under the caption *In re Chesapeake Energy Corporation*, Case No. 20-33233. The Non-Filing Entities were not part of the Chapter 11 Cases. The Debtors and the Non-Filing Entities have continued to operate in the ordinary course of business during the Chapter 11 Cases.

The Bankruptcy Court confirmed the Plan in a bench ruling on January 13, 2021 and entered the Confirmation Order on January 16, 2021. The Debtors emerged from bankruptcy on February 9, 2021 (the “Effective Date”). Although the Company is no longer a debtor-in-possession, the Company was a debtor-in-possession through the year ending December 31, 2020. As such, the Company’s bankruptcy proceedings and related matters have been summarized below.

Debtor-In-Possession

During the pendency of the Chapter 11 Cases, we operated our business as debtors-in-possession in accordance with the applicable provisions of the Bankruptcy Code. The Bankruptcy Court granted the first day relief we requested that was designed primarily to mitigate the impact of the Chapter 11 Cases on our operations, customers and employees. As a result, we were able to conduct normal business activities and pay all associated obligations for the period following the Petition Date and were also authorized to pay mineral interest owner royalties, employee wages and benefits, and certain vendors and suppliers in the ordinary course for goods and

services provided prior to the Petition Date. During the pendency of the Chapter 11 Cases, all transactions outside the ordinary course of business required the prior approval of the Bankruptcy Court.

Automatic Stay

Subject to certain specific exceptions under the Bankruptcy Code, the filing of the Chapter 11 Cases automatically stayed all judicial or administrative actions against us and efforts by creditors to collect on or otherwise exercise rights or remedies with respect to pre-petition claims. Absent an order from the Bankruptcy Court, substantially all of the Debtors' pre-petition liabilities were subject to compromise and discharge under the Bankruptcy Code. The automatic stay was lifted on the Effective Date.

Plan of Reorganization

In accordance with the Plan confirmed by the Bankruptcy Court, the following significant transactions occurred upon the Company's emergence from bankruptcy on February 9, 2021:

- On the Effective Date, we issued approximately 97,907,081 shares of the reorganized company ("New Common Stock"), reserved 2,092,918 shares of New Common Stock for future issuance to eligible holders of Allowed Unsecured Notes Claims and Allowed General Unsecured Claims and reserved 37,174,210 shares of New Common Stock for issuance upon exercise of the Warrants, which were the result of the transactions described below. We also entered into a registration rights agreement, a warrants agreement and amended our articles of incorporation and bylaws for the authorization of the New Common Stock and to provide registration rights thereunder, among other corporate governance actions. See Note 11 for further discussion of our post-emergence equity.
- Each holder of a Predecessor equity interest in Chesapeake, including our common and preferred stock, had such interest canceled, released, and extinguished without any distribution.
- Each holder of obligations under the pre-petition revolving credit facility received, at such holder's prior determined allocation, its pro rata share of either Tranche A Loans or Tranche B Loans, on a dollar for dollar basis.
- Each holder of obligations under the FLLO Term Loan Facility received its pro rata share of 23,022,420 shares of New Common Stock.
- Each holder of an Allowed Second Lien Notes Claim received its pro rata share of 3,635,118 shares of New Common Stock, 11,111,111 Class A Warrants to purchase 11,111,111 shares of New Common Stock, 12,345,679 Class B Warrants to purchase 12,345,679 shares of New Common Stock, and 6,858,710 Class C Warrants to purchase 6,858,710 shares of New Common Stock.
- Each holder of an Allowed Unsecured Notes Claim received its pro rata share of 1,311,089 shares of New Common Stock and 2,473,757 Class C Warrants to purchase 2,473,757 shares of New Common Stock.
- Each holder of Allowed General Unsecured Claim received its pro rata share of 231,112 shares of New Common Stock and 436,060 Class C Warrants to purchase 436,060 shares of New Common Stock; provided that to the extent such Allowed General Unsecured Claim is a Convenience Claim, such holder instead received its pro rata share of $10 million, which pro rata share shall not exceed five percent of such Convenience Claim.
- Participants in the Rights Offering extending to the applicable classes under the Plan received 62,927,320 shares of New Common Stock.
- In connection with the rights offering described above, the Backstop Parties under the Commitment Agreement received 6,337,031 shares of New Common Stock in respect to the Put Option Premium, and 442,991 shares of New Common Stock were issued in connection with the backstop obligation thereunder to purchase unsubscribed shares of the New Common Stock.

- 2,092,918 shares of New Common Stock and 3,948,893 Class C Warrants were reserved for future issuance to eligible holders of Allowed Unsecured Notes Claims and Allowed General Unsecured Claims. The reserved New Common Stock and Class C Warrants will be issued on a pro rata basis upon the determination of the allowed portion of all disputed General Unsecured Claims and Unsecured Notes Claims.
- The 2021 Long Term Incentive Plan (the “LTIP”) was approved with a share reserve equal to 6,800,000 shares of New Company Stock.
- Each holder of an Allowed Other Secured Claim will receive, at the Company's option and in consultation with the Required Consenting Stakeholders (as defined in the Plan): (a) payment in full in cash; (b) the collateral securing its secured claim; (c) reinstatement of its secured claim; or (d) such other treatment that renders its secured claim unimpaired in accordance with Section 1124 of the Bankruptcy Code.
- Each holder of an Allowed Other Priority Claim (as defined in the Plan) will receive cash up to the allowed amount of its claim.

Additionally, pursuant to the Plan confirmed by the Bankruptcy Court, the Company’s post-emergence Board of Directors is comprised of seven directors, including the Company’s Chief Executive Officer, Robert D. Lawler, and six non-employee directors, Michael Wichterich, Timothy S. Duncan, Benjamin C. Duster, IV, Sarah Emerson, Matthew M. Gallagher and Brian Steck.

DIP and Exit Credit Facilities

On June 28, 2020, prior to the commencement of the Chapter 11 Cases, the Company entered into a commitment letter (the “Commitment Letter”) with certain of the lenders under the pre-petition revolving credit facility and/or their affiliates (collectively, the “Commitment Parties”), pursuant to which, and subject to the satisfaction of certain customary conditions, including the approval of the Bankruptcy Court, the Commitment Parties agreed to provide the Debtors with a post-petition senior secured super-priority debtor-in-possession revolving credit facility in an aggregate principal amount of up to approximately $2.104 billion (the “DIP Credit Facility”), consisting of a revolving loan facility of new money in an aggregate principal amount of up to $925 million, which includes a sub-facility of up to $200 million for the issuance of letters of credit, and an up to approximately $1.179 billion term loan that reflects the roll-up of a portion of outstanding borrowings under the pre-petition revolving credit facility. Pursuant to the Commitment Letter, the Commitment parties have also committed to provide, subject to certain conditions, an up to $2.5 billion exit credit facility, consisting of an up to $1.75 billion revolving credit facility (the “Exit Revolving Facility”) and an up to $750 million senior secured term loan facility (the “Exit Term Loan Facility” and, together with the Exit Revolving Facility, the “Exit Credit Facilities”). The terms and conditions of the DIP Credit Facility are set forth in the Senior Secured Super-Priority Debtor-in-Possession Credit Agreement (the “DIP Credit Agreement”) attached to the Commitment Letter. The proceeds of the DIP Credit Facility may be used for, among other things, post-petition working capital, permitted capital investments, general corporate purposes, letters of credit, administrative costs, premiums, expenses and fees for the transactions contemplated by the Chapter 11 Cases, payment of court approved adequate protection obligations, and other such purposes consistent with the DIP Credit Facility. On the Effective Date, the DIP Credit Facility was terminated and the holders of obligations under the DIP Credit Facility received payment in full in cash; provided that to the extent such lender under the DIP Credit Facility is also a lender under the Exit Revolver, such lender’s allowed DIP claims were first reduced dollar-for-dollar and satisfied by the amount of its Exit RBL Loans provided as of the Effective Date.

Potential Claims

We filed with the Bankruptcy Court schedules and statements setting forth, among other things, the assets and liabilities of us and each of our Debtor subsidiaries, subject to the assumptions filed in connection therewith. Certain of these schedules and statements were amended after filing. Certain holders of pre-petition claims that are not governmental units were required to file proofs of claim by the deadline for general claims, (the “bar date”), which was set by the Bankruptcy Court as October 30, 2020. Governmental units were required to file proof of claims by December 28, 2020, the deadline that was set by the Bankruptcy Court.

As of February 25, 2021, the Debtors had received approximately 8,100 proofs of claim, approximately 72% of which represent general unsecured claims, for an aggregate amount of approximately $42.7 billion. We will continue

to evaluate these claims throughout the Chapter 11 process and recognize or adjust amounts in future financial statements as necessary using the best information available at such time. Differences between amounts scheduled by us and claims by creditors will ultimately be reconciled and resolved in connection with the claims resolution process. In light of the expected number of creditors, the claims resolution process may take considerable time to complete and has continued after our emergence from bankruptcy.

Fresh-Start Reporting

Upon emergence from bankruptcy on February 9, 2021, we expect to qualify for fresh-start reporting. In order to qualify for fresh start-reporting (i) the holders of existing voting shares of the Company prior to its emergence must receive less than 50% of the voting shares of the Company outstanding following its emergence from bankruptcy and (ii) the reorganization value of our assets immediately prior to confirmation of the plan of reorganization must be less than the post-petition liabilities and allowed claims. Under the principles of fresh-start reporting, a new reporting entity will be considered to have been created, and, as a result, the Company will allocate the reorganization value of the Company to its individual assets, including property, plant and equipment, based on their estimated fair values. The process of estimating the fair value of the Company's assets, liabilities and equity upon emergence is currently ongoing and, therefore, such amounts have not yet been finalized. In support of the Plan, the enterprise value of the Successor Company was estimated and approved by the Bankruptcy Court to be in the range of $3.5 billion to $4.7 billion.

Financial Statement Classification of Liabilities Subject to Compromise

The accompanying consolidated balance sheet as of December 31, 2020 includes amounts classified as liabilities subject to compromise, which represent liabilities we anticipate will be allowed as claims in the Chapter 11 Cases. These amounts represent our current estimate of known or potential obligations to be resolved in connection with the Chapter 11 Cases, and may differ from actual future settlement amounts paid. Differences between liabilities estimated and claims filed, or to be filed, will be investigated and resolved in connection with the claims resolution process. We will continue to evaluate these liabilities throughout the Chapter 11 process and adjust amounts as necessary. Such adjustments may be material.

Liabilities subject to compromise includes amounts related to the rejection of various executory contracts and unexpired leases. Additional amounts may be included in liabilities subject to compromise in future periods if additional executory contracts and unexpired leases are rejected. The nature of many of the potential claims arising under our executory contracts and unexpired leases has not been determined at this time, and therefore, such claims are not reasonably estimable at this time and may be material.

The following table summarizes the components of liabilities subject to compromise included on our consolidated balance sheet as of December 31, 2020:

	December 31, 2020 ($ in millions)
Debt	$ 7,166
Accounts payable	15
Accrued interest	235
Provision for contract rejection damages	729
Other liabilities	498
Liabilities subject to compromise	$ 8,643

Reorganization Items, Net

We have incurred and will continue to incur significant expenses, gains and losses associated with our reorganization, primarily the write-off of unamortized debt issuance costs and related unamortized premiums and discounts, debt and equity financing fees, provision for allowed claims and legal and professional fees incurred subsequent to the Chapter 11 Filings for the reorganization process. Provision for allowed claims primarily represents damages from contract rejections and settlements attributable to the midstream savings requirement as

stipulated by the Plan. The amount of these items, which are being expensed as incurred significantly affect our statements of operations.

The following table summarizes the components in reorganization items, net included in our consolidated statements of operations for the year ended December 31, 2020:

	Year Ended December 31, 2020
	($ in millions)
Provision for allowed claims	(879)
Write off of unamortized debt premiums (discounts)	518
Write off of unamortized debt issuance costs	(61)
Debt and equity financing fees	(145)
Loss on divested assets	(128)
Legal and professional fees	(113)
Gain on settlement of pre-petition accounts payable	15
Loss on settlement of pre-petition revenues payable	(3)
Reorganization items, net	$ (796)

Going Concern

During the Company's bankruptcy proceedings and prior to the Bankruptcy Court's entry of an order confirming the Debtors' Plan of Reorganization, the Company's ability to continue as a going concern was contingent upon, among other things, its ability to (i) develop and successfully implement a plan of reorganization and obtain creditor acceptance and confirmation under the Bankruptcy Code, (ii) achieve savings on certain midstream contracts through rejection or renegotiation of terms, (iii) achieve certain liquidity metrics, and (iv) obtain exit financing sources sufficient to meet the Company's future obligations. The Company's debt obligations and uncertainties related to the bankruptcy process raised substantial doubt about its ability to continue as a going concern.

As a result of the execution of the Plan of Reorganization and emergence from bankruptcy on February 9, 2021, management concluded there is no longer substantial doubt about the Company's ability to continue as a going concern.

3. Oil and Natural Gas Property Transactions

Mid-Continent Divestiture

On October 13, 2020, we filed a notice with the Bankruptcy Court that we reached an agreement with Tapstone Energy in a Section 363 transaction under the Bankruptcy Code. An auction supervised by the Bankruptcy Court was held on November 10, 2020 in which other pre-qualified buyers submitted bids for the asset. We presented the results of the auction process to the Bankruptcy Court and the sale was approved on November 13, 2020. On December 11, 2020, we closed the transaction with Tapstone Energy for $130 million, subject to post-closing adjustments which resulted in the recognition of a gain of approximately $27 million.

Haynesville Exchange

On November 22, 2020, we filed notice with the Bankruptcy Court that we had reached an agreement with Williams to transfer certain Haynesville assets, including interests in 144 producing wells and approximately 50,000 net acres, in exchange for improved midstream contract terms with respect to assets we retained. On December 15, 2020, the Court approved the transaction with Williams and the exchange resulted in the recognition of loss of approximately $128 million based on the difference between the carrying value of the assets and the fair value of the assets surrendered. The exchange was executed to obtain sufficient savings on midstream obligations as required by the Plan. Therefore, the loss was recorded to reorganization items, net in our consolidated statements of operations.

WildHorse Acquisition

On February 1, 2019, we acquired WildHorse Resource Development Corporation (“WildHorse”), an oil and gas company with operations in the Eagle Ford Shale and Austin Chalk formations in southeast Texas, for approximately 3.6 million reverse stock split-adjusted shares of our common stock and $381 million in cash. We funded the cash portion of the consideration through borrowings under the pre-petition revolving credit facility. In connection with the closing, we acquired all of WildHorse’s debt. See Note 5 for additional information on the acquired debt.

2019 Purchase Price Allocation

We have accounted for the acquisition of WildHorse and its corresponding merger (the “Merger”) with and into our wholly owned subsidiary, Brazos Valley Longhorn, L.L.C. (“Brazos Valley Longhorn” or “BVL”), as a business combination, using the acquisition method. The following table represents the final allocation of the total purchase price of WildHorse to the identifiable assets acquired and the liabilities assumed based on the fair values as of the acquisition date.

	2019 Purchase Price Allocation
	($ in millions)
Consideration:	
Cash	$ 381
Fair value of Chesapeake's common stock issued in the Merger [(a)]	2,037
Total consideration	$ 2,418
Fair Value of Liabilities Assumed:	
Current liabilities	$ 166
Long-term debt	1,379
Deferred tax liabilities	314
Other long-term liabilities	36
Amounts attributable to liabilities assumed	$ 1,895
Fair Value of Assets Acquired:	
Cash and cash equivalents	$ 28
Other current assets	128
Proved oil and natural gas properties	3,264
Unproved properties	756
Other property and equipment	77
Other long-term assets	60
Amounts attributable to assets acquired	$ 4,313
Total identifiable net assets	$ 2,418

(a) Based on 3.6 reverse stock split-adjusted Chesapeake common shares issued at closing at $568 per share (closing price as of February 1, 2019).

The fair values of assets acquired and liabilities assumed were based on the following key inputs:

Oil and Natural Gas Properties

For the acquisition of WildHorse, we applied applicable guidance, under which an acquirer should recognize the identifiable assets acquired and the liabilities assumed on the acquisition date at fair value. The fair value estimate of proved and unproved oil and natural gas properties as of the acquisition date was based on estimated oil and natural gas reserves and related future net cash flows discounted using a weighted average cost of capital, including estimates of future production rates and future development costs. We utilized a combination of the NYMEX strip pricing and consensus pricing to value the reserves. Our estimates of commodity prices for purposes of determining discounted cash flows ranged from a 2019 price of $56.33 per barrel of oil increasing to a 2023 price of $61.17 per barrel of oil. Similarly, natural gas prices ranged from a 2019 price of $2.82 per mmbtu then increasing to a 2023 price of $3.00 per mmbtu. Both oil and natural gas commodity prices were held flat after 2023 and adjusted for inflation. We then applied various discount rates depending on the classification of reserves and other risk characteristics. Management utilized the assistance of a third-party valuation expert to estimate the value of the oil and natural gas properties acquired. Additionally, the estimated fair value estimate of proved and unproved oil and natural gas properties was corroborated by utilizing the market approach which considers recent comparable transactions for similar assets.

The inputs used to value oil and natural gas properties require significant judgment and estimates made by management and represent Level 3 inputs.

Financial Instruments and Other

The fair value measurements of long-term debt were estimated based on a market approach using estimates provided by an independent investment data services firm and represent Level 2 inputs.

Deferred Income Taxes

For federal income tax purposes, the WildHorse acquisition qualified as a tax-free merger, as a result, we acquired carryover tax basis in WildHorse's assets and liabilities. Deferred tax liabilities and assets were recorded for differences between the purchase price allocated to the assets acquired and liabilities assumed based on the fair value and the carryover tax basis. See Note 10 for further discussion of deferred income taxes.

WildHorse Revenues and Expenses Subsequent to Acquisition

We included in our consolidated statements of operations revenues of $752 million, direct operating expenses of $810 million, including depreciation, depletion and amortization, and other expense of $83 million related to the WildHorse business for the period from February 1, 2019 to December 31, 2019.

Pro Forma Financial Information

The following unaudited pro forma financial information for the years ended December 31, 2019 and 2018, respectively, is based on our historical consolidated financial statements adjusted to reflect as if the WildHorse acquisition had occurred on January 1, 2018. The information below reflects pro forma adjustments based on available information and certain assumptions that we believe are reasonable, including adjustments to conform the classification of expenses in WildHorse's statements of operations to our classification for similar expenses and the estimated tax impact of pro forma adjustments.

	Years Ended December 31,	
	2019	2018
	($ in millions except per share data)	
Revenues	$ 8,587	$ 11,211
Net income (loss) available to common stockholders	$ (431)	$ 195
Earnings (loss) per common share:[(a)]		
Basic	$ (51.77)	$ 42.89
Diluted	$ (51.77)	$ 42.89

(a) All per share information has been retroactively adjusted to reflect the 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

This unaudited pro forma information has been derived from historical information. The unaudited pro forma financial information is not necessarily indicative of what actually would have occurred if the acquisition had been completed as of the beginning of the periods presented, nor is it necessarily indicative of future results.

2019 Transactions

In 2019, we received proceeds of approximately $130 million, net of post-closing adjustments, and recognized a gain of approximately $46 million, primarily for the sale of non-core oil and natural gas properties.

2018 Transactions

We sold all of our approximately 1,500,000 gross (900,000 net) acres in Ohio, of which approximately 320,000 net acres are prospective for the Utica Shale with approximately 920 producing wells, along with related property and equipment for net proceeds of $1.868 billion to Encino, with additional contingent payments to us of up to $100 million comprised of $50 million in consideration in each case if, on or prior to December 31, 2019, there is a period of twenty (20) trading days out of a period of thirty (30) consecutive trading days where (i) the average of the NYMEX natural gas strip prices for the months comprising the year 2022 equals or exceeds $3.00/mmbtu as calculated pursuant to the purchase agreement, and (ii) the average of the NYMEX natural gas strip prices for the months comprising the year 2023 equals or exceeds $3.25/mmbtu as calculated pursuant to the purchase agreement. The contingent consideration expired on December 31, 2019 with no value attributed to the arrangement. We recognized a loss of approximately $273 million associated with the transaction.

In 2018, we sold portions of our acreage, producing properties and other related property and equipment in the Mid-Continent, including our Mississippian Lime assets, for approximately $491 million, subject to certain customary closing adjustments. Included in the sales were approximately 238,500 net acres and interests in approximately 3,200 wells. We recognized a gain of approximately $12 million associated with the transactions. Also, in 2018, we received proceeds of approximately $37 million subject to customary closing adjustments, for the sale of other oil and natural gas properties covering various operating areas.

4. Earnings Per Share

Basic earnings per share (EPS) is calculated using the weighted average number of common shares outstanding during the period and includes the effect of any participating securities as appropriate. Participating securities consist of unvested restricted stock issued to our employees and non-employee directors that provide dividend rights.

Diluted EPS is calculated assuming the issuance of common shares for all potentially dilutive securities, provided the effect is not antidilutive. For all periods presented, our convertible senior notes did not have a dilutive effect and, therefore, were excluded from the calculation of diluted EPS.

Shares of common stock for the following securities were excluded from the calculation of diluted EPS as the effect was antidilutive.

	Years Ended December 31,		
	2020	2019	2018
		(thousands)	
Common stock equivalent of our preferred stock outstanding[(a)]	290	290	298
Common stock equivalent of our convertible senior notes outstanding[(a)]	621	621	729
Common stock equivalent of our preferred stock outstanding prior to exchange[(a)]	—	5	—
Participating securities[(a)]	—	2	6

(a) Amount has been retroactively adjusted to reflect the 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

As a result of the Company's reverse stock split effective on April 14, 2020, proportionate adjustments were made to the conversion price of Chesapeake's outstanding 5.5% Convertible Senior Notes due 2026, 4.5% Cumulative Convertible Preferred Stock, 5.00% Cumulative Convertible Preferred Stock (Series 2005B), 5.75% Cumulative Convertible Non-Voting Preferred Stock (Series A) and 5.75% Cumulative Non-Voting Convertible Preferred Stock and to the outstanding awards and number of shares issued and issuable under the Company's equity compensation plans. See Note 11 for additional information.

5. Debt

Chapter 11 Proceedings and Emergence

The Bankruptcy Filing constituted an event of default under certain of our secured and unsecured debt obligations. As a result of the Bankruptcy Filing, the principal and interest due under these debt instruments became immediately due and payable. However, pursuant to Section 362 of the Bankruptcy Code, the creditors were stayed from taking any action as a result of such defaults. On the Effective Date, our obligations under the FLLO Term Loan and Senior Notes, including interest and accrued interest, were fully extinguished in exchange for equity in the post-emergence Company. In addition, our pre-petition revolving credit facility was restructured into a new exit credit facility.

Reclassification of Debt

The principal amounts outstanding under the FLLO Term Loan, Second Lien Notes and all of our other unsecured senior and convertible senior notes were reclassified as liabilities subject to compromise on the accompanying consolidated balance sheet as of December 31, 2020. Additionally, non-cash adjustments were made to write off all of the related unamortized debt issuance costs and associated discounts and premiums of approximately $457 million, which are included in reorganization items, net in the accompanying consolidated statements of operations for the year ended December 31, 2020, as discussed in Note 2.

The agreements for our FLLO Term Loan, Second Lien Notes, and unsecured senior and convertible senior notes contain provisions regarding the calculation of interest upon default. Upon default, the interest rate on the FLLO Term Loan increased from LIBOR plus 8.00% to alternative base rate (ABR) (3.25% during the fourth quarter) plus Applicable Margin (7.00% during the fourth quarter) plus 2.00%. For the Second Lien Notes and all of our other unsecured senior and convertible senior notes, the interest rate remained the same upon default. However, interest accrued on the amount of unpaid interest in addition to the principal balance. We did not pay or recognize interest on the FLLO Term Loan, Second Lien Notes, or unsecured senior and convertible senior notes during the Chapter 11 process.

Pre-emergence debt

Our long-term debt consisted of the following as of December 31, 2020 and 2019:

	December 31, 2020		December 31, 2019	
	Principal Amount	Carrying Amount	Principal Amount	Carrying Amount
	($ in millions)			
DIP credit facility	$ —	$ —	$ —	$ —
Pre-petition revolving credit facility	1,929	1,929	1,590	1,590
Term loan due 2024	1,500	1,500	1,500	1,470
11.5% senior secured second lien notes due 2025	2,330	2,330	2,330	3,248
6.625% senior notes due 2020	176	176	208	208
6.875% senior notes due 2020	73	73	93	93
6.125% senior notes due 2021	167	167	167	167
5.375% senior notes due 2021	127	127	127	127
4.875% senior notes due 2022	272	272	338	338
5.75% senior notes due 2023	167	167	209	209
7.00% senior notes due 2024	624	624	624	624
6.875% senior notes due 2025	2	2	2	2
8.00% senior notes due 2025	246	246	246	245
5.5% convertible senior notes due 2026	1,064	1,064	1,064	765
7.5% senior notes due 2026	119	119	119	119
8.00% senior notes due 2026	46	46	46	44
8.00% senior notes due 2027	253	253	253	253
Debt issuance costs	—	—	—	(44)
Total debt, net	9,095	9,095	8,916	9,458
Less current maturities of long-term debt, net	(1,929)	(1,929)	(385)	(385)
Less amounts reclassified to liabilities subject to compromise	(7,166)	(7,166)	—	—
Total long-term debt, net	$ —	$ —	$ 8,531	$ 9,073

Debt Issuances and Retirements 2020

In 2020, we repurchased approximately $160 million aggregate principal amount of the following senior notes for $95 million and recorded an aggregate gain of approximately $65 million.

	Notes Repurchased
	($ in millions)
6.625% senior notes due 2020	$ 32
6.875% senior notes due 2020	20
4.875% senior notes due 2022	66
5.75% senior notes due 2023	42
Total	$ 160

Debt Issuances and Retirements 2019

Term Loan. In December 2019, we entered into a secured 4.5-year term loan facility in an aggregate principal amount of $1.5 billion for net proceeds of approximately $1.455 billion. Our obligations under the new facility are unconditionally guaranteed on a joint and several basis by the same subsidiaries that guarantee our revolving credit facility and second lien notes (including BVL and its subsidiaries) and are secured by first-priority liens on the same collateral securing our revolving credit facility (with a position in the collateral proceeds waterfall junior to the revolving credit facility). The term loan bears interest at a rate of London Interbank Offered Rate (LIBOR) plus 8.00% per annum, subject to a 1.00% LIBOR floor, or the Alternative Base Rate (ABR) plus 7.00% per annum, subject to a 2.00% ABR floor, at our option. The loan was made at 98% of par. We used the net proceeds to finance tender offers for our unsecured BVL senior notes and to repay amounts outstanding under our BVL revolving credit facility. We recorded an aggregate net gain of approximately $4 million associated with the retirement of our BVL senior notes and the BVL revolving credit facility.

The term loan matures in June 2024 and voluntary prepayments are subject to a make-whole premium prior to the 18-month anniversary of the closing of the term loan, a premium to par of 5.00% from the 18-month anniversary until but excluding the 30-month anniversary, a premium to par of 2.5% from the 30-month anniversary until but excluding the 42-month anniversary and at par beginning on the 42-month anniversary. The term loan may be subject to mandatory prepayments and offers to prepay with net cash proceeds of certain issuances of debt, certain asset sales and other dispositions of collateral and upon a change of control.

The term loan contains covenants limiting our ability to incur additional indebtedness, incur liens, consummate mergers and similar fundamental changes, make restricted payments, sell collateral and use proceeds from such sales, make investments, repay certain subordinate, unsecured or junior lien indebtedness, and enter into transactions with affiliates.

Events of default under the term loan include, among other things, nonpayment of principal, interest or other amounts; violation of covenants; incorrectness of representations and warranties in any material respect; cross-payment default and cross acceleration with respect to other indebtedness with an outstanding principal balance of $125 million or more; bankruptcy; judgments involving liability of $125 million or more that are not paid; and ERISA events. Many events of default are subject to customary notice and cure periods.

Senior Secured Second Lien Notes. In December 2019, we completed private offers to exchange newly issued 11.5% Senior Secured Second Lien Notes due 2025 (the “Second Lien Notes”) for the following outstanding senior unsecured notes (the “Existing Notes”):

	Notes Exchange ($ in millions)
7.00% senior notes due 2024	$ 2
8.00% senior notes due 2025	9
8.00% senior notes due 2026	8
7.5% senior notes due 2026	2
8.00% senior notes due 2027	8
Total	$ 3,2

The Second Lien Notes are secured second lien obligations and are contractually junior to our current and future secured first lien indebtedness, including indebtedness incurred under our revolving credit facility and term loan facility, to the extent of the value of the collateral securing such indebtedness, effectively senior to all of our existing and future unsecured indebtedness, including our outstanding senior notes, to the extent of the value of the collateral, and senior to any future subordinated indebtedness that we may incur. We have the option to redeem the Second Lien Notes, in whole or in part, at specified make-whole or redemption prices. Our Second Lien Notes are governed by an indenture containing covenants that may limit our ability and our subsidiaries’ ability to create liens securing certain indebtedness, make certain restricted payments, enter into certain sale-leaseback transactions, consolidate, merge or transfer assets and dispose of certain collateral and use proceeds from dispositions of certain collateral. As a holding company, Chesapeake owns no operating assets and has no significant operations

independent of its subsidiaries. Chesapeake's obligations under the Second Lien Notes are jointly and severally, fully and unconditionally guaranteed by the same subsidiaries that guarantee our revolving credit facility and term loan facility (including BVL and its subsidiaries). See Note 24 for condensed combined debtor financial information regarding our guarantor and non-guarantor subsidiaries.

The exchanges of the Existing Notes (with a carrying value of $3.152 billion) for $2.210 billion of Second Lien Notes, were accounted for as a troubled debt restructuring. For the majority of the notes in this exchange, the future undiscounted cash flows were greater than the net carrying value of the original debt, so no gain was recognized and a new effective interest rate was established based on the carrying value of the original debt. The amount of the extinguished debt will be amortized over the life of the notes as a reduction to interest expense. As a result, our reported interest expense will be significantly less than the contractual interest payments throughout the term of the Second Lien Notes.

In a subsequent transaction in December 2019, we issued an additional $120 million of 11.5% Senior Secured Second Lien Notes due 2025 pursuant to a private offering, at 89.75% of par. Additionally, in December 2019, we entered into a purchase and sale agreement with the same counterparty to acquire $101 million principal amount of our 6.625% Senior Notes due 2020, 4.875% Senior Notes due 2022 and 5.75% Senior Notes due 2023 at a discount. During the first quarter of 2020, we repurchased the senior notes.

Exchanges of Senior Notes for Common Stock. We privately negotiated exchanges of approximately $507 million principal amount of our outstanding senior notes for 235,563,519 shares of common stock and $186 million principal amount of our outstanding convertible senior notes for 73,389,094 shares of common stock. We recorded an aggregate net gain of approximately $64 million associated with the exchanges.

We issued at par approximately $919 million of 8.00% Senior Notes due 2026 ("2026 notes") pursuant to a private exchange offer for the following outstanding senior unsecured notes:

	Notes Exchanged ($ in millions)
6.625% senior notes due 2020	$ 229
6.875% senior notes due 2020	134
6.125% senior notes due 2021	381
5.375% senior notes due 2021	140
Total	$ 884

We may redeem some or all of the 2026 notes at any time prior to March 15, 2022 at a price equal to 100% of the principal amount of the notes to be redeemed plus a "make-whole" premium. At any time prior to March 15, 2022, we also may redeem up to 35% of the aggregate principal amount of each series of notes with an amount of cash not greater than the net cash proceeds of certain equity offerings at a specified redemption price. In addition, we may redeem some or all of the 2026 notes at any time on or after March 15, 2022 at the redemption prices in accordance with the terms of the notes, the indenture and supplemental indenture governing the notes. These senior notes are unsecured obligations of Chesapeake and rank equally in right of payment with all of our other existing and future senior unsecured indebtedness and rank senior in right of payment to all of our future subordinated indebtedness. Our obligations under the senior notes are jointly and severally, fully and unconditionally guaranteed by all of our wholly owned subsidiaries that guarantee the Chesapeake revolving credit facility and certain other unsecured senior notes. We accounted for the exchange as a modification to existing debt and no gain or loss was recognized.

We repaid upon maturity $380 million principal amount of our Floating Rate Senior Notes due April 2019 with borrowings from our Chesapeake revolving credit facility.

Debt Issuances and Retirements 2018

We issued at par $850 million of 7.00% Senior Notes due 2024 ("2024 notes") and $400 million of 7.50% Senior Notes due 2026 ("2026 notes") pursuant to a public offering for net proceeds of approximately $1.236 billion. We may redeem some or all of the 2024 notes at any time prior to April 1, 2021 and some or all of the 2026 notes at

any time prior to October 1, 2021, in each case at a price equal to 100% of the principal amount of the notes to be redeemed plus a "make-whole" premium. At any time prior to April 1, 2021, with respect to the 2024 notes, and October 1, 2021, with respect to the 2026 notes, we also may redeem up to 35% of the aggregate principal amount of each series of notes with an amount of cash not greater than the net cash proceeds of certain equity offerings at a specified redemption price. In addition, we may redeem some or all of the 2024 notes at any time on or after April 1, 2021 and some or all of the 2026 notes at any time on or after October 1, 2021, in each case at the redemption prices in accordance with the terms of the notes and the indenture and supplemental indenture governing the notes. These senior notes are unsecured obligations of Chesapeake and rank equally in right of payment with all of our other existing and future senior unsecured indebtedness and rank senior in right of payment to all of our future subordinated indebtedness. Our obligations under the senior notes are jointly and severally, fully and unconditionally guaranteed by certain of our direct and indirect wholly owned subsidiaries.

We used the net proceeds from the 2024 and 2026 notes, together with cash on hand and borrowings under the Chesapeake revolving credit facility, to repay in full $1.233 billion of borrowings under our secured term loan due 2021 for $1.285 billion, which included a $52 million make-whole premium. We recorded a loss of approximately $65 million associated with the repayment of the term loan, including the make-whole premium and the write-off of $13 million of associated deferred charges.

We used a portion of the proceeds from the sale of our Utica Shale assets in Ohio to redeem all of the $1.416 billion aggregate principal amount outstanding of our 8.00% Senior Secured Second Lien Notes due 2022 for $1.477 billion. We recorded a gain of approximately $331 million associated with the redemption, including the realization of the remaining $391 million difference in principal and book value due to troubled debt restructuring accounting in 2015, offset by the make-whole premium of $60 million.

We repaid upon maturity $44 million principal amount of our 7.25% Senior Notes due 2018.

As required by the terms of the indenture for our 2.25% Contingent Convertible Senior Notes due 2038 ("2038 notes"), the holders were provided the option to require us to purchase on December 15, 2018, all or a portion of the holders' 2038 notes at par plus accrued and unpaid interest up to, but excluding, December 15, 2018. On December 17, 2018, we paid an aggregate of approximately $8 million to purchase all of the 2038 notes that were tendered and not withdrawn. An aggregate of $1 million principal amount of the 2038 notes remained outstanding as of December 31, 2018. Subsequent to December 31, 2018, we redeemed these notes at par and discharged the related indenture.

Senior Notes and Convertible Senior Notes

Our senior notes and our convertible senior notes are unsecured senior obligations of Chesapeake and rank equally in right of payment with all of our other existing and future senior unsecured indebtedness and rank senior in right of payment to all of our future subordinated indebtedness. Our obligations under the senior notes and the convertible senior notes are jointly and severally, fully and unconditionally guaranteed by certain of our direct and indirect wholly owned subsidiaries. See Note 24 for consolidating financial information regarding our guarantor and non-guarantor subsidiaries.

Our senior notes, other than the convertible senior notes, were redeemable at any time at specified make-whole or redemption prices. Our senior notes were governed by indentures containing covenants that could limit our ability and our subsidiaries' ability to incur certain secured indebtedness, enter into sale-leaseback transactions, and consolidate, merge or transfer assets. The indentures governing the senior notes and the convertible senior notes did not have any financial or restricted payment covenants. Indentures for the senior notes and convertible senior notes had cross default provisions that applied to other indebtedness Chesapeake or any guarantor subsidiary may have from time to time with an outstanding principal amount of at least $50 million or $75 million, depending on the indenture.

Pre-Petition Revolving Credit Facility

Our revolving credit facility was scheduled to mature in September 2023 and the aggregate commitment of the lenders and borrowing base under the facility was $3.0 billion. The revolving credit facility provides for an accordion feature, pursuant to which the aggregate commitments thereunder may be increased to up to $4.0 billion from time to time, subject to agreement of the participating lenders and certain other customary conditions. As of

December 31, 2020, we had outstanding borrowings of $1.929 billion under our revolving credit facility and had used $54 million for various letters of credit.

Borrowings under our revolving credit facility bear interest at an alternative base rate (ABR) or LIBOR, at our election, plus an applicable margin ranging from 1.50%-2.50% per annum for ABR loans and 2.50%-3.50% per annum for LIBOR loans, depending on the percentage of the borrowing base then being utilized.

Our revolving credit facility was subject to various financial and other covenants. The terms of the revolving credit facility included covenants limiting, among other things, our ability to incur additional indebtedness, make investments or loans, incur liens, consummate mergers and similar fundamental changes, make restricted payments, make investments in unrestricted subsidiaries and enter into transactions with affiliates.

On December 3, 2019, we entered into the second amendment to our credit agreement. Among other things, the amendment (i) permitted the issuance of certain secured indebtedness with a lien priority or proceeds recovery behind the obligations under the credit agreement without a corresponding 25% reduction in the borrowing base under the credit agreement, if issued by the next scheduled redetermination of the borrowing base, (ii) increased the amount of indebtedness that can be secured on a pari passu first-lien basis with (and with recovery proceeds behind) the obligations under the credit agreement from $1 billion to $1.5 billion, (iii) increased the applicable margin as defined in the credit agreement on borrowings under the credit agreement by 100 basis points, (iv) requires liquidity of at least $250 million at all times, (v) for each fiscal quarter commencing with the fiscal quarter ending December 31, 2019, replaced the secured leverage ratio financial covenant with a requirement that the first lien secured leverage ratio not exceed 2.50 to 1 as of the end of such fiscal quarter, (vi) increased the maximum permitted leverage ratio as of the end of each fiscal quarter to 4.50 to 1 through the fiscal quarter ending December 31, 2021, with step-downs to 4.25 to 1 for the fiscal quarter ending March 31, 2022 and to 4.00 to 1 for each fiscal quarter ending thereafter, and (vii) required that we use the aggregate net cash proceeds of certain asset sales in excess of $50 million to prepay certain indebtedness and/or reduce commitments under our credit agreement, until the retirement of all of our senior notes maturing before September 12, 2023. On December 26, 2019, we entered into the third amendment to our credit agreement, which, among other things, permitted the issuance of certain secured indebtedness with a lien priority behind the obligations under the credit agreement without a corresponding 25% reduction in the borrowing base under the credit agreement, if issued by December 31, 2019 and issued in exchange for, or the proceeds used to refinance, our senior notes.

Fair Value of Debt

We estimate the fair value of our senior notes based on the market value of our publicly traded debt as determined based on the yield of our senior notes (Level 1). The fair value of all other debt is based on a market approach using estimates provided by an independent investment financial data services firm (Level 2). Fair value is compared to the carrying value, excluding the impact of interest rate derivatives, in the table below:

	December 31, 2020		December 31, 2019	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
	($ in millions)			
Short-term debt (Level 1)	$ —	$ —	$ 385	$ 360
Long-term debt (Level 1)	$ —	$ —	$ 753	$ 622
Long-term debt (Level 2)	$ —	$ —	$ 8,320	$ 6,085
Liabilities subject to compromise (Level 1)	$ 982	$ 43	$ —	$ —
Liabilities subject to compromise (Level 2)	$ 6,184	$ 1,694	$ —	$ —

Post-emergence Debt

Our post-emergence exit financing consists of a senior secured Exit Credit Facility, which includes a reserve-based revolving credit facility and a non-revolving loan facility, and unsecured senior notes, which all were entered into on the Effective Date. The initial outstanding principal amounts under the Exit Credit Facility and unsecured senior notes were:

	February 9, 2021
	($ in millions)
5.5% Senior Notes due 2026	$ 500
5.875% Senior Notes due 2029	500
Exit Credit Facility - Exit Revolver	50
Exit Credit Facility - Non-Revolving Loan Facility	221
Total	$ 1,271

Exit Credit Facility. On the Effective Date, pursuant to the terms of the Plan, the Company, as borrower, entered into a reserve-based credit agreement (the "Credit Agreement") providing for a reserve-based credit facility (the "Exit Credit Facility") with an initial borrowing base of $2.5 billion. The borrowing base will be redetermined semiannually on or around May 1 and November 1 of each year and the next scheduled redetermination will be on or about October 1, 2021. The aggregate initial elected commitments of the lenders under the Exit Credit Facility will be $1.75 billion of revolving Tranche A Loans (the "Tranche A Loans") and $220 million of fully funded Tranche B Loans (the "Tranche B Loans").

The Exit Credit Facility provides for a $200.0 million sublimit of the aggregate commitments that are available for the issuance of letters of credit. The Exit Credit Facility bears interest at the ABR (alternate base rate) or LIBOR, at our election, plus an applicable margin (ranging from 2.25–3.25% per annum for ABR loans and 3.25–4.25% per annum for LIBOR loans, subject to a 1.00% LIBOR floor), depending on the percentage of the borrowing base then being utilized. The Tranche A Loans mature three years after the Effective Date and the Tranche B Loans mature four years after the Effective Date. The Tranche B Loans can be repaid if no Tranche A Loans are outstanding.

The Credit Agreement contains financial covenants that require the Company and its Guarantors, on a consolidated basis, to maintain (i) a first lien leverage ratio of not more than 2.75 to 1:00, (ii) a total leverage ratio of not more than 3.50 to 1:00, (iii) a current ratio of not less than 1.00 to 1:00 and (iv) at any time additional secured debt is outstanding, an asset coverage ratio of not less than 1.50 to 1:00, defined as PV10 of PDP reserves to total secured debt. The Company had no additional secured debt outstanding at emergence.

The Credit Agreement also contains customary affirmative and negative covenants, including, among other things, as to compliance with laws (including environmental laws and anti-corruption laws), delivery of quarterly and annual financial statements, conduct of business, maintenance of property, maintenance of insurance, restrictions on the incurrence of liens, indebtedness, asset dispositions, fundamental changes, restricted payments, and other customary covenants.

The Company is required to pay a commitment fee of 0.50% per annum on the average daily unused portion of the current aggregate commitments under the Tranche A Loans. The Company is also required to pay customary letter of credit and fronting fees.

Outstanding Senior Notes. On February 2, 2021, Chesapeake Escrow Issuer LLC (the "Escrow Issuer") an indirect wholly-owned subsidiary of the Company, issued $500 million aggregate principal amount of its 5.5% Senior Notes due 2026 (the "2026 Notes") and $500 million aggregate principal amount of its 5.875% Senior Notes due 2029 (the "2029 Notes" and, together with the 2026 Notes, the "Notes"). The offering of the Notes is part of a series of exit financing transactions being undertaken in connection with the Debtors' Chapter 11 Cases and meant to provide the exit financing originally intended to be provided by the Exit Term Loan Facility pursuant to the Commitment Letter.

The Notes are guaranteed on a senior unsecured basis by each of the Company's subsidiaries that guarantee the Exit Credit Facility. The gross proceeds from the offering of the Notes were deposited into a segregated escrow account (the "Escrow Account") and were released upon satisfaction of certain escrow release conditions (the "Escrow Conditions"), including the occurrence of the Effective Date. Prior to the satisfaction of the Escrow Conditions, the Notes are secured by a lien on amounts deposited into the Escrow Account.

The Notes were issued pursuant to an indenture, dated as of February 5, 2021 (the "Indenture"), among the Issuer, the Guarantors and Deutsche Bank Trust Company Americas, as trustee.

Interest on the Notes will be payable semi-annually, on February 1st and August 1st of each year, commencing on August 1, 2021, to holders of record on the immediately preceding January 15th and July 15th.

The Notes are the Company's senior unsecured obligations. Accordingly, they rank (i) equal in right of payment to all existing and future senior indebtedness, including borrowings under the Exit Credit Facility, (ii) effectively subordinate in right of payment to all of existing and future secured indebtedness, including indebtedness under the Exit Credit Facility, to the extent of the value of the collateral securing such indebtedness, (iii) structurally subordinate in right of payment to all existing and future indebtedness and other liabilities of any future subsidiaries that do not guarantee the notes and any entity that is not a subsidiary that does not guarantee the notes and (iv) senior in right of payment to all future subordinated indebtedness. Each guarantee of the notes by a guarantor is a general, unsecured, senior obligation of such guarantor. Accordingly, the guarantees (i) rank equally in right of payment with all existing and future senior indebtedness of such guarantor (including such guarantor's guarantee of indebtedness under the Exit Credit Facility), (ii) are subordinated to all existing and future secured indebtedness of such guarantor, including such guarantor's guarantee of indebtedness under our Exit Credit Facility, to the extent of the value of the collateral of such guarantor securing such secured indebtedness, (iii) are structurally subordinated to all indebtedness and other liabilities of any future subsidiaries of such guarantor that do not guarantee the notes and (iv) rank senior in right of payment to all future subordinated indebtedness of such guarantor.

6. Contingencies and Commitments

Contingencies

Chapter 11 Proceedings

Commencement of the Chapter 11 Cases automatically stayed the proceedings and actions against us that are described below, in addition to actions seeking to collect pre-petition indebtedness or to exercise control over the property of the Company's bankruptcy estates. The Plan in the Chapter 11 Cases, which became effective on February 9, 2021, provided for the treatment of claims against the Company's bankruptcy estates, including pre-petition liabilities that had not been satisfied or addressed during the Chapter 11 Cases. See Note 2 for additional information.

Litigation and Regulatory Proceedings

We were involved in a number of litigation and regulatory proceedings as of the Petition Date. Many of these proceedings were in early stages, and many of them sought damages and penalties, the amount of which is indeterminate. Our total accrued liability in respect of litigation and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors, the progress of each case or proceeding, our experience and the experience of others in similar cases or proceedings, and the opinions and views of legal counsel. Significant judgment is required in making these estimates and our final liabilities may ultimately be materially different. The majority of these prepetition legal proceedings, including the matters below, have been settled during the Chapter 11 Cases or will be resolved in connection with the claims reconciliation process before the Bankruptcy Court. Any allowed claim related to such prepetition litigation will be treated in accordance with the Plan.

Business Operations. We are involved in various lawsuits and disputes incidental to our business operations, including commercial disputes, personal injury claims, royalty claims, property damage claims and contract actions. The majority of these prepetition legal proceedings have been settled during the Chapter 11 Cases or will be resolved in connection with the claims reconciliation process before the Bankruptcy Court. Any allowed claim related to such prepetition litigation will be treated in accordance with the Plan.

We and other natural gas producers have been named in various lawsuits alleging underpayment of royalties and other shares of the proceeds of production. The lawsuits against us allege, among other things, that we used below-market prices, made improper deductions, utilized improper measurement techniques, entered into arrangements with affiliates that resulted in underpayment of amounts owed in connection with the production and sale of natural gas and NGL, or similar theories. These lawsuits include cases filed by individual royalty owners and putative class actions, some of which seek to certify a statewide class. The lawsuits seek compensatory, consequential, treble, and punitive damages, restitution and disgorgement of profits, declaratory and injunctive relief

regarding our payment practices, pre-and post-judgment interest, and attorney's fees and costs. Royalty plaintiffs have varying provisions in their respective leases, oil and gas law varies from state to state, and royalty owners and producers differ in their interpretation of the legal effect of lease provisions governing royalty calculations. We have resolved a number of these claims through negotiated settlements of past and future royalty obligations and have prevailed in various other lawsuits. We are currently defending numerous lawsuits seeking damages with respect to underpayment of royalties or other shares of the proceeds of production in multiple states where we have operated, including those discussed below.

On December 9, 2015, the Commonwealth of Pennsylvania, by the Office of Attorney General, filed a lawsuit in the Bradford County Court of Common Pleas related to royalty underpayment and lease acquisition and accounting practices with respect to properties in Pennsylvania. The lawsuit, which primarily relates to the Marcellus Shale and Utica Shale, alleges that we violated the Pennsylvania Unfair Trade Practices and Consumer Protection Law (UTPCPL) by making improper deductions and entering into arrangements with affiliates that resulted in underpayment of royalties. The lawsuit includes other UTPCPL claims and antitrust claims, including that a joint exploration agreement to which we are a party established unlawful market allocation for the acquisition of leases. The lawsuit seeks statutory restitution, civil penalties and costs, as well as a temporary injunction from exploration and drilling activities in Pennsylvania until restitution, penalties and costs have been paid, and a permanent injunction from further violations of the UTPCPL.

Putative statewide class actions in Pennsylvania and Ohio and purported class arbitrations in Pennsylvania have been filed on behalf of royalty owners asserting various claims for damages related to alleged underpayment of royalties as a result of the divestiture of substantially all of our midstream business and most of our gathering assets in 2012 and 2013. These cases include claims for violation of and conspiracy to violate the federal Racketeer Influenced and Corrupt Organizations Act and for an unlawful market allocation agreement for mineral rights, intentional interference with contractual relations, and violations of antitrust laws related to purported markets for gas mineral rights, operating rights and gas gathering sources. These lawsuits seek in aggregate compensatory, consequential, treble, and punitive damages, restitution and disgorgement of profits, declaratory and injunctive relief regarding our royalty payment practices, pre-and post-judgment interest, and attorney's

fees and costs. On December 20, 2017 and August 9, 2018, we reached tentative settlements to resolve all Pennsylvania civil royalty cases for a total at that time of approximately $36 million. Subsequent to our Bankruptcy Filing the parties reopened settlement discussions.

We believe losses are reasonably possible in certain of the pending royalty cases for which we have not accrued a loss contingency, but we are currently unable to estimate an amount or range of loss or the impact the actions could have on our future results of operations or cash flows. Uncertainties in pending royalty cases generally include the complex nature of the claims and defenses, the potential size of the class in class actions, the scope and types of the properties and agreements involved, and the applicable production years.

On July 24, 2018, Healthcare of Ontario Pension Plan (HOOPP) filed a demand for arbitration with the American Arbitration Association regarding HOOPP's purchase of our interest in Chaparral Energy, Inc. stock for $215 million on January 5, 2014. HOOPP claims that we engaged in material misrepresentations and fraud, and that we violated the Securities Exchange Act of 1934 (the "Exchange Act") and Oklahoma Uniform Securities Act. HOOPP seeks either rescission or $215 million in monetary damages, and in either case, interest, attorney's fees, disgorgement and punitive damages. We intend to vigorously defend these claims.

On January 29, 2020, a well control incident occurred at one of our wellsites in Burleson County, Texas, causing the deaths of three of our contractors' employees and injuring a fourth. In connection with this incident, eleven lawsuits have been brought against us and our contractors alleging negligence, gross negligence, and breach of contract, and seeking wrongful death damages, survival statute damages, exemplary damages, and interest. Ten of the suits have been filed in Dallas County, Texas. A joint motion to consolidate filed by all the parties in nine of the ten Dallas County lawsuits is currently pending before the Texas Multidistrict Litigation Panel. The eleventh suit is pending in Burleson County, Texas. The proceedings are in their early stages and are all stayed due to the pending bankruptcy. Our general and excess liability insurance policies provide coverage for third party bodily injury and wrongful death claims, and the contracts between us and our contractors with respect to the well contain customary cross-indemnification provisions. The well control incident liability was not reduced for the potential insurance recovery and a receivable for the probable recovery was recorded.

Environmental Contingencies

The nature of the oil and gas business carries with it certain environmental risks for us and our subsidiaries. We have implemented various policies, programs, procedures, training and audits to reduce and mitigate such environmental risks. We conduct periodic reviews, on a company-wide basis, to assess changes in our environmental risk profile. Environmental reserves are established for environmental liabilities for which economic losses are probable and reasonably estimable. We manage our exposure to environmental liabilities in acquisitions by using an evaluation process that seeks to identify pre-existing contamination or compliance concerns and address the potential liability. Depending on the extent of an identified environmental concern, we may, among other things, exclude a property from the transaction, require the seller to remediate the property to our satisfaction in an acquisition or agree to assume liability for the remediation of the property.

We are named as a defendant in numerous lawsuits in Oklahoma alleging that we and other companies have engaged in activities that have caused earthquakes. These lawsuits seek compensation for injury to real and personal property, diminution of property value, economic losses due to business interruption, interference with the use and enjoyment of property, annoyance and inconvenience, personal injury and emotional distress. In addition, they seek the reimbursement of insurance premiums and the award of punitive damages, attorneys' fees, costs, expenses and interest. We are vigorously defending these claims. Any allowed claim related to such prepetition litigation will be treated in accordance with the Plan.

We are in discussions with the Pennsylvania Department of Environmental Protection (PADEP) regarding gas migration in the vicinity of certain of our wells in Wyoming County, Pennsylvania. We believe we are close to identifying agreed-upon steps to resolve PADEP's concerns regarding the issue. In addition to these steps, resolution of the matter may result in monetary sanctions of more than $300,000.

Other Matters

Based on management's current assessment, we are of the opinion that no pending or threatened lawsuit or dispute relating to our business operations is likely to have a material adverse effect on our future consolidated financial position, results of operations or cash flows. The final resolution of such matters could exceed amounts accrued, however, and actual results could differ materially from management's estimates.

Commitments

Gathering, Processing and Transportation Agreements

We have contractual commitments with midstream service companies and pipeline carriers for future gathering, processing and transportation of oil, natural gas and NGL to move certain of our production to market. Working interest owners and royalty interest owners, where appropriate, will be responsible for their proportionate share of these costs. Since filing the Chapter 11 Cases in June 2020, we have successfully renegotiated or terminated certain of our midstream contracts and commitments, including significantly reducing our gathering, processing and transportation expenses. Accordingly, $838 million of damages was accrued in liabilities subject to compromise. As of December 31, 2020, we were still negotiating certain of our midstream contracts pending our emergence from bankruptcy. Commitments related to gathering, processing and transportation agreements are not recorded as obligations in the accompanying consolidated balance sheets; however, they are reflected in our estimates of proved reserves.

The aggregate undiscounted commitments under our gathering, processing and transportation agreements, excluding any reimbursement from working interest and royalty interest owners, credits for third-party volumes or future costs under cost-of-service agreements, are presented below:

	December 31, 2020
	($ in millions)
2021	$ 865
2022	729
2023	596
2024	521
2025	471
2026 – 2034	1,911
Total	$ 5,093

In addition, we have entered into long-term agreements for certain natural gas gathering and related services within specified acreage dedication areas in exchange for cost-of-service based fees redetermined annually, or tiered fees based on volumes delivered relative to scheduled volumes. Future gathering fees may vary with the applicable agreement.

Service Contract

We have contracts with third-party contractors to provide maintenance and other services to generators and natural gas compressors. These commitments are not recorded as an obligation in the accompanying consolidated balance sheets. The aggregate undiscounted minimum future payments under these service contracts are detailed below.

	December 31, 2020
	($ in millions)
2021	$ 7
2022	2
Total	$ 9

Other Commitments

As part of our normal course of business, we enter into various agreements providing, or otherwise arranging for, financial or performance assurances to third parties on behalf of our wholly owned guarantor subsidiaries. These agreements may include future payment obligations or commitments regarding operational performance that effectively guarantee our subsidiaries' future performance.

In connection with acquisitions and divestitures, our purchase and sale agreements generally provide indemnification to the counterparty for liabilities incurred as a result of a breach of a representation or warranty by the indemnifying party and/or other specified matters. These indemnifications generally have a discrete term and are intended to protect the parties against risks that are difficult to predict or cannot be quantified at the time of entering into or consummating a particular transaction. For divestitures of oil and natural gas properties, our purchase and sale agreements may require the return of a portion of the proceeds we receive as a result of uncured title or environmental defects.

While executing our strategic priorities, we have incurred certain cash charges, including contract termination charges, financing extinguishment costs and charges for unused natural gas transportation and gathering capacity.

7. Other Liabilities

Other current liabilities as of December 31, 2020 and 2019 are detailed below:

	December 31,	
	2020	2019
	($ in millions)	
Revenues and royalties due others	$ 236	$ 516
Accrued drilling and production costs	104	326
Other accrued taxes	82	150
Debt and equity financing fees	69	—
Accrued compensation and benefits	59	156
Operating leases	24	9
Joint interest prepayments received	8	52
VPP deferred revenue[(a)]	—	55
Other	141	168
Total other current liabilities	$ 723	$ 1,432

Other long-term liabilities as of December 31, 2020 and 2019 are detailed below:

	December 31,	
	2020	2019
	($ in millions)	
VPP deferred revenue[(a)]	$ —	$ 9
Other	5	116
Total other long-term liabilities	$ 5	$ 125

(a) At the inception of our volumetric production payment (VPP) agreements, we (i) removed the proved reserves associated with the VPP, (ii) recognized VPP proceeds as deferred revenue, which were being amortized on a unit-of-production basis to other revenue over the term of the VPP, (iii) retained responsibility for the production costs and capital costs related to VPP interests and (iv) ceased recognizing production associated with the VPP volumes. In 2020, we sold the assets related to our remaining VPP and extinguished the liability related to our production volume delivery obligation.

8. Leases

We are a lessee under various agreements for compressors, drilling rigs, vehicles and other equipment. As of December 31, 2020, these leases have remaining terms ranging from one month to three years. Certain of our lease agreements include options to renew the lease, terminate the lease early or purchase the underlying asset at the end of the lease. We determine the lease term at the lease commencement date as the non-cancelable period of the lease, including options to extend or terminate the lease when we are reasonably certain to exercise the option. The company's vehicles are the only leases with renewal options that we are reasonably certain to exercise. The renewals are reflected in the ROU asset and lease liability balances.

Our operating ROU assets are included in other long-term assets while operating lease liabilities are included in other current and other long-term liabilities on the consolidated balance sheet. Finance ROU assets are reflected in total property and equipment, net, while finance lease liabilities are included in other current and other long-term liabilities on the consolidated balance sheet.

On February 1, 2019, we acquired WildHorse and, as part of the purchase price allocation, we recognized additional operating lease liabilities of $40 million, a related ROU asset of $38 million, and lease incentives of $2 million related to two office space leases, a long-term hydraulic fracturing agreement and other equipment leases. Regarding our long-term hydraulic fracturing agreements, we made a policy election to treat both lease and non-lease components as a single lease component. All of these acquired leases were approved for rejection during our bankruptcy process and subsequently removed from our balance sheet.

In 2018, we sold our wholly owned subsidiary, Midcon Compression, L.L.C., to a third party and subsequently leased back certain natural gas compressors for 38 months. The lease is accounted for as a finance lease liability.

The following table presents our ROU assets and lease liabilities as of December 31, 2020 and 2019.

	Years Ended December 31,			
	2020		2019	
	Finance	Operating	Finance	Operating
	($ in millions)			
ROU assets	$ 9	$ 29	$ 17	$ 22
Lease liabilities:				
Current lease liabilities	$ 9	$ 27	$ 9	$ 9
Long-term lease liabilities	—	2	9	16
Total lease liabilities	9	29	18	25
Less amounts reclassified to liabilities subject to compromise	(9)	(5)	—	—
Total lease liabilities, net	$ —	$ 24	$ 18	$ 25

Additional information for the Company's operating and finance leases is presented below:

	Years Ended December 31,	
	2020	2019
Lease cost:	($ in millions)	
Amortization of ROU assets	$ 9	$ 8
Interest on lease liability	1	2
Finance lease cost	10	10
Operating lease cost	17	26
Short-term lease cost	32	112
Total lease cost	$ 59	$ 148
Other information:		
Operating cash outflows from finance lease	$ 1	$ 2
Operating cash outflows from operating leases	$ 9	$ 11
Investing cash outflows from operating leases	$ 40	$ 127
Financing cash outflows from finance lease	$ 9	$ 8

	December 31,	
	2020	2019
Weighted average remaining lease term - finance lease	1.00 year	2.00 years
Weighted average remaining lease term - operating leases	1.12 years	4.65 years
Weighted average discount rate - finance lease	7.50 %	7.50 %
Weighted average discount rate - operating leases	6.46 %	4.85 %

Maturity analysis of finance lease liabilities and operating lease liabilities are presented below:

	December 31, 2020	
	Finance Lease	Operating Leases
	($ in millions)	
2021	$ 10	$ 28
2022	—	2
Total lease payments	10	30
Less imputed interest	(1)	(1)
Present value of lease liabilities	9	29
Less current maturities	(9)	(27)
Present value of lease liabilities, less current maturities	$ —	$ 2

9. Revenue Recognition

The following table shows revenue disaggregated by operating area and product type, for the years ended December 31, 2020, 2019 and 2018:

	Year Ended December 31, 2020			
	Oil	Natural Gas	NGL	Total
	($ in millions)			
Marcellus	$ —	$ 631	$ —	$ 631
Haynesville	—	362	—	362
Eagle Ford	717	113	84	914
Brazos Valley	485	16	13	514
Powder River Basin	170	41	20	231
Mid-Continent	55	25	13	93
Revenue from contracts with customers	1,427	1,188	130	2,745
Gains on oil, natural gas and NGL derivatives	554	42	—	596
Oil, natural gas and NGL revenue	$ 1,981	$ 1,230	$ 130	$ 3,341
Marketing revenue from contracts with customers	$ 1,195	$ 494	$ 110	$ 1,799
Other marketing revenue	67	3	—	70
Marketing revenue	$ 1,262	$ 497	$ 110	$ 1,869

	Year Ended December 31, 2019			
	Oil	Natural Gas	NGL	Total
	($ in millions)			
Marcellus	$ —	$ 856	$ —	$ 856
Haynesville	—	620	—	620
Eagle Ford	1,289	153	119	1,561
Brazos Valley	721	32	16	769
Powder River Basin	369	77	32	478
Mid-Continent	164	44	25	233
Revenue from contracts with customers	2,543	1,782	192	4,517
Gains (losses) on oil, natural gas and NGL derivatives	(212)	217	—	5
Oil, natural gas and NGL revenue	$ 2,331	$ 1,999	$ 192	$ 4,522
Marketing revenue from contracts with customers	$ 2,473	$ 900	$ 246	$ 3,619
Other marketing revenue	311	41	—	352
Losses on marketing derivatives	—	(4)	—	(4)
Marketing revenue	$ 2,784	$ 937	$ 246	$ 3,967

	Year Ended December 31, 2018			
	Oil	Natural Gas	NGL	Total
	($ in millions)			
Marcellus	$ —	$ 924	$ —	$ 924
Haynesville	2	836	—	838
Eagle Ford	1,514	173	185	1,872
Powder River Basin	244	68	38	350
Mid-Continent	246	84	55	385
Utica	195	401	224	820
Revenue from contracts with customers	2,201	2,486	502	5,189
Gains (losses) on oil, natural gas and NGL derivatives	124	(147)	(11)	(34)
Oil, natural gas and NGL revenue	$ 2,325	$ 2,339	$ 491	$ 5,155
Marketing revenue from contracts with customers	$ 2,740	$ 1,194	$ 456	$ 4,390
Other marketing revenue	457	222	—	679
Gains on marketing derivatives	—	7	—	7
Marketing revenue	$ 3,197	$ 1,423	$ 456	$ 5,076

Accounts Receivable

Accounts receivable as of December 31, 2020 and 2019 are detailed below:

	December 31,	
	2020	2019
	($ in millions)	
Oil, natural gas and NGL sales	$ 589	$ 737
Joint interest billings	119	200
Other	68	74
Allowance for doubtful accounts	(30)	(21)
Total accounts receivable, net	$ 746	$ 990

10. Income Taxes

The components of the income tax expense (benefit) for each of the periods presented below are as follows:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Current			
Federal	$ (3)	$ —	$ —
State	(6)	(26)	—
Current Income Taxes	(9)	(26)	—
Deferred			
Federal	—	(297)	3
State	(10)	(8)	(13)
Deferred Income Taxes	(10)	(305)	(10)
Total	$ (19)	$ (331)	$ (10)

The income tax expense (benefit) reported in our consolidated statement of operations is different from the federal income tax expense (benefit) computed using the federal statutory rate for the following reasons:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Income tax expense (benefit) at the federal statutory rate of 21%	$ (2,051)	$ (134)	$ 45
State income taxes (net of federal income tax benefit)	(41)	(21)	27
Partial release of valuation allowance due to the WildHorse Merger	—	(314)	—
Change in valuation allowance excluding impact of WildHorse Merger	2,010	114	(97)
Reorganization items	41	—	—
Equity-based compensation (non-officer)	10	4	4
Officer compensation limited under Section 162(m)	9	3	5
Other	3	17	6
Total	$ (19)	$ (331)	$ (10)

We applied the guidance in Staff Accounting Bulletin 118 when accounting for the enactment-date effect of the tax reform legislation commonly known as the Tax Cuts and Jobs Act, which was signed into law on December 22, 2017 (the “Tax Act”). At December 31, 2017, we had not completed our accounting for all of the enactment-date income tax effects of the Tax Act under ASC 740, Income Taxes, for certain items as we were waiting on additional guidance to be issued. At December 31, 2018, we had completed our accounting for all of the enactment-date income tax effects of the Tax Act. The adjustments made during 2018 were considered immaterial but nevertheless are included as a component of income tax expense (benefit) in our consolidated statement of operations for the year ended December 31, 2018, which is fully offset with an adjustment to the valuation allowance against our net deferred tax asset position.

We reassessed the realizability of our deferred tax assets and continue to maintain a full valuation allowance against our net deferred tax asset positions for federal and state purposes. Of the net increase in our valuation allowance, $2.010 billion is reflected as a component of income tax expense in our consolidated statement of operations for the year ended December 31, 2020.

Deferred income taxes are provided to reflect temporary differences in the tax basis of assets and liabilities and their reported amounts in the financial statements. The tax-effected temporary differences, net operating loss

(NOL) carryforwards and disallowed business interest carryforwards that comprise our deferred income taxes are as follows:

	December 31,	
	2020	2019
	($ in millions)	
Deferred tax liabilities:		
Property, plant and equipment	$ —	$ (546)
Volumetric production payments	—	(89)
Derivative instruments	—	(14)
Other	(3)	(5)
Deferred tax liabilities	(3)	(654)
Deferred tax assets:		
Property, plant and equipment	907	—
Net operating loss carryforwards	2,066	1,971
Carrying value of debt	48	169
Disallowed business interest carryforward	293	25
Asset retirement obligations	34	50
Investments	71	83
Accrued liabilities	288	64
Derivative instruments	53	—
Other	51	87
Deferred tax assets	3,811	2,449
Valuation allowance	(3,808)	(1,805)
Deferred tax assets after valuation allowance	3	644
Net deferred tax liability	$ —	$ (10)

As of December 31, 2020, we had federal NOL carryforwards of approximately $7.803 billion and state NOL carryforwards of approximately $7.784 billion. The associated deferred tax assets related to these federal and state NOL carryforwards were $1.639 billion and $427 million, respectively. The federal NOL carryforwards generated in tax years prior to 2018 expire in 2036 and 2037. As a result of the Tax Act, the 2018 through 2020 federal NOL carryforwards have no expiration. The value of all of these carryforwards depends on our ability to generate future taxable income.

As of December 31, 2020, and 2019, we had deferred tax assets of $3.811 billion and $2.449 billion upon which we had a valuation allowance of $3.808 billion and $1.805 billion, respectively. Of the net change in the valuation allowance of $2.003 billion for both federal and state deferred tax assets, $2.010 billion is reflected as a component of income tax benefit in the consolidated statement of operations and the difference is reflected in components of stockholders' equity.

A valuation allowance against deferred tax assets, including NOL carryforwards and disallowed business interest carryforwards, is recognized when it is more likely than not that all or some portion of the benefit from the deferred tax assets will not be realized. To assess that likelihood, we use estimates and judgment regarding our future taxable income, and we consider the tax consequences in the jurisdiction where such taxable income is generated, to determine whether a valuation allowance is required. Such evidence can include our current financial position, our results of operations, both actual and forecasted, the reversal of existing taxable temporary differences, tax planning strategies, as well as the current and forecasted business economics of our industry. Management assesses all available evidence, both positive and negative, to estimate whether sufficient future taxable income will be generated to permit the use of deferred tax assets. A significant piece of objectively verifiable negative evidence is the cumulative loss incurred over the three-year period ended December 31, 2020. Such objective negative evidence limits our ability to consider various forms of subjective positive evidence, such as any projections for future income. Accordingly, management has not changed its judgment for the period ended December 31, 2020 with respect to the need for a full valuation allowance against our net deferred tax asset positions for federal and state purposes. The amount of the deferred tax assets considered realizable could be adjusted if projections of future taxable income are increased and/or if objective negative evidence in the form of cumulative losses is no longer present. Should we achieve a level of sustained profitability, consideration will need to be given to future projections of taxable income to determine whether such projections provide an adequate source of taxable income for the realization of our deferred tax assets, namely federal NOL carryforwards and disallowed business interest carryforwards. If so, then all or a portion of the valuation allowance could possibly be released.

On February 1, 2019, we completed the acquisition of WildHorse. For federal income tax purposes, the transaction qualified as a tax-free merger under Section 368 of the Code and, as a result, we acquired carryover tax basis in WildHorse's assets and liabilities. We recorded a net deferred tax liability of $314 million as part of the business combination accounting for WildHorse. As a consequence of maintaining a full valuation allowance against our net deferred tax asset positions (federal and state), a partial release of the valuation allowance was recorded as a discrete income tax benefit of $314 million through the consolidated statement of operations in the first quarter of 2019. The net deferred tax liability determined through business combination accounting includes deferred tax liabilities on plant, property and equipment and prepaid compensation totaling $401 million, partially offset by deferred tax assets totaling $87 million relating to federal NOL carryforwards, disallowed business interest carryforwards and certain other deferred tax assets. These carryforwards will be subject to an annual limitation under Section 382 of the Code of approximately $61 million. We determined that no separate valuation allowances were required to be established through business combination accounting against any of the individual deferred tax assets acquired.

Our ability to utilize NOL carryforwards, disallowed business interest carryforwards, tax credits and possibly other tax attributes to reduce future taxable income and federal income tax is subject to various limitations under Section 382 of the Code. The utilization of such attributes may be subject to an annual limitation under Section 382 of the Code should transactions involving our equity result in a cumulative shift of more than 50% in the beneficial ownership of our stock during any three-year testing period (an "Ownership Change"). For this purpose, "stock" includes certain preferred stock. The annual limitation is generally equal to the product of (a) the fair market value of our equity immediately before the Ownership Change (*i.e.*, the value of the old loss corporation) multiplied by (b) the long-term tax-exempt rate in effect for the month in which an Ownership Change occurs. If we are in a net unrealized built-in gain position at the time of an Ownership Change, then the limitation is increased by each year's recognized built-in gains occurring within a five-year period following the Ownership Change, but only to the extent of the net unrealized built-in gain which existed at the time of the Ownership Change. However, proposed regulations issued on September 10, 2019, and on January 14, 2020, under Section 382(h) of the Code (the "Proposed Regulations") would, if finalized in their present form, limit the potential increases to the annual limitation amount for certain built-in gains existing at the time of an Ownership Change, (unless the transition relief provisions of the Proposed Regulations are applicable), thereby possibly reducing the ability to utilize tax attributes significantly. If we are in a net unrealized built-in loss position at the time of an Ownership Change, then the limitation may apply to tax attributes other than just NOL carryforwards, disallowed business interest carryforwards and tax credits, such as tax depreciation, depletion and amortization. Some states impose similar limitations on tax attribute utilization upon experiencing an Ownership Change.

As of December 31, 2020, we do not believe that an Ownership Change had occurred that would subject us to an annual limitation on the utilization of our NOL carryforwards, disallowed business interest carryforwards, tax credits and possibly other tax attributes although our cumulative shift continues to be at a level greater than 40%.

Therefore, with the exception of the NOL carryforwards and disallowed business interest carryforwards acquired upon the WildHorse Merger, we do not believe we had a limitation on the ability to utilize our carryforwards and other tax attributes under Section 382 of the Code as of December 31, 2020. However, upon emergence from bankruptcy on February 9, 2021, the Company did experience an Ownership Change. If the old loss corporation is under the jurisdiction of the court in a case under Title 11 of the United States Code, then the annual limitation generally is based on the post-emergence fair market value of the equity of the new loss corporation as opposed to the fair market value of the equity of the old loss corporation. As such, an annual limitation will be computed based on the fair market value of the new equity immediately after emergence and will pertain to the post-emergence utilization of NOL carryforwards, disallowed business interest carryforwards and tax credits existing at the time of emergence.

Accounting guidance for recognizing and measuring uncertain tax positions requires a more likely than not threshold condition be met on a tax position, based solely on the technical merits of being sustained, before any benefit of the tax position can be recognized in the financial statements. Guidance is also provided regarding de-recognition, classification and disclosure of uncertain tax positions. As of December 31, 2020, and 2019, the amount of unrecognized tax benefits related to NOL carryforwards and tax liabilities associated with uncertain tax positions was $74 million for both years. For both 2020 and 2019, $29 million is related to state tax receivables not expected to be recovered and the remainder is related to NOL carryforwards. If recognized, $29 million of the uncertain tax positions identified would have an effect on the effective tax rate. No material changes to the current uncertain tax positions are expected within the next 12 months. As of December 31, 2020, and 2019, we had no amounts accrued for interest related to these uncertain tax positions. We recognize interest related to uncertain tax positions as a component of interest expense. Penalties, if any, related to uncertain tax positions would be recorded in other expenses.

A reconciliation of the beginning and ending balances of unrecognized tax benefits is as follows:

	2020	2019	2018
		($ in millions)	
Unrecognized tax benefits at beginning of period	$ 74	$ 79	$ 106
Additions based on tax positions related to the current year	—	—	—
Additions to tax positions of prior years	—	27	—
Settlements	—	(32)	—
Expiration of the applicable statute of limitations	—	—	(23)
Reductions to tax positions of prior years	—	—	(4)
Unrecognized tax benefits at end of period	$ 74	$ 74	$ 79

Our federal and state income tax returns are subject to examination by federal and state tax authorities. Notification was received from the IRS during February 2021 that the examination of the WildHorse 2017 federal income tax return has been closed as a no-change audit. Further, the IRS has concluded the fieldwork relating to our 2016 federal income tax return with no changes proposed. Our tax years 2017 through 2019 remain open for all purposes of examination by the IRS as do the WildHorse 2018 federal income tax return and the WildHorse short period return for January 1, 2019, through February 1, 2019. However, certain earlier tax years remain open for adjustment to the extent of their NOL carryforwards available for future utilization.

In addition, tax years 2017 through 2019 as well as certain earlier years remain open for examination by state tax authorities. Currently, several state examinations are in progress of various years. We do not anticipate that the outcome of any federal or state audit will have a significant impact on our financial position or results of operations.

11. Equity

Chapter 11 Proceedings

Upon our emergence from Chapter 11 on February 9, 2021, as discussed in Note 2, our then-authorized common stock and preferred stock were canceled and released under the Plan without receiving any recovery on account thereof.

Pre-Emergence Equity

Common Stock. A summary of the changes in our common shares issued for the years ended December 31, 2020, 2019 and 2018 is detailed below:

	Years Ended December 31,		
	2020	2019	2018
	(in thousands)		
Shares issued as of January 1[(a)]	9,773	4,568	4,543
Common shares issued for WildHorse Merger[(a)(b)]	—	3,587	—
Exchange of senior notes[(a)(c)]	—	1,178	—
Exchange of convertible notes[(a)(c)]	—	367	—
Exchange of preferred stock[(a)]	—	52	—
Restricted stock issuances (net of forfeitures and cancellations)[(a)(d)]	8	21	25
Shares issued as of December 31[(a)]	9,781	9,773	4,568

(a) All share information has been retroactively adjusted to reflect the 1-for-200 (1:200) reverse stock split effective April 14, 2020. See below for additional information.

(b) See Note 3 for discussion of WildHorse Merger.

(c) See Note 5 for discussion of debt exchanges.

(d) See Note 12 for discussion of restricted stock.

Reverse Stock Split. On April 13, 2020, our board of directors and our shareholders approved a 1-for-200 (1:200) reverse stock split of our common stock and a reduction of the total number of authorized shares of our common stock as determined by a formula based on two-thirds of the reverse stock split ratio. The reverse stock split became effective as of the close of business on April 14, 2020. Our common stock began trading on a split-adjusted basis on the NYSE at the market open on April 15, 2020. The par value of the common stock was not adjusted as a result of the reverse stock split.

The reverse stock split was intended to, among other things, increase the per share trading price of our common stock to satisfy the $1.00 minimum per share closing price requirement for continued listing on the NYSE. As a result of the reverse stock split, each 200 pre-split shares of common stock outstanding were automatically combined into one issued and outstanding share of common stock. The fractional shares that resulted from the reverse stock split were canceled by paying cash in lieu of the fair value. The number of outstanding shares of common stock was reduced from approximately 1.957 billion as of April 10, 2020 to approximately 9.784 million shares (without giving effect to the liquidation of fractional shares). The total number of shares of common stock that we are authorized to issue was reduced from 3,000,000,000 to 22,500,000 shares. All share and per share amounts in the accompanying consolidated financial statements and notes thereto were retroactively adjusted for all periods presented to give effect to this reverse stock split, including reclassifying an amount equal to the reduction in par value of our common stock to additional paid-in capital.

During the year ended December 31, 2019, our shareholders approved a proposal to amend our restated certificate of incorporation to increase the number of authorized shares of our common stock from 15,000,000 shares to 22,500,000 shares, adjusted for our reverse stock split.

Cancellation of Rights Plan

On April 23, 2020, our Board of Directors declared a dividend of one Right payable on May 4, 2020 for each share of our common stock outstanding on May 4, 2020 to the shareholders of record on that date (the "Rights"). In connection with the distribution of the Rights, we entered into a Rights Agreement with Computershare Trust Company, N.A., as rights agent (the "Rights Agreement"). Each Right entitles the registered holder to purchase from us Preferred Shares.

The Rights Agreement was intended to protect value by preserving our ability to use our tax attributes to offset potential future income taxes for federal income tax purposes. Our ability to use our tax attributes would have been substantially limited if we had experienced an ownership change under Section 382 of the Code prior to emergence from bankruptcy on February 9, 2021. The Rights Agreement reduced the likelihood of an ownership change by deterring any person or group of affiliated or associated persons from acquiring beneficial ownership of 4.9% or more of the outstanding shares of our common stock.

In connection with the adoption of the Rights Agreement the Company filed a Certificate of Designations of Series B Preferred Stock with the Secretary of State of the State of Oklahoma setting forth the rights, powers, and preferences of the Series B Preferred Stock issuable upon exercise of the Rights (the "Preferred Shares"). On the Plan Effective Date, the Company filed a Certificate of Elimination with the Secretary of State of the State of Oklahoma eliminating the Preferred Shares and returning them to authorized but undesignated shares of the Company's preferred stock. The foregoing is a summary of the terms of the Certificate of Elimination. The summary does not purport to be complete and is qualified in its entirety by reference to the Certificate of Elimination.

Preferred Stock. Following is a summary of our preferred stock, including the primary conversion terms as of December 31, 2020:

Preferred Stock Series	Issue Date	Liquidation Preference per Share	Holder's Conversion Right	Conversion Rate	Conversion Price	Company's Conversion Right From	Company's Market Conversion Trigger[(a)]
5.75% cumulative convertible non-voting	May and June 2010	$ 1,000	Any time	0.1984	$ 5,039.59	May 17, 2015	$ 6,551.46
5.75% (series A) cumulative convertible non-voting	May 2010	$ 1,000	Any time	0.1918	$ 5,215.02	May 17, 2015	$ 6,779.52
4.50% cumulative convertible	September 2005	$ 100	Any time	0.0123	$ 8,142.99	September 15, 2010	$ 10,585.89
5.00% cumulative convertible (series 2005B)	November 2005	$ 100	Any time	0.0139	$ 7,208.51	November 15, 2010	$ 9,371.06

(a) Convertible at the Company's option if the trading price of the Company's common stock equals or exceeds the trigger price for a specified time period or after the applicable conversion date if there are less than 250,000 shares of 4.50% or 5.00% (Series 2005B) preferred stock outstanding or 25,000 shares of 5.75% or 5.75% (Series A) preferred stock outstanding.

Outstanding shares of our preferred stock for the years ended December 31, 2020, 2019 and 2018 are detailed below:

	5.75%	5.75% (Series A)	4.50%	5.00% (Series 2005B)
	(in thousands)			
Shares outstanding as of January 1, 2020 and December 31, 2020	770	423	2,559	1,811
Shares outstanding as of January 1, 2019	770	463	2,559	1,811
Preferred stock exchanges[(a)]	—	(40)	—	—
Shares outstanding as of December 31, 2019	770	423	2,559	1,811
Shares outstanding as of January 1, 2018 and December 31, 2018	770	463	2,559	1,811

(a) During 2019, we exchanged 51,839 shares of common stock for 40,000 shares of our 5.75% (Series A) Cumulative Convertible Preferred Stock. In connection with the exchange, we recognized a loss equal to the excess of the fair value of all common stock issued in exchange for the preferred stock over the fair value of the common stock issuable pursuant to the original terms of the preferred stock. The loss of $17 million is reflected as a reduction to net income available to common stockholders for the purpose of calculating earnings per common share.

Dividends. Dividends declared on our preferred stock are reflected as adjustments to retained earnings to the extent a surplus of retained earnings exists after giving effect to the dividends. To the extent retained earnings are insufficient to fund the distributions, payments are reflected in our financial statements as a return of contributed capital rather than earnings and are accounted for as a reduction to paid-in capital.

Dividends on our outstanding preferred stock are payable quarterly. We may pay dividends on our 5.00% Cumulative Convertible Preferred Stock (Series 2005B) and our 4.50% Cumulative Convertible Preferred Stock in cash, common stock or a combination thereof, at our option. Dividends on both series of our 5.75% Cumulative Convertible Non-Voting Preferred Stock are payable only in cash.

On April 17, 2020, we announced that we were suspending payment of dividends on each series of our outstanding convertible preferred stock, and were therefore currently in arrears on such dividend payments as of December 31, 2020. Suspension of the dividends did not constitute an event of default under any of our debt instruments. No dividends have been accrued on our convertible preferred stock subsequent to the Petition Date. Pursuant to the Plan, each holder of an equity interest in Chesapeake had such interest canceled, released and extinguished without any distribution. See Note 2 for additional information about the Chapter 11 Cases.

Accumulated Other Comprehensive Income (Loss). For the years ended December 31, 2020 and 2019, changes in accumulated other comprehensive income (loss) for cash flow hedges, net of tax, are detailed below:

	Years Ended December 31,	
	2020	2019
	($ in millions)	
Balance, as of January 1	$ 12	$ (23)
Amounts reclassified from accumulated other comprehensive income[(a)]	33	35
Balance, as of December 31	$ 45	$ 12

(a) Net losses on cash flow hedges for commodity contracts reclassified from accumulated other comprehensive income (loss), net of tax, to oil, natural gas and NGL revenues in the consolidated statements of operations.

Noncontrolling Interests. We owned 23,750,000 common units in the Chesapeake Granite Wash Trust (the "Trust") representing a 51% beneficial interest. We determined that the Trust was a VIE and that we were the primary beneficiary. As a result, the Trust was included in our consolidated financial statements. In 2020, we sold our interests in the Mid-Continent operating area and the units we owned in the Trust. See Note 3 for additional discussion.

The Trust's legal existence was separate from Chesapeake and our other consolidated subsidiaries, and the Trust was not a guarantor of any of Chesapeake's debt. The creditors or beneficial holders of the Trust had no recourse to the general credit of Chesapeake. We presented parenthetically on the face of the consolidated balance sheets the assets of the Trust that could be used only to settle obligations of the Trust and the liabilities of the Trust for which creditors did not have recourse to the general credit of Chesapeake.

Post-Emergence Equity

New Common Stock. As discussed in Note 2, on the Effective Date, we issued an aggregate of approximately 97.9 million shares of New Common Stock, par value $0.01 per share, to the holders of allowed claims, as defined in the Plan, and approximately 2.1 million shares of New Common Stock were reserved for future distributions under the Plan.

*Warrants. A*s discussed in Note 2, on the Emergence Date, we issued approximately 11.1 million Class A Warrants, 12.3 million Class B Warrants and 13.7 million Class C Warrants that are initially exercisable for one share of New Common Stock per Warrant at initial exercise prices of $27.63, $32.13 and $36.18 per share, respectively, subject to adjustments pursuant to the terms of the warrants. The warrants are exercisable from the Emergence Date until February 9, 2026. The warrants contain customary anti-dilution adjustments in the event of any stock split, reverse stock split, reclassification, stock dividend or other distributions.

12. Share-Based Compensation

Our share-based compensation program has consisted of restricted stock, stock options, performance share units (PSUs) and cash restricted stock units (CRSUs) granted to employees and restricted stock granted to non-employee directors under our Long Term Incentive Plan. The restricted stock and stock options were equity-classified awards and the PSUs and CRSUs were liability-classified awards.

Chapter 11 Proceedings

As discussed in Note 2, on the Effective Date, our current common stock was canceled and New Common Stock was issued. Accordingly, our then existing share-based compensation awards were also canceled, which resulted in the recognition of any previously unamortized expense related to the canceled awards on the date of cancellation.

Share-Based Compensation Plans

2014 Long Term Incentive Plan. Our 2014 Long Term Incentive Plan (2014 LTIP), which is administered by the Compensation Committee of our Board of Directors, became effective on June 13, 2014 after it was approved by shareholders at our 2014 Annual Meeting. The 2014 LTIP replaced our Amended and Restated Long Term Incentive Plan which was adopted in 2005. The 2014 LTIP provides for up to 358,000 reverse stock split adjusted shares of common stock that may be issued as long-term incentive compensation to our employees and non-employee directors. The 2014 LTIP authorizes the issuance of the following types of awards: (i) nonqualified and incentive stock options; (ii) SARs; (iii) restricted stock; (iv) performance awards, including PSUs; and (v) other stock-based awards. As of December 31, 2020, 474,123 reverse stock split adjusted shares of common stock remained issuable under the 2014 LTIP.

Equity-Classified Awards

Restricted Stock. We grant restricted stock to employees and non-employee directors. A summary of the changes in unvested restricted stock during 2020, 2019 and 2018 is presented below:

	Shares of Unvested Restricted Stock[(a)]	Weighted Average Grant Date Fair Value[(a)]
	(in thousands)	
Unvested restricted stock as of January 1, 2020	52	$ 710
Granted	68	$ 60
Vested	(21)	$ 792
Forfeited	(98)	$ 243
Unvested restricted stock as of December 31, 2020	1	$ 617
Unvested restricted stock as of January 1, 2019	59	$ 886
Granted	30	$ 530
Vested	(30)	$ 876
Forfeited	(7)	$ 744
Unvested restricted stock as of December 31, 2019	52	$ 710
Unvested restricted stock as of January 1, 2018	66	$ 1,274
Granted	30	$ 746
Vested	(29)	$ 1,534
Forfeited	(8)	$ 1,204
Unvested restricted stock as of December 31, 2018	59	$ 886

(a) Amount has been retroactively adjusted to reflect a 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

The aggregate intrinsic value of restricted stock that vested during 2020 was approximately $1 million based on the stock price at the time of vesting.

Stock Options. In 2020, 2019 and 2018, we granted members of management stock options that vest ratably over a three-year period. Each stock option award has an exercise price equal to the closing price of our common stock on the grant date. Outstanding options expire seven years to ten years from the date of grant.

We utilize the Black-Scholes option pricing model to measure the fair value of stock options. The expected life of an option is determined using the simplified method. Volatility assumptions are estimated based on the average of historical volatility of Chesapeake stock over the expected life of an option. The risk-free interest rate is based on the U.S. Treasury rate in effect at the time of the grant over the expected life of the option. The dividend yield is based on an annual dividend yield, taking into account our dividend policy, over the expected life of the option. We used the following weighted average assumptions to estimate the grant date fair value of the stock options granted in 2019:

Expected option life – years	6.0
Volatility	65.61 %
Risk-free interest rate	2.47 %
Dividend yield	— %

The following table provides information related to stock option activity for 2020, 2019 and 2018:

	Number of Shares Underlying Options	Weighted Average Exercise Price Per Share	Weighted Average Contract Life in Years	Aggregate Intrinsic Value[(a)]
	(in thousands)			($ in millions)
Outstanding as of January 1, 2020	90	$ 1,420	5.70	$ —
Granted	—	$ —		
Exercised	—	$ —		$ —
Expired	(23)	$ 915		
Forfeited	(47)	$ 1,666		
Outstanding as of December 31, 2020	20	$ 1,429	4.27	$ —
Exercisable as of December 31, 2020	19	$ 1,440	4.35	$ —
Outstanding as of January 1, 2019	90	$ 1,440	7.15	$ —
Granted	5	$ 594		
Exercised	—	$ —		$ —
Expired	(2)	$ 1,272		
Forfeited	(3)	$ 794		
Outstanding as of December 31, 2019	90	$ 1,420	5.70	$ —
Exercisable as of December 31, 2019	65	$ 1,656	4.86	$ —
Outstanding as of January 1, 2018	81	$ 1,650	7.73	$ 1
Granted	18	$ 602		
Exercised	—	$ —		$ —
Expired	(3)	$ 2,766		
Forfeited	(6)	$ 1,090		
Outstanding as of December 31, 2018	90	$ 1,440	7.15	$ —
Exercisable as of December 31, 2018	41	$ 2,146	5.73	$ —

(a) The intrinsic value of a stock option is the amount by which the current market value or the market value upon exercise of the underlying stock exceeds the exercise price of the option.

Restricted Stock and Stock Option Compensation. We recognized the following compensation costs, net of actual forfeitures, related to restricted stock and stock options for the years ended December 31, 2020, 2019 and 2018:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
General and administrative expenses	$ 20	$ 26	$ 31
Oil and natural gas properties	1	2	2
Oil, natural gas and NGL production expenses	1	3	5
Exploration expenses	—	1	1
Total restricted stock and stock option compensation	$ 22	$ 32	$ 39

Liability-Classified Awards

Performance Share Units. In 2019, we granted PSUs to senior management that vest ratably over a three-year performance period and are settled in cash. The ultimate amount earned is based on achievement of performance metrics established by the Compensation Committee of the Board of Directors. Compensation expense associated with PSU awards is recognized over the service period based on the graded-vesting method. The value of the PSU awards at the end of each reporting period is dependent upon our estimates of the underlying performance measures.

Cash Restricted Stock Units. In 2018, we granted CRSUs to employees that vest straight-line over a three-year period and are settled in cash on each of the three annual vesting dates. The ultimate amount earned is based on the closing price of our common stock on each of the vesting dates. We used the closing price of our common stock on the grant date to determine the grant date fair value of the CRSUs. The CRSU liability will be adjusted quarterly, based on changes in our stock price, through the end of the vesting period.

The following table presents a summary of our liability-classified awards:

	Units[(a)]	Grant Date Fair Value	December 31, 2020	
			Fair Value	Vested Liability
		($ in millions)	($ in millions)	
2018 CRSU Awards:				
Payable 2021	13,351	$ 8	$ —	$ —

(a) Amount has been retroactively adjusted to reflect a 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

We recognized the following compensation costs (credits), net of actual forfeitures, related to our liability-classified awards for the years ended December 31, 2020, 2019 and 2018:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
General and administrative expenses	$ (3)	$ 5	$ 9
Oil and natural gas properties	—	1	1
Oil, natural gas and NGL production expenses	(1)	3	2
Separation and other termination costs	—	1	—
Total liability-classified awards compensation	$ (4)	$ 10	$ 12

2020 Compensation Adjustments

On May 5, 2020, all of the outstanding share-based compensation, including restricted stock, stock options, PSUs and CRSUs, granted to our executive officers and designated vice presidents was canceled and replaced with cash retention incentives. The cash retention incentives granted to executive officers are equally weighted between achievement of certain specified performance metrics and a service period. The cash retention incentives may be clawed back if an executive officer or vice president terminates employment for any reason other than a qualifying termination prior to the earlier of (i) the effective date of a plan of reorganization under Chapter 11 of the Bankruptcy Code or (ii) May 8, 2021. The transactions were considered a modification to the previously issued equity-classified awards. As such, the remaining unrecognized expense related to restricted stock and stock options will result in $18 million of share-based compensation expense to be amortized over the relevant service period of the new cash retention incentives. The $15 million after-tax fair value of the cash retention incentives was capitalized to other current assets in the consolidated balance sheets and will be amortized over the relevant service period. The difference between the cash and after-tax value of the cash retention incentives of approximately $10 million, which is not subject to the claw back provisions contained within the agreements, was expensed to general and administrative expenses in the consolidated statements of operations for the year ended December 31, 2020.

Post-Emergence Stock-Based Compensation

As of the Effective Date, the Board adopted the 2021 Long Term Incentive Plan (the 2021 LTIP) with a share reserve equal to 6,800,000 shares of New Common Stock. The 2021 LTIP provides for the grant of restricted stock units, restricted stock awards, stock options, stock appreciation rights, performance awards and other stock awards to the Company's employees and non-employee directors.

13. Employee Benefit Plans

Our qualified 401(k) profit sharing plan (401(k) Plan) is the Chesapeake Energy Corporation Savings and Incentive Stock Bonus Plan, which is open to employees of Chesapeake and all our subsidiaries. Eligible employees may elect to defer compensation through voluntary contributions to their 401(k) Plan accounts, subject to plan limits and those set by the IRS. We match employee contributions dollar for dollar (subject to a maximum contribution of 15% of an employee's base salary and performance bonus) in cash. We contributed $24 million, $29 million and $31 million to the 401(k) Plan in 2020, 2019 and 2018, respectively.

We also maintained a nonqualified deferred compensation plan (DC Plan) which we terminated in January 2020 in accordance with its terms. Accordingly, we derecognized the asset associated with the plan after the participants' investments were liquidated. The cash was distributed to the participants, and we extinguished the corresponding $43 million accrued liability.

14. Derivative and Hedging Activities

We use derivative instruments to reduce our exposure to fluctuations in future commodity prices and to protect our expected operating cash flow against significant market movements or volatility. All of our oil, natural gas and NGL derivative instruments are net settled based on the difference between the fixed-price payment and the floating-price payment, resulting in a net amount due to or from the counterparty. None of our open oil, natural gas and NGL derivative instruments were designated for hedge accounting as of December 31, 2020 and 2019.

Oil, Natural Gas and NGL Derivatives

As of December 31, 2020 and 2019, our oil, natural gas and NGL derivative instruments consisted of the following types of instruments:

- *Swaps*: We receive a fixed price and pay a floating market price to the counterparty for the hedged commodity. In exchange for higher fixed prices on certain of our swap trades, we may sell call options and call swaptions.
- *Options*: We sell, and occasionally buy, call options in exchange for a premium. At the time of settlement, if the market price exceeds the fixed price of the call option, we pay the counterparty the excess on sold call options and we receive the excess on bought call options. If the market price settles below the fixed price of the call option, no payment is due from either party.
- *Call Swaptions*: We sell call swaptions to counterparties in exchange for a premium. Swaptions allow the counterparty, on a specific date, to extend an existing fixed-price swap for a certain period of time or to increase the notional volumes of an existing fixed-price swap.
- *Collars*: These instruments contain a fixed floor price (put) and ceiling price (call). If the market price exceeds the call strike price or falls below the put strike price, we receive the fixed price and pay the market price. If the market price is between the put and the call strike prices, no payments are due from either party. Three-way collars include the sale by us of an additional put option in exchange for a more favorable strike price on the call option. This eliminates the counterparty's downside exposure below the second put option strike price.
- *Basis Protection Swaps*: These instruments are arrangements that guarantee a fixed price differential to NYMEX from a specified delivery point. We receive the fixed price differential and pay the floating market price differential to the counterparty for the hedged commodity.

The estimated fair values of our oil, natural gas and NGL derivative instrument assets (liabilities) as of December 31, 2020 and 2019 are provided below:

	December 31, 2020		December 31, 2019	
	Notional Volume	Fair Value	Notional Volume	Fair Value
		($ in millions)		($ in millions)
Oil (mmbbl):				
Fixed-price swaps	27	$ (136)	24	$ (7)
Collars	—	—	2	14
Basis protection swaps	7	(1)	8	(2)
Total oil	34	(137)	34	5
Natural gas (bcf):				
Fixed-price swaps	728	10	265	125
Collars	53	8	—	—
Call options (sold)	—	—	22	—
Call swaptions	—	—	29	(2)
Basis protection swaps	66	1	30	2
Total natural gas	847	19	346	125
Total estimated fair value		$ (118)		$ 130

We have terminated certain commodity derivative contracts that were previously designated as cash flow hedges for which the original contract months are yet to occur. See further discussion below under *Effect of Derivative Instruments – Accumulated Other Comprehensive Income (Loss)*.

Effect of Derivative Instruments – Consolidated Balance Sheets

The following table presents the fair value and location of each classification of derivative instrument included in the consolidated balance sheets as of December 31, 2020 and 2019 on a gross basis and after same-counterparty netting:

Balance Sheet Classification	Gross Fair Value	Amounts Netted in the Consolidated Balance Sheets	Net Fair Value Presented in the Consolidated Balance Sheets
		($ in millions)	
As of December 31, 2020			
Commodity Contracts:			
Short-term derivative asset	$ 84	$ (65)	$ 19
Long-term derivative asset	5	(5)	—
Short-term derivative liability	(158)	65	(93)
Long-term derivative liability	(49)	5	(44)
Total derivatives	$ (118)	$ —	$ (118)
As of December 31, 2019			
Commodity Contracts:			
Short-term derivative asset	$ 174	$ (40)	$ 134
Short-term derivative liability	(42)	40	(2)
Long-term derivative liability	(2)	—	(2)
Total derivatives	$ 130	$ —	$ 130

As of December 31, 2020 and 2019, we did not have any cash collateral balances for these derivatives.

Effect of Derivative Instruments – Consolidated Statements of Operations

The components of oil, natural gas and NGL revenues for the years ended December 31, 2020, 2019 and 2018 are presented below:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Oil, natural gas and NGL revenues	$ 2,745	$ 4,517	$ 5,189
Gains on undesignated oil, natural gas and NGL derivatives	629	40	—
Losses on terminated cash flow hedges	(33)	(35)	(34)
Total oil, natural gas and NGL revenues	$ 3,341	$ 4,522	$ 5,155

The components of marketing revenues for the years ended December 31, 2020, 2019 and 2018 are presented below:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Marketing revenues	$ 1,869	$ 3,971	$ 5,069
Gains (losses) on undesignated marketing natural gas derivatives	—	(4)	7
Total marketing revenues	$ 1,869	$ 3,967	$ 5,076

Effect of Derivative Instruments – Accumulated Other Comprehensive Income (Loss)

A reconciliation of the changes in accumulated other comprehensive income (loss) in our consolidated statements of stockholders' equity related to our cash flow hedges is presented below:

	Years Ended December 31,					
	2020		2019		2018	
	Before Tax	After Tax	Before Tax	After Tax	Before Tax	After Tax
	($ in millions)					
Balance, beginning of period	$ (45)	$ 12	$ (80)	$ (23)	$ (114)	$ (57)
Losses reclassified to income	33	33	35	35	34	34
Balance, end of period	$ (12)	$ 45	$ (45)	$ 12	$ (80)	$ (23)

The accumulated other comprehensive loss as of December 31, 2020 represents the net deferred loss associated with commodity derivative contracts that were previously designated as cash flow hedges for which the original contract months are yet to occur. Remaining deferred gain or loss amounts will be recognized in earnings in the month for which the original contract months are to occur. As we early adopted ASU 2019-12 in 2020, the tax effect will be recognized in earnings in the year ended December 31, 2022. As of December 31, 2020, we expect to transfer approximately $8 million of net loss included in accumulated other comprehensive income to net income (loss) during the next 12 months. The remaining amounts will be transferred by December 31, 2022.

Credit Risk Considerations

Our derivative instruments expose us to our counterparties' credit risk. To mitigate this risk, we enter into derivative contracts only with counterparties that are highly rated or deemed by us to have acceptable credit strength and deemed by management to be competent and competitive market-makers, and we attempt to limit our exposure to non-performance by any single counterparty. As of December 31, 2020, our oil, natural gas and NGL derivative instruments were spread among 7 counterparties.

Hedging Arrangements

Certain of our hedging arrangements are with counterparties that were also lenders (or affiliates of lenders) under our DIP Credit Facility. The contracts entered into with these counterparties are secured by the same collateral that secures the pre-petition revolving credit facility. The counterparties' obligations must be secured by cash or letters of credit to the extent that any mark-to-market amounts owed to us exceed defined thresholds.

Fair Value

The fair value of our derivatives is based on third-party pricing models which utilize inputs that are either readily available in the public market, such as oil, natural gas and NGL forward curves and discount rates, or can be corroborated from active markets or broker quotes. These values are compared to the values given by our counterparties for reasonableness. Since oil, natural gas and NGL swaps do not include optionality and therefore generally have no unobservable inputs, they are classified as Level 2. All other derivatives have some level of unobservable input, such as volatility curves, and are therefore classified as Level 3. Derivatives are also subject to the risk that either party to a contract will be unable to meet its obligations. We factor non-performance risk into the valuation of our derivatives using current published credit default swap rates. To date, this has not had a material impact on the values of our derivatives.

The following table provides information for financial assets (liabilities) measured at fair value on a recurring basis as of December 31, 2020 and 2019:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
		($ in millions)		
As of December 31, 2020				
Derivative Assets (Liabilities):				
Commodity assets	$ —	$ 78	$ 10	$ 88
Commodity liabilities	—	(204)	(2)	(206)
Total derivatives	$ —	$ (126)	$ 8	$ (118)
As of December 31, 2019				
Derivative Assets (Liabilities):				
Commodity assets	$ —	$ 160	$ 14	$ 174
Commodity liabilities	—	(42)	(2)	(44)
Total derivatives	$ —	$ 118	$ 12	$ 130

A summary of the changes in the fair values of our financial assets (liabilities) classified as Level 3 during 2020 and 2019 is presented below:

	Commodity Derivatives	Utica Contingent Consideration
	($ in millions)	
Balance, as of January 1, 2020	$ 12	$ —
Total gains (losses) (realized/unrealized):		
Included in earnings[(a)]	11	—
Total purchases, issuances, sales and settlements:		
Settlements	(15)	—
Balance, as of December 31, 2020	$ 8	$ —
Balance, as of January 1, 2019	$ 87	$ 7
Total gains (losses) (realized/unrealized):		
Included in earnings[(a)]	(59)	(7)
Total purchases, issuances, sales and settlements:		
Settlements	(16)	—
Balance, as of December 31, 2019	$ 12	$ —

(a)

	Commodity Derivatives		Utica Contingent Consideration	
	2020	2019	2020	2019
	($ in millions)			
Total gains (losses) included in earnings for the period	$ 11	$ (59)	$ —	$ (7)
Change in unrealized gains (losses) related to assets still held at reporting date	$ —	$ (19)	$ —	$ —

Qualitative and Quantitative Disclosures about Unobservable Inputs for Level 3 Fair Value Measurements

The significant unobservable inputs for Level 3 derivative contracts include market volatility. Changes in market volatility impact the fair value measurement of our derivative contracts, which is based on an estimate derived from option models. For example, an increase or decrease in the forward prices and volatility of oil and natural gas prices decreases or increases the fair value of oil and natural gas derivatives. The following table presents quantitative information about Level 3 inputs used in the fair value measurement of our commodity derivative contracts as of December 31, 2020:

Instrument Type	Unobservable Input	Range	Weighted Average	Fair Value December 31, 2020
				($ in millions)
Natural gas trades	Natural gas price volatility curves	24% – 71%	38%	$ 8

15. Capitalized Exploratory Well Costs

A summary of the changes in our capitalized well costs for the years ended December 31, 2020, 2019 and 2018 is detailed below. Additions pending the determination of proved reserves excludes amounts capitalized and subsequently charged to expense within the same year.

	Years Ended December 31,		
	2020	2019	2018
	(in millions)		
Balance as of January 1	$ 7	$ 36	$ 36
Additions pending the determination of proved reserves	—	7	74
Divestitures and other	—	(3)	—
Reclassifications to proved properties	—	(17)	(40)
Charges to exploration expense	(7)	(16)	(34)
Balance as of December 31	$ —	$ 7	$ 36

The following table provides an aging of capitalized costs and the number of projects for which exploratory well costs have been capitalized for a period greater than one year since the completion of drilling.

	2020	2019	2018
	(in millions)		
Exploratory well costs capitalized for a period of one year or less	$ —	$ 7	$ 34
Exploratory well costs capitalized for a period greater than one year	—	—	2
Balance as of December 31	$ —	$ 7	$ 36
Number of projects with exploratory well costs capitalized for a period greater than one year	—	—	7

16. Other Property and Equipment

Other Property and Equipment

A summary of other property and equipment held for use and the estimated useful lives thereof is as follows:

	December 31,		Estimated Useful Life
	2020	2019	
	($ in millions)		(in years)
Buildings and improvements	$ 1,038	$ 1,058	10 – 39
Computer equipment	356	355	5
Sand mine	81	78	10 – 30
Natural gas compressors[(a)]	36	48	3 – 20
Land	113	115	
Other	130	156	5 – 20
Total other property and equipment, at cost	1,754	1,810	
Less: accumulated depreciation	(799)	(692)	
Total other property and equipment, net	$ 955	$ 1,118	

(a) Includes assets under finance lease of $27 million, less accumulated depreciation of $18 million and $10 million, as of December 31, 2020 and 2019, respectively. The related amortization expense for assets under finance lease is included in depreciation, depletion and amortization expense on our consolidated statement of operations.

17. Investments

FTS International, Inc. (NYSE: FTSI). In 2018, FTS International, Inc. completed an initial public offering. Due to the offering, the ownership percentage of our equity method investment in FTSI decreased from approximately 29% to 24% and resulted in a gain of $78 million. In addition, we sold approximately 4.3 million shares of FTSI in the offering for net proceeds of approximately $74 million and recognized a gain of $61 million decreasing our ownership percentage to approximately 20%.

In 2019, the hydraulic fracturing industry experienced challenging operating conditions resulting in the current fair value of our investment in FTSI falling below book value of $65 million and remaining below that amount as of the end of the year. Based on FTSI's 2019 operating results and FTSI's share price of $1.04 per share as of December 31, 2019, we determined that the reduction in fair value is other-than-temporary, and recognized an impairment of our investment in FTSI of approximately $43 million.

In 2020, the hydraulic fracturing industry continued experiencing challenging operating conditions resulting in FTSI filing for Chapter 11 bankruptcy and we recognized an impairment of our entire investment of $23 million. FTSI emerged from bankruptcy on November 19, 2020 and this restructuring resulted in a reduction of the common stock we owned in FTSI from 20% to less than 2%. The decreased ownership percentage and the loss of significant influence required us to measure the investment at fair value as of December 31, 2020.

JWH Midstream LLC (JWH). In 2019, in connection with the acquisition of WildHorse, we obtained a 50% membership interest in JWH Midstream LLC (JWH). The carrying value of our investment in JWH, which was being accounted for as an equity method investment, was approximately $17 million. In 2019, we paid approximately $7 million to terminate our involvement in the partnership. This removed us from any future obligations related to this joint venture and, therefore, we impaired the full value of the investment and recognized approximately $24 million of impairment expense in 2019.

18. Impairments

Impairments of Oil and Natural Gas Properties

A summary of our impairments of oil and natural gas properties for the years ended December 31, 2020, 2019 and 2018 is as follows:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Impairments due to lower forecasted commodity prices	$ 8,446	$ 8	$ 23
Impairments due to anticipated sale	—	—	55
Total impairments of oil and natural gas properties	$ 8,446	$ 8	$ 78

During 2020, the decrease in demand for crude oil primarily due to the combined impacts of COVID-19 and the OPEC+ production increases resulted in decreases in current and expected long-term crude oil and NGL sale prices. These conditions resulted in reductions to the market capitalization of peer companies in the energy industry. We determined these adverse market conditions represented a triggering event to perform an impairment assessment of our long-lived assets used in, and in support of, our operations, including proved oil and gas properties, and our sand mine assets.

Proved Oil and Gas Properties

Our impairment test involved a Step 1 assessment to determine if the net book value of our proved oil and natural gas properties is expected to be recovered from the estimated undiscounted future cash flows.

- We calculated the expected undiscounted future net cash flows of our long-lived assets using management's assumptions and expectations of (i) commodity prices, which are based on the NYMEX strip pricing escalated by an inflationary rate after 2 years, (ii) pricing adjustments for differentials, (iii) operating costs, (iv) capital investment plans, (v) future production volumes, and (vi) estimated proved reserves.

- Unprecedented volatility in the price of oil due to the decrease in demand has led us to rely on NYMEX strip pricing, which represents a Level 1 input.

Certain oil and gas properties in our Eagle Ford, Brazos Valley, Powder River Basin, and Mid-Continent and other non-core operating areas failed the Step 1 assessment. For these assets, we used a discounted cash flow analysis to estimate fair value. The expected future net cash flows were discounted using a rate of 11%, which we believe represents the estimated weighted average cost of capital of a theoretical market participant. Based on Step 2 of our long-lived assets impairment test, we recognized an $8.446 billion impairment because the carrying value exceeded estimated fair market value as of March 31, 2020.

- Significant inputs associated with the calculation of discounted future net cash flows include estimates of (i) recoverable reserves, (ii) production rates, (iii) future operating and development costs, (iv) future commodity prices escalated by an inflationary rate after two years, adjusted for differentials, and (v) a market-based weighted average cost of capital. We utilized NYMEX strip pricing, adjusted for differentials, to value the reserves. The NYMEX strip pricing inputs used are classified as Level 1 fair value assumptions and all other inputs are classified as Level 3 fair value assumptions.

Impairments of Fixed Assets

A summary of our impairments of fixed assets by asset class and other charges for the years ended December 31, 2020, 2019 and 2018 is as follows:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Sand mine	$ 76	$ —	$ —
Natural gas compressors	13	—	45
Buildings and land	—	1	4
Other	—	2	4
Total impairments of fixed assets and other	$ 89	$ 3	$ 53

In 2020, we recorded a $76 million impairment of our sand mine assets that support our Brazos Valley operating area for the difference between the fair value and carrying value of the assets as well as a $13 million impairment of compressor inventory due to a lack of a current market for compressors. In 2018, we recorded a $45 million impairment related to 890 compressors for the difference between carrying value and the fair value of the assets.

19. Exploration Expense

A summary of our exploration expense for the years ended December 31, 2020, 2019 and 2018 is as follows:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Impairments of unproved properties	$ 411	$ 32	$ 59
Dry hole expense	7	25	37
Geological and geophysical expense and other	9	27	66
Exploration expense	$ 427	$ 84	$ 162

Unproved oil and natural gas properties are periodically assessed for impairment by considering future drilling and exploration plans, results of exploration activities, commodity price outlooks, planned future sales and expiration of all or a portion of the projects. The exploration expense charges during 2020 are primarily the result of non-cash impairment charges in unproved properties, primarily in our Brazos Valley, Haynesville, Powder River Basin and Mid-Continent operating areas. The decrease in geological and geophysical expense in 2019 and 2020 was due to fewer exploratory geological and geophyscial projects.

20. Other Operating Expense

In 2020, we terminated certain gathering, processing and transportation contracts and recognized a non-recurring $80 million expense related to the contract terminations. The contract terminations removed approximately $169 million of future commitments related to gathering, processing and transportation agreements.

In 2019, we recorded approximately $37 million of costs related to our acquisition of WildHorse which consisted of consulting fees, financial advisory fees, legal fees and travel and lodging expenses. In addition, we recorded approximately $38 million of severance expense as a result of the acquisition of WildHorse. A majority of the WildHorse executives and employees were terminated on the date of acquisition. These executives and employees were entitled to severance benefits in accordance with existing employment agreements.

21. Separation and Other Termination Costs

Workforce Reductions

In 2020, 2019 and 2018, we incurred charges of approximately $44 million, $12 million and $38 million related to one-time termination benefits for certain employees.

Subsequent to December 31, 2020, we reduced our workforce by 220 employees or approximately 15%, primarily in Oklahoma City and incurred charges of approximately $20 million.

22. Asset Retirement Obligations

The components of the change in our asset retirement obligations are shown below:

	Years Ended December 31,	
	2020	2019
	($ in millions)	
Asset retirement obligations, beginning of period	$ 211	$ 166
Additions[a]	1	21
Revisions	(14)	18
Settlements and disposals[b]	(66)	(5)
Accretion expense	12	11
Asset retirement obligations, end of period	144	211
Less current portion	5	11
Asset retirement obligation, long-term	$ 139	$ 200

(a) During 2019, approximately $17 million of additions relate to the acquisition of WildHorse.

(b) During 2020, approximately $49 million and $14 million of disposals related to our Mid-Continent and Haynesville assets, respectively. See Note 3 for further discussion of these transactions.

23. Major Customers

Sales to Valero Energy Corporation constituted approximately 17%, 12% and 10% of total revenues (before the effects of hedging) for the years ended December 31, 2020, 2019 and 2018, respectively. No other purchasers accounted for more than 10% of our total revenues in 2020, 2019 or 2018.

24. Condensed Combined Debtor-in-Possession Financial Information

The financial statements below represent the combined financial statements of the Debtors as of December 31, 2020 and 2019 and the years ended December 31, 2020, 2019 and 2018.

Condensed Combined Balance Sheets	Total Combined Debtor Entities	
	December 31,	
	2020	2019
	($ in millions)	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 278	$ 4
Other current assets	829	1,244
Total Current Assets	1,107	1,248
PROPERTY AND EQUIPMENT:		
Oil and natural gas properties at cost, based on successful efforts accounting, net	4,277	13,586
Other property and equipment, net	955	1,118
Property and equipment held for sale, net	10	10
Total Property and Equipment, Net	5,242	14,714
Other long-term assets	234	187
Investments in subsidiaries and intercompany advances	1	6
TOTAL ASSETS	$ 6,584	$ 16,155
LIABILITIES AND EQUITY (DEFICIT):		
CURRENT LIABILITIES:		
Current liabilities	$ 3,094	$ 2,391
Total Current Liabilities	3,094	2,391
Long-term debt, net	—	9,073
Deferred income tax liabilities	—	10
Other long-term liabilities	188	317
Liabilities subject to compromise	8,643	—
Total Liabilities	11,925	11,791
EQUITY (DEFICIT):		
Stockholders' equity (deficit)	(5,341)	4,364
Total Equity (Deficit)	(5,341)	4,364
TOTAL LIABILITIES AND EQUITY (DEFICIT)	$ 6,584	$ 16,155

Condensed Combined Statements of Operations	Total Combined Debtor Entities		
	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
REVENUES AND OTHER:			
Oil, natural gas and NGL	$ 3,334	$ 4,508	$ 5,136
Marketing	1,869	3,967	5,076
Total Revenues	5,203	8,475	10,212
Other	56	63	63
Gains (losses) on sales of assets	30	43	(264)
Total Revenues and Other	5,289	8,581	10,011
OPERATING EXPENSES:			
Oil, natural gas and NGL production	373	520	474
Oil, natural gas and NGL gathering, processing and transportation	1,079	1,076	1,391
Severance and ad valorem taxes	149	224	188
Exploration	427	84	162
Marketing	1,889	4,003	5,158
General and administrative	266	314	334
Separation and other termination costs	44	12	38
Provision for legal contingencies	27	19	26
Depreciation, depletion and amortization	1,095	2,258	1,730
Impairments	8,501	11	131
Other operating expense	109	92	—
Total Operating Expenses	13,959	8,613	9,632
INCOME (LOSS) FROM OPERATIONS	(8,670)	(32)	379
OTHER INCOME (EXPENSE):			
Interest expense	(331)	(651)	(633)
Gains (losses) on investments	(20)	(71)	139
Gains on purchases or exchanges of debt	65	75	263
Other income	16	39	67
Reorganization items, net	(796)	—	—
Equity in net earnings (losses) of subsidiary	(17)	1	1
Total Other Expense	(1,083)	(607)	(163)
INCOME (LOSS) BEFORE INCOME TAXES	(9,753)	(639)	216
INCOME TAX BENEFIT	(19)	(331)	(10)
NET INCOME (LOSS)	(9,734)	(308)	226
Other comprehensive income	33	35	34
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO CHESAPEAKE	$ (9,701)	$ (273)	$ 260

Condensed Combined Statements of Cash Flows	Total Combined Debtor Entities		
	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net Cash Provided By Operating Activities	$ 1,163	$ 1,618	$ 1,727
CASH FLOWS FROM INVESTING ACTIVITIES:			
Drilling and completion costs	(1,111)	(2,180)	(1,848)
Business combination, net	—	(353)	—
Acquisitions of proved and unproved properties	(9)	(35)	(128)
Proceeds from divestitures of proved and unproved properties	136	130	2,231
Additions to other property and equipment	(22)	(48)	(21)
Proceeds from sales of other property and equipment	14	6	147
Proceeds from sales of investments	—	—	74
Net Cash Provided By (Used In) Investing Activities	(992)	(2,480)	455
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from pre-petition revolving credit facility borrowings	3,656	10,676	11,697
Payments on pre-petition revolving credit facility borrowings	(3,317)	(10,180)	(12,059)
Proceeds from DIP credit facility borrowings	60	—	—
Payments on DIP credit facility borrowings	(60)	—	—
DIP credit facility and exit facilities financing costs	(109)		
Proceeds from issuance of senior notes, net	—	108	1,236
Proceeds from issuance of term loan, net	—	1,455	—
Cash paid to purchase debt	(94)	(1,073)	(2,813)
Cash paid for preferred stock dividends	(22)	(91)	(92)
Other financing activities	(11)	(32)	(149)
Intercompany advances, net	—	—	(2)
Net Cash Provided by (Used In) Financing Activities	103	863	(2,182)
Net increase in cash and cash equivalents	274	1	—
Cash and cash equivalents, beginning of period	4	3	3
Cash and cash equivalents, end of period	$ 278	$ 4	$ 3

25. Subsequent Events

On February 2, 2021, an indirect wholly-owned subsidiary of the Company, issued $500 million aggregate principal amount of its 2026 Notes and $500 million aggregate principal amount of its 2029 Notes as part of a series of exit financing transactions being undertaken in connection with the Debtors' Chapter 11 Cases and meant to provide the exit financing originally intended to be provided by the Exit Term Loan Facility pursuant to the Commitment Letter. Additionally, on the Effective Date, we entered into the Exit Credit Facility, a reserve-based credit facility with an initial borrowing base of $2.5 billion collateralized by our oil and gas properties. The aggregate initial elected commitments of the lenders under the Exit Credit Facility will be $1.75 billion of revolving Tranche A Loans and $220 million of fully funded Tranche B Loans on the Effective Date. See Note 5 for more information on our exit facilities.

On February 3, 2021, we reduced our workforce by 220 employees or approximately 15%, primarily in Oklahoma City and incurred charges of approximately $20 million. See Note 21 for more information regarding our workforce reduction.

We completed our financial restructuring and emerged from Chapter 11 bankruptcy proceedings on February 9, 2021. In support of the Plan, the enterprise value of the Successor was estimated and approved by the Bankruptcy Court to be in the range of $3.5 billion to $4.7 billion. We cannot currently estimate the financial effect of emergence from bankruptcy on our financial statements, although we expect to record material adjustments related to our Plan and the application of fresh-start reporting guidance upon the Effective Date. See Note 2 for more information regarding Chapter 11 proceedings including effects of the Plan.

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES
SUPPLEMENTARY INFORMATION

Quarterly Financial Data (unaudited)

Summarized unaudited quarterly financial data for 2020 and 2019 are as follows:

	2020 First Quarter[a]	2020 Second Quarter	2020 Third Quarter	2020 Fourth Quarter
	($ in millions except per share data)			
Total revenues	$ 2,541	$ 521	$ 975	$ 1,259
Income (loss) from operations	$ (8,227)	$ (541)	$ (111)	$ 176
Net loss attributable to Chesapeake	$ (8,297)	$ (276)	$ (745)	$ (416)
Net loss available to common stockholders	$ (8,319)	$ (276)	$ (745)	$ (416)
Net loss per common share[b]:				
Basic	$ (852.97)	$ (28.22)	$ (76.18)	$ (42.54)
Diluted	$ (852.97)	$ (28.22)	$ (76.18)	$ (42.54)

	2019 First Quarter	2019 Second Quarter	2019 Third Quarter	2019 Fourth Quarter
	($ in millions except per share data)			
Total revenues	$ 2,196	$ 2,386	$ 2,087	$ 1,926
Income (loss) from operations	$ (182)	$ 278	$ 46	$ (173)
Net income (loss) attributable to Chesapeake	$ (21)	$ 98	$ (61)	$ (324)
Net income (loss) available to common stockholders	$ (44)	$ 75	$ (101)	$ (346)
Net income (loss) per common share[b]:				
Basic	$ (6.37)	$ 9.21	$ (11.89)	$ (35.53)
Diluted	$ (6.37)	$ 9.21	$ (11.89)	$ (35.53)

(a) Includes $8.446 billion of impairment charges as a result of the decrease in demand for crude oil primarily due to COVID-19 and sharp decline in commodity prices related to the combined impact of falling demand and increases in production from OPEC+ which resulted in decreases in crude oil and NGL sales prices.

(b) All per share information has been retroactively adjusted to reflect the 1-for-200 (1:200) reverse stock split effective April 14, 2020. See Note 11 for additional information.

Supplemental Disclosures About Oil, Natural Gas and NGL Producing Activities (unaudited)

Net Capitalized Costs

Capitalized costs related to our oil, natural gas and NGL producing activities are summarized as follows:

	December 31,	
	2020	2019
	($ in millions)	
Oil and oil and natural gas properties:		
Proved	$ 25,734	$ 30,765
Unproved	1,550	2,173
Total	27,284	32,938
Less accumulated depreciation, depletion and amortization	(23,007)	(19,310)
Net capitalized costs	$ 4,277	$ 13,628

Unproved properties as of December 31, 2020 and 2019, consisted mainly of leasehold acquired through direct purchases of significant oil and natural gas property interests. We will continue to evaluate our unproved properties, and although the timing of the ultimate evaluation or disposition of the properties cannot be determined, we can expect the majority of our unproved properties not held by production to be transferred into the amortization base over the next five years.

Costs Incurred in Oil and Natural Gas Property Acquisition, Exploration and Development

Costs incurred in oil and natural gas property acquisition, exploration and development, including capitalized interest and asset retirement costs, are summarized as follows:

	Years Ended December 31,		
	2020	2019	2018
		($ in millions)	
Acquisition of Properties[(a)]:			
Proved properties	$ 3	$ 3,264	$ 80
Unproved properties	6	792	56
Exploratory costs	8	42	80
Development costs	887	2,177	1,954
Costs incurred	$ 904	$ 6,275	$ 2,170

(a) Includes $3.264 billion and $756 million of proved and unproved property acquisitions, respectively, related to our acquisition of WildHorse in 2019.

Results of Operations from Oil, Natural Gas and NGL Producing Activities

Our results of operations from oil, natural gas and NGL producing activities are presented below for 2020, 2019 and 2018. The following table includes revenues and expenses associated directly with our oil, natural gas and NGL producing activities. It does not include any interest costs or indirect general and administrative costs and, therefore, is not necessarily indicative of the contribution to consolidated net operating results of our oil, natural gas and NGL operations.

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Oil, natural gas and NGL sales	$ 3,341	$ 4,522	$ 5,155
Other revenue	56	63	63
Oil, natural gas and NGL production expenses	(373)	(520)	(474)
Oil, natural gas and NGL gathering, processing and transportation expenses	(1,082)	(1,082)	(1,398)
Severance and ad valorem taxes	(149)	(224)	(189)
Exploration	(427)	(84)	(162)
Depletion and depreciation	(1,026)	(2,188)	(1,665)
Impairment of oil and natural gas properties	(8,446)	(8)	(78)
Imputed income tax provision[(a)]	1,840	(125)	(326)
Results of operations from oil, natural gas and NGL producing activities	$ (6,266)	$ 354	$ 926

(a) The imputed income tax provision is hypothetical (at the statutory tax rate) and determined without regard to our deduction for general and administrative expenses, interest costs and other income tax credits and deductions, nor whether the hypothetical tax provision (benefit) will be payable (receivable).

Oil, Natural Gas and NGL Reserve Quantities

Our petroleum engineers and independent petroleum engineering firms estimated all of our proved reserves as of December 31, 2020, 2019 and 2018. Independent petroleum engineering firm LaRoche Petroleum Consultants, Ltd. estimated an aggregate of 87% of our estimated proved reserves (by volume) as of December 31, 2020.

Proved oil, natural gas and NGL reserves are those quantities of oil, natural gas 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, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. Based on reserve reporting rules, the price is calculated using the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within the period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. A project to extract hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time. The area of the reservoir considered as proved includes: (i) the area identified by drilling and limited by fluid contacts, if any, and (ii) adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or natural gas on the basis of available geoscience and engineering data. In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons as seen in a well penetration unless geoscience, engineering or performance data and reliable technology establish a lower contact with reasonable certainty. Where direct observation from well penetrations has defined a highest known oil elevation and the potential exists for an associated natural gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering or performance data and reliable technology establish the higher contact with reasonable certainty. Reserves which can be produced economically through application of improved recovery

techniques (including, but not limited to, fluid injection) are included in the proved classification when: (i) successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and (ii) the project has been approved for development by all necessary parties and entities, including governmental entities.

Developed oil, natural gas and NGL reserves are reserves of any category that can be expected to be recovered through existing wells with existing equipment and operating methods where production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.

The information provided below on our oil, natural gas and NGL reserves is presented in accordance with regulations prescribed by the SEC. Our reserve estimates are generally based upon extrapolation of historical production trends, analogy to similar properties and volumetric calculations. Accordingly, these estimates will change as future information becomes available and as commodity prices change. These changes could be material and could occur in the near term.

Presented below is a summary of changes in estimated reserves for 2020, 2019 and 2018:

	Oil (mmbbl)	Natural Gas (bcf)	NGL (mmbbl)	Total (mmboe)
December 31, 2020				
Proved reserves, beginning of period	358.0	6,566	120.0	1,572
Extensions, discoveries and other additions	1.1	100	0.4	18
Revisions of previous estimates	(148.2)	(2,326)	(50.6)	(586)
Production	(37.3)	(684)	(11.3)	(163)
Sale of reserves-in-place	(12.3)	(126)	(6.5)	(39)
Purchase of reserves-in-place	—	—	—	—
Proved reserves, end of period	161.3	3,530	52.0	802
Proved developed reserves:				
Beginning of period	201.4	3,377	82.1	846
End of period	158.1	3,196	51.4	742
Proved undeveloped reserves:				
Beginning of period	156.6	3,189	37.9	726
End of period[(a)]	3.2	334	0.6	60

CHESAPEAKE ENERGY CORPORATION AND SUBSIDIARIES (DEBTOR-IN-POSSESSION)
SUPPLEMENTARY INFORMATION - (Continued)

	Oil (mmbbl)	Natural Gas (bcf)	NGL (mmbbl)	Total (mmboe)
December 31, 2019				
Proved reserves, beginning of period	215.5	6,777	103.3	1,448
Extensions, discoveries and other additions	52.2	897	13.9	216
Revisions of previous estimates	(40.9)	(516)	(15.8)	(143)
Production	(43.0)	(728)	(12.3)	(177)
Sale of reserves-in-place	(1.8)	(23)	(1.4)	(7)
Purchase of reserves-in-place	176.0	159	32.3	235
Proved reserves, end of period	358.0	6,566	120.0	1,572
Proved developed reserves:				
Beginning of period	127.6	3,314	67.9	748
End of period	201.4	3,377	82.1	846
Proved undeveloped reserves:				
Beginning of period	87.9	3,463	35.4	700
End of period[(a)]	156.6	3,189	37.9	726
December 31, 2018				
Proved reserves, beginning of period	260.2	8,600	218.6	1,912
Extensions, discoveries and other additions	56.3	1,162	19.8	270
Revisions of previous estimates	(30.5)	242	5.4	15
Production	(32.7)	(832)	(18.9)	(190)
Sale of reserves-in-place	(37.8)	(2,395)	(121.6)	(559)
Purchase of reserves-in-place	—	—	—	—
Proved reserves, end of period	215.5	6,777	103.3	1,448
Proved developed reserves:				
Beginning of period	150.9	4,980	135.0	1,116
End of period	127.6	3,314	67.9	748
Proved undeveloped reserves:				
Beginning of period	109.3	3,620	83.6	796
End of period[(a)]	87.9	3,463	35.4	700

(a) As of December 31, 2020, 2019 and 2018, there were no PUDs that had remained undeveloped for five years or more.

During 2020, we recorded extension and discoveries of 18 mmboe primarily in the Marcellus and Gulf Coast primarily related to successfully drilled new well additions. We sold 39 mmboe of proved reserves for approximately $136 million primarily in the Mid-Continent. We recorded 586 mmboe of downward revisions of previous estimates consisting of 423 mmboe of downward revisions due to updates to our five-year development plan in contemplation of ongoing market conditions and uncertainty regarding our ability to finance the development of our proved reserves over a five-year period, downward revisions of 208 mmboe due to lower oil, natural gas and NGL prices in 2020, and upward revisions of 45 mmboe due to ongoing portfolio evaluation including performance adjustments. The oil and natural gas prices used in computing our reserves as of December 31, 2020, were $39.57 per bbl and $1.98 per mcf, respectively, before price differentials.

During 2019, we acquired 235 mmboe primarily related to the acquisition of WildHorse. We recorded extensions and discoveries of 216 mmboe, primarily related to undeveloped well additions in the Marcellus and Brazos Valley operating areas. In addition, we recorded downward revisions of 110 mmboe due to lower oil, natural gas and NGL prices in 2019, and downward revisions of 33 mmboe due to ongoing portfolio evaluation including lateral length adjustments, performance and updates to our five-year development plan. The oil and natural gas prices used in computing our reserves as of December 31, 2019, were $55.69 per bbl and $2.58 per mcf, respectively, before price differentials.

During 2018, we sold 559 mmboe of proved reserves for approximately $1.8 billion primarily in the Utica and Mid-Continent. We recorded extensions and discoveries of 270 mmboe, primarily related to undeveloped well additions located in Marcellus and Powder River Basin operating areas. In addition, we recorded upward revisions of 28 mmboe due to higher oil, natural gas and NGL prices in 2018 partially offset by downward revisions of 13 mmboe due to ongoing portfolio evaluation including longer lateral and spacing adjustments. The oil and natural gas prices used in computing our reserves as of December 31, 2018, were $65.56 per bbl and $3.10 per mcf, respectively, before price differentials.

Standardized Measure of Discounted Future Net Cash Flows

Accounting Standards Codification Topic 932 prescribes guidelines for computing a standardized measure of future net cash flows and changes therein relating to estimated proved reserves. Chesapeake has followed these guidelines which are briefly discussed below.

Future cash inflows and future production and development costs as of December 31, 2020, 2019 and 2018 were determined by applying the average of the first-day-of-the-month prices for the 12 months of the year and year-end costs to the estimated quantities of oil, natural gas and NGL to be produced. Actual future prices and costs may be materially higher or lower than the prices and costs used. For each year, estimates are made of quantities of proved reserves and the future periods during which they are expected to be produced based on continuation of the economic conditions applied for that year. Estimated future income taxes are computed using current statutory income tax rates including consideration of the current tax basis of the properties and related carryforwards, giving effect to permanent differences and tax credits. The resulting future net cash flows are reduced to present value amounts by applying a 10% annual discount factor.

The assumptions used to compute the standardized measure are those prescribed by the Financial Accounting Standards Board and do not necessarily reflect our expectations of actual revenue to be derived from those reserves nor their present worth. The limitations inherent in the reserve quantity estimation process, as discussed previously, are equally applicable to the standardized measure computations since these estimates reflect the valuation process.

The following summary sets forth our future net cash flows relating to proved oil, natural gas and NGL reserves based on the standardized measure:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Future cash inflows	$ 8,247 [a]	$ 29,857 [b]	$ 27,312 [c]
Future production costs	(2,963)	(6,956)	(5,946)
Future development costs	(563)	(5,757)	(4,032)
Future income tax provisions	(9)	(75)	(331)
Future net cash flows	4,712	17,069	17,003
Less effect of a 10% discount factor	(1,626)	(8,069)	(7,508)
Standardized measure of discounted future net cash flows[d]	$ 3,086	$ 9,000	$ 9,495

(a) Calculated using prices of $39.57 per bbl of oil and $1.98 per mcf of natural gas, before field differentials.

(b) Calculated using prices of $55.69 per bbl of oil and $2.58 per mcf of natural gas, before field differentials.

(c) Calculated using prices of $65.56 per bbl of oil and $3.10 per mcf of natural gas, before field differentials.

(d) Excludes discounted future net cash inflows attributable to production volumes sold to VPP buyers. See Note 7.

The principal sources of change in the standardized measure of discounted future net cash flows are as follows:

	Years Ended December 31,		
	2020	2019	2018
	($ in millions)		
Standardized measure, beginning of period[a]	$ 9,000	$ 9,495	$ 7,490
Sales of oil and natural gas produced, net of production costs and gathering, processing and transportation[b]	(1,140)	(2,691)	(3,128)
Net changes in prices and production costs	(5,576)	(3,457)	3,317
Extensions and discoveries, net of production and development costs	71	991	1,666
Changes in estimated future development costs	1,933	366	1,113
Previously estimated development costs incurred during the period	665	775	973
Revisions of previous quantity estimates	(1,839)	(793)	47
Purchase of reserves-in-place	—	3,435	—
Sales of reserves-in-place	(112)	(57)	(2,052)
Accretion of discount	902	953	749
Net change in income taxes	14	17	(32)
Changes in production rates and other	(832)	(34)	(648)
Standardized measure, end of period[a]	$ 3,086	$ 9,000	$ 9,495

(a) The impact of cash flow hedges has not been included in any of the periods presented.

(b) Excludes gains and losses on derivatives.

ITEM 9. ***Changes In and Disagreements with Accountants on Accounting and Financial Disclosure***

Not applicable.

ITEM 9A. ***Controls and Procedures***

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to management, including our principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(b). Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2020 that our disclosure controls and procedures were effective.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control Over Financial Reporting

It is the responsibility of the management of Chesapeake Energy Corporation to establish and maintain adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934). Management utilized the Committee of Sponsoring Organizations of the Treadway Commission's *Internal Control-Integrated Framework* (2013) in conducting the required assessment of effectiveness of the Company's internal control over financial reporting.

Management has performed an assessment of the effectiveness of the Company's internal control over financial reporting and has determined the Company's internal control over financial reporting was effective as of December 31, 2020.

/s/ ROBERT D. LAWLER
Robert D. Lawler
President and Chief Executive Officer

/s/ DOMENIC J. DELL'OSSO, JR.
Domenic J. Dell'Osso, Jr.
Executive Vice President and Chief Financial Officer

March 1, 2021

ITEM 9B. ***Other Information***

Not applicable.

PART III

ITEM 10. ***Directors, Executive Officers and Corporate Governance***

The names of executive officers and certain other senior officers of the Company and their ages, titles and biographies as of the date hereof are incorporated by reference from Item 1 of Part I of this report. The other information called for by this Item 10 is incorporated herein by reference to the definitive proxy statement to be filed by Chesapeake pursuant to Regulation 14A of the General Rules and Regulations under the Securities Exchange Act of 1934 not later than April 30, 2021 (the "2021 Proxy Statement").

ITEM 11. ***Executive Compensation***

The information called for by this Item 11 is incorporated herein by reference to the 2021 Proxy Statement.

ITEM 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information called for by this Item 12 is incorporated herein by reference to the 2021 Proxy Statement.

ITEM 13. ***Certain Relationships and Related Transactions and Director Independence***

The information called for by this Item 13 is incorporated herein by reference to the 2021 Proxy Statement.

ITEM 14. ***Principal Accountant Fees and Services***

The information called for by this Item 14 is incorporated herein by reference to the 2021 Proxy Statement.

PART IV

ITEM 15. ***Exhibits and Financial Statement Schedules***

(a) The following financial statements, financial statement schedules and exhibits are filed as a part of this report:

1. *Financial Statements*. Chesapeake's consolidated financial statements are included in Item 8 of Part II of this report. Reference is made to the accompanying Index to Financial Statements.
2. *Financial Statement Schedules*. No financial statement schedules are applicable or required.
3. *Exhibits*. The exhibits listed below in the Index of Exhibits are filed, furnished or incorporated by reference pursuant to the requirements of Item 601 of Regulation S-K.

INDEX OF EXHIBITS

		Incorporated by Reference				
Exhibit Number	Exhibit Description	Form	SEC File Number	Exhibit	Filing Date	Filed o Furnish Herewi
2.1	Fifth Amended Joint Plan of Reorganization of Chesapeake Energy Corporation and its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code (Exhibit A of the Confirmation Order).	8-K	001-13726	2.1	1/19/2021	
3.1	Second Amended and Restated Certificate of Incorporation of Chesapeake Energy Corporation.	8-K	001-13726	3.1	2/9/2021	
3.2	Second Amended and Restated Bylaws of Chesapeake Energy Corporation.	8-K	001-13726	3.2	2/9/2021	
3.3	Certificate of Elimination of Series B Preferred Stock of Chesapeake Energy.					X
4.1	Description of Securities.	8-A	001-13726	N/A	2/9/2021	
10.1	Restructuring Support Agreement, dated June 28, 2020.	8-K	001-13726	10.1	6/29/2020	
10.2	Backstop Commitment Agreement, dated June 28, 2020 (Exhibit 4 to the Restructuring Support Agreement).	8-K	001-13726	10.1	6/29/2020	
10.3	Credit Agreement, dated as of February 9, 2021, among Chesapeake Energy Corporation, as borrower, MUFG Union Bank, N.A., as administrative agent, and the lenders and other parties thereto.	8-K	001-13726	10.1	2/9/2021	
10.4	Registration Rights Agreement, dated as of February 9, 2021, by and among Chesapeake Energy Corporation and the other parties signatory thereto.	8-K	001-13726	10.2	2/9/2021	
10.5	Class A Warrant Agreement, dated as of February 9, 2021, between Chesapeake Energy Corporation and Equiniti Trust Company.	8-K	001-13726	10.3	2/9/2021	
10.6	Class B Warrant Agreement, dated as of February 9, 2021, between Chesapeake Energy Corporation and Equiniti Trust Company.	8-K	001-13726	10.4	2/9/2021	
10.7	Class C Warrant Agreement, dated as of February 9, 2021, between Chesapeake Energy Corporation and Equiniti Trust Company.	8-K	001-13726	10.5	2/9/2021	

10.8	Form of Indemnity Agreement.	8-K	001-13726	10.6	2/9/2021	
10.9†	Chesapeake Energy Corporation 2021 Long Term Incentive Plan.	8-K	001-13726	10.7	2/9/2021	
10.10	Purchase Agreement, dated as of February 2, 2021, by and among Chesapeake Escrow Issuer LLC, and Goldman Sachs & Co. LLC, RBC Capital Markets, LLC, as representatives of the purchasers signatory thereto, with respect to 5.5% Senior Notes due 2026 and 5.875% Senior Notes due 2029.					X
10.11	Indenture dated as of February 5, 2021, among Chesapeake Escrow Issuer LLC, as issuer, the guarantors signatory thereto, and Deutsche Bank Trust Company Americas, as Trustee, with respect to 5.5% Senior Notes due 2026 and 5.875% Senior Notes due 2029.					X
10.12*	Joinder Agreement, dated as of February 9, 2021, by and among Chesapeake Energy Corporation and the Guarantors party thereto, with respect to 5.5% Senior Notes due 2026 and 5.875% Senior Notes due 2029.					X
10.13	First Supplemental Indenture, dated as of February 9, 2021, by and among Chesapeake Energy Corporation, the Guarantors signatory thereto, and Deutsche Bank Trust Company Americas, as Trustee, with respect to 5.5% Senior Notes due 2026 and 5.875% Senior Notes due 2029.					X
21	Subsidiaries of Chesapeake Energy Corporation.					X
23.1	Consent of PricewaterhouseCoopers LLP.					X
23.2	Consent of LaRoche Petroleum Consultants, Ltd.					X
31.1	Robert D. Lawler, President and Chief Executive Officer, Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Domenic J. Dell'Osso, Jr., Executive Vice President and Chief Financial Officer, Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Robert D. Lawler, President and Chief Executive Officer, Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2	Domenic J. Dell'Osso, Jr., Executive Vice President and Chief Financial Officer, Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
95.1	Mine Safety Disclosures					X
99.1	Report of LaRoche Petroleum Consultants, Ltd.	8-K	001-13726	99.2	2/2/2021	
101 INS	Inline XBRL Instance Document.					X

101 SCH	Inline XBRL Taxonomy Extension Schema Document.		X
101 CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.		X
101 DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.		X
101 LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document.		X
101 PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.		X
104	Cover Page Interactive Data file - the Cover Page Interactive Data File does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document		

* Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish supplemental copies of any of the omitted schedules upon request by the SEC.

† Management contract or compensatory plan or arrangement.

PLEASE NOTE: Pursuant to the rules and regulations of the Securities and Exchange Commission, we have filed or incorporated reference the agreements referenced above as exhibits to this Annual Report on Form 10-K. The agreements have been filed to provi investors with information regarding their respective terms. The agreements are not intended to provide any other factual information abo Chesapeake Energy Corporation or its business or operations. In particular, the assertions embodied in any representations, warranties a covenants contained in the agreements may be subject to qualifications with respect to knowledge and materiality different from tho applicable to investors and may be qualified by information in confidential disclosure schedules not included with the exhibits. These disclosu schedules may contain information that modifies, qualifies and creates exceptions to the representations, warranties and covenants set forth the agreements. Moreover, certain representations, warranties and covenants in the agreements may have been used for the purpose allocating risk between the parties, rather than establishing matters as facts. In addition, information concerning the subject matter of t representations, warranties and covenants may have changed after the date of the respective agreement, which subsequent information m or may not be fully reflected in our public disclosures. Accordingly, investors should not rely on the representations, warranties and covenar in the agreements as characterizations of the actual state of facts about Chesapeake Energy Corporation or its business or operations on tl date hereof.

ITEM 16. *Form 10-K Summary*

Not applicable.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CHESAPEAKE ENERGY CORPORATION

Date: March 1, 2021

By: /s/ ROBERT D. LAWLER
Robert D. Lawler
President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Robert D. Lawler and Domenic J. Dell'Osso, Jr., and each of them, either one of whom may act without joinder of the other, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments to this Annual Report on Form 10-K, and to file the same, with all, exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each, and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, and each of them, or the substitute or substitutes of any or all of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ ROBERT D. LAWLER **Robert D. Lawler**	President and Chief Executive Officer (Principal Executive Officer)	March 1, 2021
/s/ DOMENIC J. DELL'OSSO, JR. **Domenic J. Dell'Osso, Jr.**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	March 1, 2021
/s/ WILLIAM M. BUERGLER **William M. Buergler**	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	March 1, 2021
/s/ MICHAEL WICHTERICH **Michael Wichterich**	Chairman of the Board	March 1, 2021
/s/ TIMOTHY S. DUNCAN **Timothy S. Duncan**	Director	March 1, 2021
/s/ BENJAMIN C. DUSTER, IV **Benjamin C. Duster, IV**	Director	March 1, 2021
/s/ SARAH EMERSON **Sarah Emerson**	Director	March 1, 2021
/s/ MATTHEW M. GALLAGHER **Matthew M. Gallagher**	Director	March 1, 2021
/s/ BRIAN STECK **Brian Steck**	Director	March 1, 2021

OFFICE OF THE SECRETARY OF STATE

STATE OF OKLAHOMA

AMENDED
CERTIFICATE OF INCORPORATION

WHEREAS, *the Amended Certificate of Incorporation of*

CHESAPEAKE ENERGY CORPORATION

has been filed in the office of the Secretary of State as provided by the laws of the State of Oklahoma.

NOW THEREFORE, I, *the undersigned, Secretary of State of the State of Oklahoma, by virtue of the powers vested in me by law, do hereby issue this certificate evidencing such filing.*

IN TESTIMONY WHEREOF, I *hereunto set my hand and cause to be affixed the Great Seal of the State of Oklahoma.*

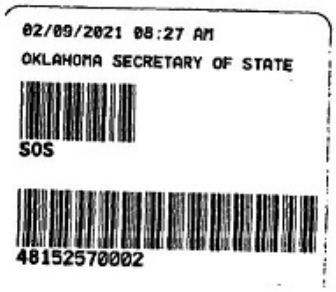
GREAT SEAL OF THE STATE OF OKLAHOMA 1907

Filed in the city of Oklahoma City this
9th day of February, 2021.

Brian Bingman

Secretary of State

FILED - Oklahoma Secretary of State #1900575772 02/09/2021



CERTIFICATE OF ELIMINATION

of

SERIES B PREFERRED STOCK

of

CHESAPEAKE ENERGY CORPORATION

Pursuant to Section 1032(G) of the Oklahoma General Corporation Act

Execution Version

Chesapeake Energy Corporation (the "Corporation"), a corporation organized and existing under the Oklahoma General Corporation Act (the "OGCA"), hereby certifies as follows:

FIRST: That pursuant to the authority expressly vested in the Board of Directors of the Corporation (the "Board of Directors") by the Certificate of Incorporation of the Corporation, as may be amended and as effective as of the date hereof (the "Certificate of Incorporation"), the Board of Directors previously adopted resolutions creating and authorizing a series of 50,000 shares of preferred stock, par value $0.001 per share, of the Corporation designated as Series B Preferred Stock (the "Series B Preferred Stock"), subject to the Certificate of Designations of Series B Preferred Stock (the "Certificate of Designations"), as filed with the Secretary of State of the State of Oklahoma on April 23, 2020.

SECOND: That none of the authorized shares of the Series B Preferred Stock is outstanding and none will be issued by the Corporation pursuant to the Certificate of Designations.

THIRD: That pursuant to the authority conferred upon the Board of Directors pursuant to the Certificate of Incorporation, the Board of Directors duly adopted the following resolutions at a meeting duly called and held on February 9, 2021, approving the elimination of the Series B Preferred Stock:

WHEREAS, the Board previously adopted resolutions creating and authorizing a series of preferred stock designated as Series B Preferred Stock, subject to the Certificate of Designations of Series B Preferred Stock, as filed with the Secretary of State of the State of Oklahoma on April 23, 2020;

WHEREAS, none of the authorized shares of the Series B Preferred Stock is outstanding and none will be issued by the Corporation pursuant to the Certificate of Designations; and

WHEREAS, the Board has determined that it is advisable and in the best interests of the Corporation and its stockholders to eliminate the Series B Preferred Stock (the "Elimination").

NOW, **THEREFORE**, **BE IT RESOLVED**, that the Elimination hereby is authorized, approved, and adopted in all respects; and

FURTHER RESOLVED, that each of the Chairman of the Board, Chief Executive Officer, the President, a Vice President, the Treasurer, or Secretary, in each case of the Corporation, is hereby authorized and directed, in the name and on behalf of the Corporation, to prepare, execute, and deliver to the Secretary of State of the State of Oklahoma a Certificate of Elimination as required by the OGCA in order to effect the cancellation and elimination of the Series B Preferred Stock, and any and all additional documents required to be filed therewith.

FOURTH: That, in accordance with Section 1032(G) of the OGCA, the Certificate of Incorporation, as effective immediately prior to the filing of this Certificate of Elimination, is hereby amended to eliminate all references to the Series B Preferred Stock.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the undersigned, a duly authorized officer of the Corporation, has executed and subscribed this Certificate of Elimination and does affirm the foregoing as true under the penalties of perjury on February 9, 2021.

CHESAPEAKE ENERGY CORPORATION

By:	/s/ Domenic J. Dell'Osso, Jr.
Name:	Domenic J. Dell'Osso, Jr.
Title:	Executive Vice President and Chief Financial Officer

Exhibit 10.10

Chesapeake Escrow Issuer LLC

5.500% Senior Notes due 2026

5.875% Senior Notes due 2029

Purchase Agreement

February 2, 2021

Goldman Sachs & Co. LLC
RBC Capital Markets, LLC
As representatives of the several Purchasers
named in Schedule I hereto,

c/o Goldman Sachs & Co. LLC
200 West Street
New York, New York 10282

c/o RBC Capital Markets, LLC
Brookfield Place
200 Vesey Street, 8th Floor
New York, New York 10281

Ladies and Gentlemen:

Chesapeake Escrow Issuer LLC, a Delaware limited liability company (the "Escrow Issuer"), proposes, subject to the terms and conditions set forth in this agreement (this "Agreement"), to issue and sell to the Purchasers named in Schedule I hereto (the "Purchasers"), for whom you are acting as representatives (the "Representatives"), an aggregate of $500,000,000 principal amount of the 5.500% Senior Notes due 2026 (the "2026 Notes") and an aggregate of $500,000,000 principal amount of 5.875% Senior Notes due 2029 (the "2029 Notes and, together with the 2026 Notes, the "Securities"). Upon execution and delivery of the Joinder Agreement (as defined below), the obligations of the Company (as defined below) under the Securities will be fully and unconditionally guaranteed (the "Guarantees") as to the payment of principal, premium, if any, and interest, on a senior basis, jointly and severally, by each of the guarantors listed on Annex II hereto (each, a "Guarantor" and, collectively, the "Guarantors").

On June 28, 2020, Chesapeake Energy Corporation, an Oklahoma corporation ("Chesapeake" or the "Permanent Issuer"), and certain of its subsidiaries (collectively with Chesapeake, the "Debtors") filed voluntary petitions for relief under chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court for the Southern District of Texas (the "Bankruptcy Court").

On September 11, 2020, the Debtors filed a Joint Chapter 11 Plan of Reorganization of Chesapeake Energy Corporation and its Debtor Affiliates (as amended, including on October 8, 2020, October 29, 2020, December 13, 2020, December 27, 2020 and January 12, 2021, the "Plan") with the Bankruptcy Court. On the same date, the Debtors filed a disclosure statement relating to the Plan (as amended,

including on October 8, 2020 and October 30, 2020, the "Disclosure Statement"), along with a motion seeking approval of the Disclosure Statement. At a hearing held on October 30, 2020, the Disclosure Statement was approved by the Bankruptcy Court. On January 16, 2021, the Bankruptcy Court entered an order confirming the Plan and approving the transactions contemplated thereby. The effective date of the Plan (the "Plan Effective Date") will occur after all conditions precedent to the Plan have been satisfied and the Plan is declared effective.

If the Escrow Conditions (as defined in the Offering Circular (as defined below)), including the effectiveness of the Plan, are not satisfied on or prior to the Time of Delivery (as defined below), substantially concurrently with the closing of the offering of the Securities at the Time of Delivery the Escrow Issuer will enter into a customary escrow agreement relating to each series of the Securities (each, as amended, supplemented or modified from time to time, an "Escrow Agreement") among the Escrow Issuer, Deutsche Bank Trust Company Americas, a New York banking corporation, as Trustee (the "Trustee") and Deutsche Bank Trust Company Americas, as escrow agent (in such capacity, together with its successors, the "Escrow Agent") pursuant to which an amount equal to the gross proceeds of the offering of the Securities (together with any additional amounts (as determined solely by the Escrow Issuer) as may be necessary to fund the redemption of all the Notes in accordance with the special mandatory redemption provisions set forth in the Indenture between the Escrow Issuer and the Trustee (the "Initial Indenture") based on the Escrow Outside Date (as defined below)) will be deposited into an escrow account for each series of Securities (each, an "Escrow Account"). The funds held in each Escrow Account will be released to the Company on the Completion Date upon delivery by the Escrow Issuer to the Escrow Agent and the Trustee of an officer's certificate certifying that the Escrow Conditions have been satisfied.

The date, if any, when the Escrow Conditions are satisfied and funds held in each Escrow Account are released to the Company is herein referred to as the "Escrow Release Date." If the Escrow Conditions are not satisfied on or prior to February 28, 2021 (the "Escrow Outside Date") (or, if prior to such date, the Company determines in its sole discretion that any of the Escrow Conditions cannot be satisfied by such date), the Escrow Issuer will be required to redeem the Securities in accordance with the special mandatory redemption provisions set forth in the Initial Indenture. For the purposes of this Agreement, the term "Completion Date" means the Time of Delivery or, if the Escrow Conditions have not been satisfied on or prior to the Time of Delivery, the Escrow Release Date. On and after the Time of Delivery (if the Time of Delivery is not the Completion Date) and prior to the Completion Date, each series of the Securities will be secured pursuant to the terms of its respective Escrow Agreement on a first-priority basis, by liens on the Escrow Accounts and proceeds thereof as described in the Pricing Circular and the Offering Circular (each as defined below) (the "Escrow Collateral"). If the Completion Date occurs before the Time of Delivery, the escrow arrangements described herein will not be implemented and the Guarantees will be issued as of the Time of Delivery.

On the Plan Effective Date, substantially concurrently with the satisfaction of the Escrow Conditions on the Completion Date and as described in the Pricing Circular and Offering Circular:

(i) the Escrow Issuer will merge with and into the Permanent Issuer, with the Permanent Issuer continuing as the surviving entity, and the Permanent Issuer will assume the Securities offered hereby and the obligations of the Escrow Issuer under the Securities and the Initial Indenture.

(ii) the Escrow Issuer, the Permanent Issuer and each of the Guarantors will enter into a supplemental indenture to the Initial Indenture (the "Supplemental Indenture") with the Trustee, pursuant to which (x) the Permanent Issuer will assume the rights and obligations of the Escrow Issuer under the

Indenture with respect to the Securities effective as of and from the Completion Date pursuant to, and in accordance with, the terms of the Indenture; and (y) the Guarantors will guarantee the Securities on a senior basis as of and from the Completion Date pursuant to, and in accordance with, the terms of the Indenture. As used herein, the term "Indenture" shall mean the Initial Indenture, as supplemented by the Supplemental Indenture; and

(iii) the Permanent Issuer and the Guarantors shall execute and deliver to the Representatives a joinder agreement in substantially the form attached as Annex II hereto (the "Joinder Agreement"), whereby the Permanent Issuer and each Guarantor will agree to observe and fully perform all of the rights, obligations and liabilities contemplated herein as if it were an original signatory hereto. The representations, warranties, authorizations, acknowledgements, covenants and agreements of the Permanent Issuer and the Guarantors under this Agreement shall not become effective or enforceable until the execution and delivery by each of them of the Joinder Agreement, at which time such representations, warranties, authorizations, acknowledgements, covenants and agreements shall become effective and enforceable as if made on the date hereof pursuant to the terms of the Joinder Agreement.

For the purposes of this Agreement:

(i) references to the "Company" refer to (a) prior to the Completion Date, to the Escrow Issuer, and (b) from and after the Completion Date and upon execution and delivery of the Joinder Agreement, the Permanent Issuer;

(ii) the term "Transactions" means, collectively, the (a) issuance and sale of the Securities, (b) entry into the Escrow Agreements, deposit of the proceeds of the issuance and sale of the Securities in the Escrow Accounts and granting of any security interest under the Escrow Agreements and (c) application of the proceeds from the sale of the Securities as described under "Use of Proceeds" in the Pricing Circular and the Offering Circular; and

(iii) the term "Transaction Agreements" means this Agreement, the Joinder Agreement, the Securities, the Initial Indenture (including the Guarantees), the Supplemental Indenture, the Escrow Agreements, the Plan and the Confirmation Order.

1. The Escrow Issuer represents and warrants as of the date hereof and as of the Time of Delivery, and upon the execution and delivery of the Joinder Agreement the Permanent Issuer and each Guarantor jointly and severally represents and warrants as of the Time of Delivery and as of the Completion Date, to each Purchaser, that:

   (a) A preliminary offering circular, dated February 2, 2021 (the "Preliminary Offering Circular"), and an offering circular, dated February 2, 2021 (the "Offering Circular"), have been prepared in connection with the offering of the Securities. The Preliminary Offering Circular, as amended and supplemented immediately prior to the Applicable Time (as defined in Section 1(b)), is hereinafter referred to as the "Pricing Circular". Any reference to the Preliminary Offering Circular, the Pricing Circular or the Offering Circular shall be deemed to refer to and include all documents filed with the United States Securities and Exchange Commission (the "Commission") pursuant to Section 13(a), 13(c) or 15(d) of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"), on or prior to the date of such circular and incorporated by reference therein and any reference to the Preliminary Offering Circular, the Pricing Circular or the Offering Circular, as the case may be, as amended or supplemented, as of

any specified date, shall be deemed to include) any documents filed with the Commission pursuant to Section 13(a), 13(c) or 15(d) of the Exchange Act after the date of the Preliminary Offering Circular, the Pricing Circular or the Offering Circular, as the case may be, and prior to such specified date; and all documents filed under the Exchange Act and so deemed to be included in the Preliminary Offering Circular, the Pricing Circular or the Offering Circular, as the case may be, or any amendment or supplement thereto are hereinafter called the "Exchange Act Reports" (provided that where only sections of such documents are specifically incorporated by reference, only such sections shall be considered to be part of the "Exchange Act Reports"). The Exchange Act Reports, when they were or are filed with the Commission, conformed or will conform in all material respects to the applicable requirements of the Exchange Act and the applicable rules and regulations of the Commission thereunder; and no such documents were filed with the Commission since the Commission's close of business on the business day immediately prior to the date of this Agreement and prior to the execution of this Agreement, except as set forth on Schedule I l(a) hereof. The Preliminary Offering Circular or the Offering Circular and any amendments or supplements thereto and the Exchange Act Reports did not and will not, as of their respective dates, contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with information furnished in writing to the Company by a Purchaser through the Representatives expressly for use therein it being understood and agreed that the only such information is that described as such in Section 9(b) hereof;

(b) For the purposes of this Agreement, the "Applicable Time" is 5:30 p.m. (Eastern time) on the date of this Agreement; the Pricing Circular as supplemented by the information set forth in Schedule III hereto, taken together (collectively, the "Pricing Disclosure Package") as of the Applicable Time, did not include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Company Supplemental Disclosure Document (as defined in Section 6(a)(i)) listed on Schedule Il(b) hereto does not conflict with the information contained in the Pricing Circular or the Offering Circular and each such Company Supplemental Disclosure Document, as supplemented by and taken together with the Pricing Disclosure Package as of the Applicable Time, did not include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements or omissions made in a Company Supplemental Disclosure Document in reliance upon and in conformity with information furnished in writing to the Company by a Purchaser through the Representatives expressly for use therein it being understood and agreed that the only such information is that described as such in Section 9(b) hereof;

(c) Neither the Permanent Issuer nor any of its subsidiaries has sustained since the date of the latest audited financial statements included in the Pricing Circular any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Pricing Circular or the Plan;

and, since the respective dates as of which information is given in the Pricing Circular, there has not been any change in the capital stock, partnership interests, membership interests or long-term debt of the Permanent Issuer or any of its subsidiaries or any material adverse change, or any development involving a prospective material adverse change, in or affecting the general affairs, management, financial position, stockholders' equity (or partners' interests or members' interests) or results of operations of the Permanent Issuer and its subsidiaries, taken as a whole, otherwise than as set forth or contemplated in the Pricing Circular or the Plan;

(d) The Permanent Issuer and its subsidiaries have (i) good and defensible title to its oil and gas properties, (ii) good and marketable title to all other real property owned by it to the extent necessary to carry on its business, (iii) good and marketable title to all personal property owned by it, and (iv) good and defensible title to the easements, leases and subleases material to the business of the Permanent Issuer and its subsidiaries, in each case free and clear of all liens, encumbrances and defects that materially affect the value of the properties of the Permanent Issuer and its subsidiaries, considered as one enterprise, and do not interfere in any material respect with the use made and proposed to be made of such properties, by the Permanent Issuer and its subsidiaries, considered as one enterprise;

(e) The Permanent Issuer and each of its subsidiaries has been duly incorporated or formed and is validly existing as a corporation, limited partnership or limited liability company in good standing under the laws of its respective jurisdiction of incorporation or formation, with power and authority (corporate, limited partnership, limited liability company and other) to own its properties and conduct its business as described in the Pricing Disclosure Package and the Offering Circular, and has been duly qualified as a foreign corporation, limited partnership or limited liability company for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, or is subject to no material liability or disability by reason of the failure to be so qualified or be in good standing in any such jurisdiction;

(f) The Permanent Issuer, on the Completion Date will have an authorized capitalization as set forth in the Pricing Disclosure Package and the Offering Circular, and all of the issued shares of capital stock of the Permanent Issuer will have been duly and validly authorized and issued and fully paid and non-assessable; and all of the issued shares of capital stock, partnership interests or membership interests, as applicable, of each subsidiary of the Permanent Issuer will have been duly and validly authorized and issued, are fully paid and non-assessable and are owned directly or indirectly by the Permanent Issuer;

(g) The Securities and the Guarantees have been duly authorized by the Escrow Issuer and, upon the execution and delivery of the Supplemental Indenture, the Permanent Issuer and the Guarantors, as applicable, and, when issued and delivered pursuant to this Agreement, will have been duly executed, authenticated, issued and delivered and will constitute valid and legally binding obligations of the Escrow Issuer, the Permanent Issuer and the Guarantors, as applicable, entitled to the benefits provided by the Indenture, under which they are to be issued, which will be substantially in the form previously delivered to you; the Initial Indenture has been duly authorized by the Escrow Issuer and, on or prior to the Completion Date, the Supplemental Indenture will have been duly authorized by the

Permanent Issuer and the Guarantors and, when executed and delivered by the Escrow Issuer, the Trustee and, upon the execution and delivery of the Supplemental Indenture, the Permanent Issuer and the Guarantors, the Indenture will constitute a valid and legally binding instrument, enforceable against the Escrow Issuer, the Permanent Issuer and each of the Guarantors in accordance with its terms, subject, as to enforcement, to bankruptcy, insolvency, reorganization and other laws of general applicability relating to or affecting creditors' rights and to general equity principles and entitled to the benefits provided by the Indenture; and the Securities, the Initial Indenture and the Indenture will conform in all material respects to the descriptions thereof in the Pricing Disclosure Package and the Offering Circular and will be in substantially the form previously delivered to you;

(h) Each of the Escrow Issuer, the Permanent Issuer and each of the Guarantors has all requisite corporate, limited partnership or limited liability company, as applicable, power to execute, deliver and perform its obligations under this Agreement. This Agreement has been duly and validly authorized, executed and delivered by the Escrow Issuer, and on the Completion Date the Joinder Agreement will have been duly authorized, executed and delivered by the Permanent Issuer and each Guarantor.

(i) Prior to the date hereof, none of the Escrow Issuer or any of its respective affiliates, and prior to the Completion Date, none of the Permanent Issuer, the Guarantors or any of their respective affiliates, has taken any action which is designed to or which has constituted or which might have been expected to cause or result in stabilization or manipulation of the price of any security of the Permanent Issuer or any Guarantor in connection with the offering of the Securities;

(j) The issue and sale of the Securities and the Guarantees and the compliance by the Escrow Issuer, the Permanent Issuer and the Guarantors, as applicable, with all of the provisions of the Securities, the Initial Indenture, the Indenture and this Agreement and the consummation of the transactions herein and therein contemplated and the application of the proceeds from the sale of the Securities as described under "Use of Proceeds" in the Pricing Disclosure Package and the Offering Circular will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Escrow Issuer, the Permanent Issuer, the Guarantors or any of their respective subsidiaries is a party or by which the Escrow Issuer, the Permanent Issuer, the Guarantors or any of their respective subsidiaries is bound or to which any of the property or assets of the Escrow Issuer, the Permanent Issuer, the Guarantors or any of their respective subsidiaries is subject, nor will such action result in any violation of the provisions of the Certificate of Incorporation or Bylaws or equivalent organizational documents of the Escrow Issuer, the Permanent Issuer or any Guarantor or any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Escrow Issuer, the Permanent Issuer, the Guarantors or any of their respective subsidiaries or any of their properties; and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental agency or body is required for the issue and sale of the Securities or the Guarantees or the consummation by the Escrow Issuer, the Permanent Issuer and the Guarantors of the transactions contemplated by this Agreement or the Indenture, except for such consents, approvals, authorizations, registrations or qualifications as may be required under state

securities or Blue Sky laws in connection with the purchase and distribution of the Securities by the Purchasers;

(k) Neither the Permanent Issuer nor any of its subsidiaries is in violation of its Certificate of Incorporation or Bylaws or equivalent organizational document or in default in the performance or observance of any material obligation, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it or any of its properties may be bound;

(l) The statements set forth in the Pricing Circular and the Offering Circular under the caption “Description of notes”, insofar as they purport to constitute a summary of the terms of the Securities, and “Description of other indebtedness,” insofar as they purport to constitute a summary of the terms of the documents referred to therein, under the caption “Certain United States federal income tax considerations”, and under the caption “Plan of distribution”, insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate, complete and fair;

(m) Except as otherwise disclosed in the General Disclosure Package, there are no pending actions, suits, governmental or regulatory inquiries or investigations, or other proceedings against or affecting the Permanent Issuer, any of its subsidiaries or any of their respective properties that, if determined adversely to the Permanent Issuer or any of its subsidiaries, would reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect, or would materially and adversely affect the ability of the Permanent Issuer or any Guarantor to perform its obligations under this Agreement or the Indenture, or which are otherwise material in the context of the sale of the Securities; and no such actions, suits, inquiries, investigations or proceedings are, to the Escrow Issuer’s, Permanent Issuer’s or any Guarantor’s knowledge, threatened or contemplated;

(n) When the Securities are issued and delivered pursuant to this Agreement, the Securities will not be of the same class (within the meaning of Rule 144A under the Act) as securities which are listed on a national securities exchange registered under Section 6 of the Exchange Act or quoted in a U.S. automated inter-dealer quotation system;

(o) The Permanent Issuer is subject to Section 13 or 15(d) of the Exchange Act;

(p) The Permanent Issuer and its subsidiaries, the Guarantors and their respective subsidiaries are not, and after giving effect to the offering and sale of the Securities and the application of the proceeds thereof, will not be, an “investment company”, as such term is defined in the United States Investment Company Act of 1940, as amended (the “Investment Company Act”);

(q) (None of the Escrow Issuer, the Permanent Issuer, the Guarantors or any person acting on its or their behalf (other than the Purchasers, as to which no representation is made) has offered or sold the Securities by means of any general solicitation or general advertising within the meaning of Rule 502(c) under the Act or, with respect to Securities sold outside the United States to non-U.S. persons (as defined in Rule 902 under the Act), by means of any directed selling efforts within the meaning of Rule 902 under the Act and the Escrow Issuer, the Permanent Issuer, any of their affiliates and any person acting on

its or their behalf has complied with and will implement the "offering restriction" within the meaning of such Rule 902;

(r) Within the preceding six months, neither the Escrow Issuer, the Permanent Issuer nor any other person acting on behalf of the Escrow Issuer or the Permanent Issuer has offered or sold to any person any Securities, or any securities of the same or a similar class as the Securities, other than Securities offered or sold to the Purchasers hereunder. The Escrow Issuer and the Permanent Issuer will take reasonable precautions designed to insure that any offer or sale, direct or indirect, in the United States or to any U.S. person (as defined in Rule 902 under the Act) of any Securities or any substantially similar security issued by the Escrow Issuer or the Permanent Issuer, within six months subsequent to the date on which the distribution of the Securities has been completed (as notified to the the Escrow Issuer or the Permanent Issuer by the Representatives), is made under restrictions and other circumstances reasonably designed not to affect the status of the offer and sale of the Securities in the United States and to U.S. persons contemplated by this Agreement as transactions exempt from the registration provisions of the Act;

(s) The Permanent Issuer maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) of the Exchange Act) that complies in all material resects with the requirements of the Exchange Act and has been designed by the Permanent Issuer's principal executive officer and principal financial officer, or under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Permanent Issuer's internal control over financial reporting is reasonably effective and the Permanent Issuer is not aware of any material weaknesses in its internal control over financial reporting;

(t) Since the date of the latest audited financial statements included or incorporated by reference in the Pricing Circular, there has been no change in the Permanent Issuer's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Permanent Issuer's internal control over financial reporting;

(u) The Permanent Issuer maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) of the Exchange Act) that comply in all material respects with the requirements of the Exchange Act; made known to the chief executive officer and chief financial officer of the Permanent Issuer by others within the Permanent Issuer or any subsidiary, and such disclosure controls and procedures are reasonably effective to perform the functions for which they were established subject to the limitations of any such control system; and

(v) PricewaterhouseCoopers LLP, which has audited certain financial statements of the Permanent Issuer and its subsidiaries is an independent registered public accounting firm as required by the Act and the rules and regulations of the Commission thereunder;

(w) Neither the Permanent Issuer nor any of its subsidiaries, nor, to the knowledge of the Escrow Issuer, Permanent Issuer or the Guarantors, any director, officer, employee, agent, affiliate or other person acting on behalf of the Permanent Issuer or any of its

subsidiaries, has taken any action, directly or indirectly, that would violate the Foreign Corrupt Practices Act of 1977.

(x) The operations of the Escrow Issuer, the Permanent Issuer, the Guarantors and their subsidiaries are and have been conducted at all times in material compliance with the requirements of applicable anti-money laundering laws, including, but not limited to, the Bank Secrecy Act of 1970, as amended by the USA PATRIOT ACT of 2001, and the rules and regulations promulgated thereunder, and the anti-money laundering laws of the various jurisdictions in which the Escrow Issuer, the Permanent Issuer, the Guarantors and their subsidiaries conduct business (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Escrow Issuer, the Permanent Issuer, the Guarantors or any of their subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Escrow Issuer, Permanent Issuer or the Guarantors, threatened.

(y) None of the Escrow Issuer, the Permanent Issuer, the Guarantors, any of their subsidiaries or, to the knowledge of the Escrow Issuer, Permanent Issuer or the Guarantors, any director, officer, agent, employee or affiliate of the Escrow Issuer, the Permanent Issuer, the Guarantors or any of their subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. Government, including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"), or other relevant sanctions authority, and the Escrow Issuer and the Permanent Issuer will not directly or indirectly use the proceeds of the offering of the notes offered hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity currently subject to sanctions administered by OFAC.

(z) Except as disclosed in the Offering Circular and Pricing Circular, neither the Permanent Issuer nor any of its subsidiaries is in violation of any statute, rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, "environmental laws"), owns or operates any real property contaminated with any substance that is subject to any environmental laws, is liable for any off-site disposal or contamination pursuant to any environmental laws, or is subject to any claim relating to any environmental laws which violation, contamination, liability or claim would reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect; and the Permanent Issuer is not aware of any pending investigation which might lead to such a claim.

(aa) Except as described in the Offering Circular and Pricing Circular, no person has the right to act as an initial purchaser or as a financial advisor to the Escrow Issuer or the Permanent Issuer in connection with the offer and resale of the Securities, whether as a result of the resale of the Securities as contemplated hereby or otherwise.

(bb) At the Time of Delivery, the Securities will not be of the same class as securities listed on a national securities exchange registered under Section 6 of the Exchange Act or quoted in an automated inter-dealer quotation system; and each of the Preliminary Offering Circular and the Offering Circular, as of its respective date, contains or will contain all

the information that, if requested by a prospective purchaser of the Securities, would be required to be provided to such prospective purchaser pursuant to Rule 144A(d)(4) under the U.S. Securities Act of 1933 (the "Securities Act").

(cc) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), that is maintained, administered or contributed to by the Permanent Issuer or any of its affiliates for employees or former employees of the Permanent Issuer and its affiliates has been maintained in compliance, in all material respects, with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Internal Revenue Code of 1986, as amended (the "Code"); no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any such plan excluding any transactions effected pursuant to a statutory or administrative exemption and transactions which, individually or in the aggregate, would not have a Material Adverse Effect; and no such plan is subject to Title IV of ERISA or the funding rules of Section 412 of the Code or Section 302 of ERISA.

(dd) Other than as disclosed in the Preliminary Offering Circular, the Pricing Circular and the Offering Circular, the proved reserves for crude oil and natural gas for each of the periods presented in the Pricing Circular and the Offering Circular were prepared in accordance with the Statement of Financial Accounting Standards No. 69 and Rule 4-10 of Regulation S-X.

(ee) LaRoche Petroleum Consultants, Ltd. are independent petroleum engineers with respect to the Permanent Issuer and its subsidiaries.

(ff) There is and has been no failure on the part of the Escrow Issuer, the Permanent Issuer and the Guarantors or any of the officers and directors of the Escrow Issuer, the Permanent Issuer or any of the Guarantors, in their capacities as such, to comply in all material respects with the provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations in connection therewith, including without limitation Section 402 related to loans and Sections 302 and 906 related to certifications.

(gg) To the Escrow Issuer's, Permanent Issuer's and each Guarantor's and their respective subsidiaries' knowledge, except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Escrow Issuer's, the Permanent Issuer's, its subsidiaries' and the Guarantors' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") (i) are adequate for, and operate and perform in all material respects as required in connection with the operation of the businesses of the Escrow Issuer, the Permanent Issuer, their subsidiaries and the Guarantors as currently conducted and as proposed to be conducted in the Pricing Disclosure Package and the Offering Circular, (ii) have not malfunctioned or failed and (iii) are free and clear of all bugs, errors, defects, Trojan horses, time bombs, back doors, drop dead devices, malware and other corruptants, including software or hardware components that are designed to interrupt use of, permit unauthorized access to or disable, damage or erase the IT Systems. The Escrow Issuer, the Permanent Issuer, its subsidiaries and the Guarantors have implemented commercially reasonable controls, policies, procedures, and technological safeguards to maintain and protect the integrity, continuous operation,

redundancy and security of their material IT Systems and data and information (including all personal, personally identifiable, sensitive, confidential or regulated data and information of their respective customers, employees, suppliers and vendors, any third-party data maintained, processed or stored by the Company, its subsidiaries and the Guarantors and any such data processed or stored by third parties on behalf of the Company, its respective subsidiaries or the Guarantors) (collectively, "Data"). Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, neither the Escrow Issuer, the Permanent Issuer nor their subsidiaries nor the Guarantors have been notified of, and each of them have no knowledge of any event or condition that would reasonably be expected to result in, any security breach, violation, outage, destruction, loss, misappropriation, modification, misuse, unauthorized access, use, disclosure or other compromise to their IT Systems and Data (each, a "Breach"). The Company, its subsidiaries and the Guarantors are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data (collectively, the "Data Security Obligations") and to the protection of such IT Systems and Data from a Breach, except as would not, individually or in the aggregate, have a Material Adverse Effect. To the Escrow Issuer's, Permanent Issuer's or the Guarantors' knowledge, neither the Company nor any of its subsidiaries nor the Guarantors have received any notification of or complaint regarding, or is aware of any other facts that, individually or in the aggregate, that would reasonably indicate non-compliance with any Data Security Obligation and there is no action, suit, proceeding or claim by or before any court or governmental or regulatory agency, authority or body pending or, to the Company's, its subsidiaries' or the Guarantors' knowledge, threatened, alleging non-compliance with any Data Security Obligation.

(hh) Each of the Escrow Issuer, the Permanent Issuer, their subsidiaries and the Guarantors own, or have obtained valid and enforceable licenses for, or other adequate rights to use, or can acquire on reasonable terms, all inventions, patents, trademarks, tradenames, service marks, copyrights, trade secrets, know-how, social media identifiers and accounts, software, domain names and all other worldwide intellectual property and similar proprietary rights (including all registrations and applications for registration of, and all goodwill associated with, the foregoing) (collectively, "Intellectual Property") in connection with their respective businesses now operated by them, which are necessary for the conduct of their respective businesses, except where the failure to own, license or have such rights would not, individually or in the aggregate, have a Material Adverse Effect. Neither the Permanent Issuer nor any of its subsidiaries nor the Guarantors have knowingly infringed, misappropriated, or otherwise violated any Intellectual Property Rights of others, nor have the Company, its subsidiaries or the Guarantors received any notice alleging any infringement, misappropriation or other violation of or conflict with any Intellectual Property rights of others, which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect. There is no pending, or to the Escrow Issuer's, Permanent Issuer's, their subsidiaries' and the Guarantors' knowledge, threatened, action, suit, proceeding or claim regarding the same.

(ii) The Escrow Issuer, the Permanent Issuer, their subsidiaries and the Guarantors have paid all federal, state, local and foreign taxes and filed all tax returns required to be paid or

filed through the date hereof; and except as otherwise disclosed in the Offering Circular, or as would not, individually or in the aggregate, have a Material Adverse Effect, there is no tax deficiency that has been, or could reasonably be expected to be, asserted against the Escrow Issuer, the Permanent Issuer, their subsidiaries or the Guarantors or any of their respective properties or assets.

(jj) Each Escrow Agreement has been duly authorized by the Escrow Issuer; and, at the Time of Delivery (and only if the Time of Delivery is not on the Completion Date), each Escrow Agreement will have been duly executed and delivered by the Escrow Issuer, and, when duly executed and delivered in accordance with its terms by each of the other parties thereto, will constitute a valid and binding agreement of, the Escrow Issuer, enforceable against the Escrow Issuer in accordance with its terms, except as the enforcement thereof may be limited by bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, moratorium or similar laws affecting enforcement of creditors' rights generally and except as enforcement thereof is subject to general principles of equity (regardless of whether enforcement is considered in a proceeding in equity or at law). Each Escrow Agreement will, at the Time of Delivery (and only if the Time of Delivery is not on the Completion Date), create in favor of the Trustee, for the benefit of itself and the holders of the 11 Securities, as applicable, a legal, valid and enforceable security interest in the Escrow Collateral (as defined in each Escrow Agreement) as security for the Securities, as applicable, to the extent that a legal, valid, binding and enforceable security interest in such Escrow Collateral may be created under any applicable law of the United States of America and any states thereof, including, without limitation, the applicable Uniform Commercial Code ("UCC"), which security interest, upon execution of each Escrow Agreement, will constitute a fully perfected lien on, and security interest in, all right, title and interest of the Issuers in such Escrow Collateral.

(kk)

(a) No consent, approval, authorization, filing with or order of any court or governmental agency or body is required in connection with the issue and sale of the Securities, the execution, delivery and performance by the Escrow Issuer, the Permanent Issuer and the Guarantors (as applicable) of the Transaction Agreements, the application of the proceeds from the sale of the Securities as described under "Use of Proceeds" in the Pricing Circular and the consummation of the Transactions or any other of the transactions contemplated herein or under the Plan or the Confirmation Order or the performance by Parent, the Company, the Escrow Issuer, or the Guarantors of any of their respective obligations set forth herein or under the Plan and the Confirmation Order, as applicable, except (i) such as have been obtained from the Bankruptcy Court; (ii) filings and recordings with governmental or regulatory authorities or agencies as may be required to perfect security interests under the applicable Transaction Agreements; (iii) such as have been obtained, under the Act and the rules and interpretations of the Commission thereunder or otherwise; and (iv) such as may be required under the blue sky laws of any jurisdiction in connection with the purchase and distribution of the Securities by the Purchasers in the manner contemplated herein and in the Pricing Circular.

(b) The Plan has been duly authorized by the Debtors, and the description thereof in the Pricing Circular is accurate in all material respects. The Plan has not been

modified in any material respect or withdrawn since the date of its confirmation by the Bankruptcy Court.

(c) Each of the Debtors has the requisite power and authority to carry out the Transactions to which it will be a party and perform its obligations under the Plan, and has taken all necessary actions required for the due authorization, execution, delivery and performance by it of the transactions contemplated by the Plan, including the Transactions to which it will be party, by the Plan Effective Date. The Plan constitutes a valid and binding obligation of the Debtors, enforceable against the Debtors in accordance with its terms.

(ll) Assuming the accuracy of the representations and warranties of the Purchasers contained in Section 3 hereof and their compliance with their agreements set forth therein, it is not necessary, in connection with the issuance and sale of the Securities to the Purchasers and the offer, resale and delivery of the Securities by the Purchasers in the manner contemplated by this Agreement, the Pricing Circular and the Offering Memorandum, to register the Securities under the Securities Act or to qualify the Initial Indenture or Indenture under the Trust Indenture Act.

2. Subject to the terms and conditions herein set forth, the Escrow Issuer agrees to issue and sell to each of the Purchasers, and each of the Purchasers agrees, severally and not jointly, to purchase from the Escrow Issuer, at a purchase price of the Gross Purchase Price (defined as 100.000% of the principal amount of the Securities, plus accrued interest, if any, from February 15, 2021 to the Time of Delivery hereunder), the principal amount of Securities set forth opposite the name of such Purchaser in Schedule I hereto, and, at the Completion Date, the Escrow Issuer agrees to pay the Representatives, on behalf of the Purchasers, the Purchaser Fees (defined as 0.75% of the principal amount of the Securities,) and the Purchaser Fees will only become payable when and if the Escrow Conditions are satisfied and the proceeds from the Escrow Accounts are released in accordance with each Escrow Agreement); provided, however, that, if the Time of Delivery is the Completion Date, the Purchasers may instead deduct the Purchaser Fees from the Gross Purchase Price payable to the Company.

If the Time of Delivery is not the Completion Date, substantially concurrently with the release of funds from the Escrow Accounts on the Completion Date, an amount equal to the aggregate Purchaser Fees will be paid out of the funds in the Escrow Accounts on the Completion Date by the Escrow Agent to the Representatives for the accounts of the several Purchasers, to be paid by wire transfer to the account or accounts specified by the Representatives in immediately available funds. For the avoidance of doubt, if the Completion Date does not occur on or prior to the Escrow Outside Date or the Company informs the Escrow Agent in writing that, in the reasonable good faith judgement of the Company, the Completion Date will not occur on or prior to the Escrow Outside Date, the aggregate Gross Purchase Price, including the aggregate Purchaser Fees, shall be used to redeem the Securities pursuant to the terms of each Escrow Agreement and the special mandatory redemption provisions set forth in the Initial Indenture.

3. Upon the authorization by you of the release of the Securities, the several Purchasers propose to offer the Securities for sale upon the terms and conditions set forth in this Agreement and the Offering Circular and each Purchaser, acting severally and not jointly, hereby represents and warrants to, and agrees with the Company and the Guarantors that:

(a) It will sell the Securities only to: (i) persons who it reasonably believes are "qualified institutional buyers" ("QIBs") within the meaning of Rule 144A under the Act in transactions meeting the requirements of Rule 144A or (ii) upon the terms and conditions set forth in Annex I to this Agreement; and

(b) It is an Institutional Accredited Investor.

4.

(a) The Securities to be purchased by each Purchaser hereunder will be represented by one or more definitive global Securities in book-entry form which will be deposited by or on behalf of the Escrow Issuer with The Depository Trust Company ("DTC") or its designated custodian. The Escrow Issuer will deliver the Securities to Goldman Sachs & Co. LLC, for the account of each Purchaser, against payment by or on behalf of such Purchaser of the purchase price therefor by wire transfer in Federal (same day) funds, by causing DTC to credit the Securities to the account of Goldman Sachs & Co. LLC at DTC; such payment will be either to Company, if the Time of Delivery is not the Completion Date, or otherwise into escrow pursuant to each Escrow Agreement. The Escrow Issuer will cause the certificates representing the Securities to be made available to the Representatives for checking at least twenty-four hours prior to the Time of Delivery (as defined below) at the office of Davis Polk & Wardwell LLP, 450 Lexington Avenue, New York, New York 10017 (the "Closing Location"). The time and date of such delivery and payment shall be 9:30 a.m., New York City time, on February 5, 2021 or such other time and date as the Representatives and the Escrow Issuer may agree upon in writing. Such time and date are herein called the "Time of Delivery".

(b) The documents to be delivered at the Time of Delivery by or on behalf of the parties hereto pursuant to Section 8 hereof, including the cross-receipt for the Securities and any additional documents requested by the Purchasers pursuant to Section 8(k) hereof, will be delivered at such time and date at the Closing Location, and the Securities will be delivered at the office of DTC (or its designated custodian), all at the Time of Delivery. A meeting will be held at the Closing Location at 5:00 p.m., New York City time, on the New York Business Day next preceding the Time of Delivery, at which meeting the final drafts of the documents to be delivered pursuant to the preceding sentence will be available for review by the parties hereto. For the purposes of this Section 4, "New York Business Day" shall mean each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close.

5. The Escrow Issuer agrees with each of the Purchasers and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each Guarantor jointly and severally agrees with each of the Purchasers, as follows:

(a) To prepare the Offering Circular in a form reasonably acceptable to you; to make no amendment or any supplement to the Offering Circular which shall be reasonably disapproved by you, unless otherwise required by law, promptly after reasonable notice thereof; and to furnish you with copies thereof;

(b) Promptly from time to time to take such action as you may reasonably request to qualify the Securities for offering and sale under the securities laws of such jurisdictions as you

may reasonably request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Securities, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction;

(c) To furnish the Purchasers with written and electronic copies of the Offering Circular and any amendment or supplement thereto in such quantities as you may from time to time reasonably request, and if, at any time prior to the expiration of nine months after the date of the Offering Circular, any event shall have occurred as a result of which the Offering Circular as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Offering Circular is delivered, not misleading, or, if for any other reason it shall be necessary or desirable during such same period to amend or supplement the Offering Circular, to notify you and upon your request to prepare and furnish without charge to each Purchaser and to any dealer in securities as many written and electronic copies as you may from time to time reasonably request of an amended Offering Circular or a supplement to the Offering Circular which will correct such statement or omission or effect such compliance;

(d) During the period beginning from the date hereof and continuing until the date that is 60 days after the Time of Delivery, not to offer, issue, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, or file with or confidentially submit to the Commission a registration statement under the Act relating to any securities of the Escrow Issuer or the Permanent Issuer that are substantially similar to the Securities, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing without the prior written consent of Goldman Sachs & Co. LLC, which consent shall not be unreasonably withheld.

(e) Not to be or become, at any time prior to the expiration of two years after the Time of Delivery, an open-end investment company, unit investment trust, closed-end investment company or face-amount certificate company that is or is required to be registered under Section 8 of the Investment Company Act;

(f) At any time when the Permanent Issuer is not subject to Section 13 or 15(d) of the Exchange Act, for the benefit of holders from time to time of Securities, to furnish at its expense, upon request, to holders of Securities and prospective purchasers of Securities information satisfying the requirements of subsection (d)(4)(i) of Rule 144A under the Act;

(g) Except for such documents that are publicly available on EDGAR, to furnish to the holders of the Securities as soon as practicable after the end of each fiscal year an annual report (including a balance sheet and statements of income, stockholders' equity and cash flows of the Company and its consolidated subsidiaries certified by independent public accountants) and, as soon as practicable after the end of each of the first three quarters of each fiscal year (beginning with the fiscal quarter ending after the date of the Offering Circular), to make available to its stockholders consolidated summary financial information of the Company and its subsidiaries for such quarter in reasonable detail;

(h) During the period of one year after the Time of Delivery, the Escrow Issuer and the Permanent Issuer will not, and will not permit any of their "affiliates" (as defined in Rule 144 under the Act) to, resell any of the Securities which constitute "restricted securities" under Rule 144 that have been reacquired by any of them (other than pursuant to a registration statement that has been declared effective under the Act);

(i) To use the net proceeds received by the Company from the sale of the Securities pursuant to this Agreement in the manner specified in the Pricing Circular under the caption "Use of Proceeds";

(j) On or prior to the Completion Date (and only if the Time of Delivery is not the Completion Date):

(i) the Permanent Issuer and the Escrow Issuer shall to take all steps necessary to cause the merger of the Escrow Issuer with an into the Permanent Issuer, with the Permanent Issuer continuing as the surviving entity, shall have been consummated;

(ii) the Permanent Issuer shall cause the aggregate Purchaser Fees to be paid to the Purchasers from the Escrow Accounts upon the release of funds after satisfaction of the Escrow Conditions in accordance with the terms of each Escrow Agreement;

(iii) the Permanent Issuer and the Guarantors shall cause to be delivered to the Purchasers fully executed copies of the Joinder Agreement, dated as of the Completion Date, in the form attached as Annex III hereto, and the Supplemental Indenture, dated as of the Completion Date, in the form attached to the Initial Indenture;

(iv) each of the Escrow Issuer, the Permanent Issuer and the Guarantors shall consummate the other Transactions to which it is a party on or prior to the Completion Date; and

(v) the Permanent Issuer and the Guarantors shall satisfy all conditions to the effectiveness of the Plan;

(k) The Permanent Issuer and the Guarantors shall (i) cause to be delivered to the Purchasers an opinion of Kirkland & Ellis LLP, counsel for the Company, dated as of the Completion Date, in form and substance agreed prior to the Time of Delivery; (ii) cause to be delivered to the Purchasers an opinion of Derrick & Briggs, LLP, Oklahoma counsel for the Company, dated as of the Completion Date, in form and substance agreed prior to the Time of Delivery; the Permanent Issuer shall have furnished to the Representatives a officers' certificate, dated the Completion Date, to the effect that: (a) the representations and warranties of the Escrow Issuer and the Permanent Issuer in this Agreement are true and correct on and as of the Completion Date with the same effect as if made on the Completion Date and (b) the Escrow Conditions have been satisfied; and (iv) cause to be delivered to the Purchasers any other certificates, evidence and documents confirming compliance with and satisfaction of the Escrow Conditions in accordance with the terms of each Escrow Agreement and such other certificates or documents as the Purchasers shall reasonably request;

6.

(a) (i) The Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each of the Guarantors represents and agrees that, without the prior consent of the Representatives, it and its affiliates and any other person acting on its or their behalf (other than the Purchasers, as to which no statement is given) (x) have not made and will not make any offer relating to the Securities that, if the offering of the Securities contemplated by this Agreement were conducted as a public offering pursuant to a registration statement filed under the Act with the Commission, would constitute an "issuer free writing prospectus," as defined in Rule 433 under the Act (any such offer is hereinafter referred to as a "Company Supplemental Disclosure Document") and (y) have not solicited and will not solicit offers for, and have not offered or sold and will not offer or sell, the Securities by means of any form of general solicitation or general advertising within the meaning of Rule 502(c) of Regulation D;

(ii) each Purchaser, severally and not jointly, represents and agrees that, without the prior consent of the Company and the Representatives other than one or more term sheets relating to the Securities containing customary information and conveyed to purchasers of securities, it has not made and will not make any offer relating to the Securities that, if the offering of the Securities contemplated by this Agreement were conducted as a public offering pursuant to a registration statement filed under the Act with the Commission, would constitute a "free writing prospectus," as defined in Rule 405 under the Act required to filed under the Act (any such offer (other than any such term sheets), is hereinafter referred to as a "Purchaser Supplemental Disclosure Document"); and

(iii) any Company Supplemental Disclosure Document or Purchaser Supplemental Disclosure Document, the use of which has been consented to by the Company and the Representatives, is listed as applicable on Schedule 11(b) or Schedule 11(c) or hereto, respectively;

7. The Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each of the Guarantors, jointly and severally, covenants and agrees with the several Purchasers that the Company and the Guarantors will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's and the Guarantors' counsel and accountants in connection with the issue of the Securities and all other expenses in connection with the preparation, printing, reproduction and filing of the Preliminary Offering Circular and the Offering Circular and any amendments and supplements thereto and the mailing and delivering of copies thereof to the Purchasers and dealers; (ii) the cost of printing or producing any Agreement among Purchasers, this Agreement, the Initial Indenture, the Securities, the Blue Sky Memorandum, the Joinder Agreement, the Supplemental Indenture, closing documents (including any compilations thereof), and any other documents in connection with the offering, purchase, sale and delivery of the Securities; (iii) all expenses in connection with the qualification of the Securities for offering and sale under state securities laws as provided in Section 5(b) hereof, including the fees and disbursements of counsel for the Purchasers in connection with such qualification and in connection with the Blue Sky and legal investment surveys; (iv) any fees charged by securities rating services for rating the Securities; (v) the cost of preparing the Securities; (vi) the fees and expenses of the Trustee and any agent of the Trustee and the fees and disbursements of counsel for the Trustee in connection with the Initial Indenture, the Indenture and the Securities; (vii) the fees and expenses of the Escrow Agent and any agent of the Escrow Agent and the fees and disbursements of counsel for the Escrow Agent in connection with the

Escrow Agreements and the Securities (viii) all costs and expenses incurred in connection with any "road show" presentation to potential purchasers of the Securities; (ix) all expenses associated with the assignment, creation and perfection of security interests, mortgages and charges, including, without limitation, pursuant to each Escrow Agreement and their associated financing statements, including filing fees, and fees and expenses incurred by counsel for the Purchasers incurred in connection therewith; and (x) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise specifically provided for in this Section. It is understood, however, that, except as provided in this Section, and Sections 9 and 12 hereof, the Purchasers will pay all of their own costs and expenses, including the fees of their counsel, transfer taxes on resale of any of the Securities by them, and any advertising expenses connected with any offers they may make.

8. The obligations of the Purchasers hereunder shall be subject, in their discretion, to the condition that all representations and warranties and other statements of the Escrow Issuer, the Permanent Issuer and the Guarantors herein are, at and as of the Time of Delivery, true and correct, the condition that the Escrow Issuer, the Permanent Issuer and each of the Guarantors shall have performed all of its obligations hereunder theretofore to be performed, and the following additional conditions:

(a) Davis Polk & Wardwell LLP, counsel for the Purchasers, shall have furnished to the Representatives opinion or opinions, dated the Time of Delivery, with respect to such matters as the Representatives may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;

(b) (i) Kirkland & Ellis LLP, counsel for the Company and the Guarantors, shall have furnished to you their written opinion, dated the Time of Delivery, in form and substance reasonably satisfactory to the Representatives and (ii) Derrick & Briggs, LLP, Oklahoma counsel for the Company and the Guarantors, shall have furnished to you their written opinion, dated the Time of Delivery, in form and substance reasonably satisfactory to the Representatives;

(c) On the date of the Offering Circular concurrently with the execution of this Agreement and also at the Time of Delivery, PricewaterhouseCoopers LLP shall have furnished to the Representatives a letter or letters with respect to the financial statements and financial information included or incorporated by reference in the Pricing Circular of the Company, dated the respective dates of delivery thereof, in form and substance satisfactory to the Representatives;

(d) (i) Neither the Permanent Issuer nor any of its subsidiaries shall have sustained since the date of the latest audited financial statements included in the Pricing Circular any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Pricing Circular, and (ii) since the respective dates as of which information is given in the Pricing Circular there shall not have been any change in the capital stock or long-term debt of the Permanent Issuer or any of its subsidiaries or any change, or any development involving a prospective change, in or affecting the general affairs, management, financial position, stockholders' equity or results of operations of the Permanent Issuer and its subsidiaries, otherwise than

as set forth or contemplated in the Pricing Circular, the effect of which, in any such case described in clause (i) or (ii), is in your judgment so material and adverse as to make it impracticable or inadvisable to proceed with the offering, sale or the delivery of the Securities on the terms and in the manner contemplated in this Agreement and in each of the Pricing Disclosure Package and the Offering Circular;

(e) On or after the Applicable Time (i) no downgrading shall have occurred in the rating accorded the Permanent Issuer's debt securities by any "nationally recognized statistical rating organization", as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Permanent Issuer's debt securities;

(f) On or after the Applicable Time there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or The Nasdaq Global Market; (ii) any suspension of trading of any securities of the Permanent Issuer on any exchange or in the over-the-counter market; (iii) a general moratorium on commercial banking activities declared by either Federal or New York or State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (iv) the outbreak or escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war or (v) the occurrence of any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (iv) or (v) in your judgment makes it impracticable or inadvisable to proceed with the offering, sale or the delivery of the Securities on the terms and in the manner contemplated in the Pricing Disclosure Package and the Offering Circular;

(g) On the date of the Offering Circular concurrently with the execution of this Agreement and also at the Time of Delivery, LaRoche Petroleum Consultants, Ltd. shall have furnished to the Representatives, at the request of the Permanent Issuer, a reserve report confirmation letter, dated the respective date of delivery thereof and addressed to the Representatives, in form and substance reasonably satisfactory to the Representatives, containing statements and information of the type customarily included in such letters to initial purchasers with respect to the reserve and other operational information contained or incorporated by reference in the Preliminary Offering Circular, the Pricing Disclosure Package and the Offering Circular;

(h) The Purchasers shall have received an executed original copy of the Indenture;

(i) The Securities shall be eligible for clearance and settlement through the facilities of DTC;

(j) The Representative shall have received certificates signed by the chief financial officer of the Permanent Issuer, dated as of the date hereof and the Time of Delivery, with respect to financial and other information of the Permanent Issuer included or incorporated by reference in the Pricing Circular, dated the respective dates of delivery thereof, substantially in the form and substance set forth in Annex IV hereto;

(k) The Permanent Issuer and the Guarantors shall have furnished or caused to be furnished to you at the Time of Delivery certificates of officers of the Permanent Issuer and the Guarantors satisfactory to you as to the accuracy of the representations and warranties of the Company herein at and as of such Time of Delivery, as to the performance by the Company and the Guarantors of all of its obligations hereunder to be performed at or prior to such Time of Delivery, as to the matters set forth in subsection (e) of this Section and as to such other matters as you may reasonably request.

(l) If the Completion Date is on or prior to the Time of Delivery, then at the Time of Delivery the Confirmation Order shall be in full force and effect, and such order shall not have been reversed, vacated, amended, supplemented or otherwise modified in any manner that could reasonably be expected to adversely affect the interests of the Purchasers or the holders of the Securities, and it shall authorize the Escrow Issuer and Permanent Issuer and the Guarantors to execute, deliver and perform under all documents contemplated hereunder and thereunder (including, without limitation, the Transactions, the Transaction Agreements, and payment of all fees with respect thereto). The Plan and all transactions contemplated therein or in the Confirmation Order to occur on the Plan Effective Date shall have been (or concurrently with the occurrence of the Completion Date, shall be) substantially consummated in accordance with the terms thereof and in compliance with applicable law and Bankruptcy Court and regulatory approvals. The respective indebtedness or obligations of the Issuers and the Guarantors and any liens securing same that are outstanding immediately after the consummation of the Plan shall not exceed the amount contemplated by the Plan and the Confirmation Order.

9.

(a) The Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each of the Guarantors, jointly and severally, will indemnify and hold harmless each Purchaser against any losses, claims, damages or liabilities, joint or several, to which such Purchaser may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue Statement or alleged untrue statement of a material fact contained in any Preliminary Offering Circular, the Pricing Circular, the Pricing Disclosure Package, the Offering Circular, or any amendment or supplement thereto, or any Company Supplemental Disclosure Document or arise out of or are based upon the omission or alleged omission to state therein a material fact necessary to make the statements therein not misleading, and will reimburse each Purchaser for any legal or other expenses reasonably incurred by such Purchaser in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that the Escrow Issuer, the Company and the Guarantors shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in any Preliminary Offering Circular, the Pricing Circular, the Pricing Disclosure Package, the Offering Circular or any such amendment or supplement, or any Company Supplemental Disclosure Document, in reliance upon and in conformity with written information furnished to the Company by any Purchaser through the Representatives expressly for use therein it being understood and agreed that the only such information is that described as such in Section 9(b) hereof.

(b) Each Purchaser, severally and not jointly, will indemnify and hold harmless the Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each Guarantor against any losses, claims, damages or liabilities to which the Company and the Guarantors may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any Preliminary Offering Circular, the Pricing Circular, the Pricing Disclosure Package, the Offering Circular, or any amendment or supplement thereto, or any Company Supplemental Disclosure Document or arise out of or are based upon the omission or alleged omission to state therein a material fact or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in any Preliminary Offering Circular, the Pricing Circular, the Pricing Disclosure Package, the Offering Circular or any such amendment or supplement, any Company Supplemental Disclosure Document in reliance upon and in conformity with written information furnished to the Company by such Purchaser through the Representatives expressly for use therein, it being understood and agreed that the only such information furnished by any Purchaser consists of the following information in the Preliminary and Final Offering Circular furnished on behalf of each Purchaser: under the caption "Plan of Distribution" in the second sentence of the seventh paragraph (concerning market-making by the Purchasers) and the eighth paragraph (concerning stabilizing transactions and syndicate covering transactions); provided, however, that the Purchasers shall not be liable for any losses, claims, damages or liabilities arising out of or based upon the Escrow Issuer's, the Permanent Issuer's or any Guarantor's failure to perform its obligations under Section 5(a) of this Agreement; and each Purchaser will reimburse the Company and the Guarantors for any legal or other expenses reasonably incurred by the Company and the Guarantors in connection with investigating or defending any such action or claim as such expenses are incurred.

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under subsection (a) or (b) above except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and the failure to notify the indemnifying party shall not relieve it from any liability that it may have to an indemnified party otherwise than under such subsection. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed in

writing to the retention of such counsel; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person; or (iv) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to, or an admission of, fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) If the indemnification provided for in this Section 9 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or (b) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Guarantors on the one hand and the Purchasers on the other from the offering of the Securities. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law or if the indemnified party failed to give the notice required under subsection (c) above, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company and the Guarantors on the one hand and the Purchasers on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Escrow Issuer, the Permanent Issuer and the Guarantors on the one hand and the Purchasers on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Purchasers, in each case as set forth in the Offering Circular. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Escrow Issuer, the Permanent Issuer and the Guarantors on the one hand or the Purchasers on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Escrow Issuer, the Permanent Issuer, the Guarantors and the Purchasers agree that it would not be just and equitable if contribution pursuant to this subsection (d) were determined by pro rata allocation (even if the Purchasers were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above

in this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), no Purchaser shall be required to contribute any amount in excess of the amount by which the total price at which the Securities purchased by it and distributed to investors were offered to investors exceeds the amount of any damages which such Purchaser has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. The Purchasers' obligations in this subsection (d) to contribute are several in proportion to their respective purchase obligations and not joint.

(e) The obligations of the Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and the Guarantors under this Section 9 shall be in addition to any liability which the Company and the Guarantors may otherwise have and shall extend, upon the same terms and conditions, to each employee, officer and director each Purchaser, any affiliate of each Purchaser and each person, if any, who controls any Purchaser within the meaning of the Act; and the obligations of the Purchasers under this Section 9 shall be in addition to any liability which the respective Purchasers may otherwise have and shall extend, upon the same terms and conditions, to each officer and director of the Company and each of the Guarantors and to each person, if any, who controls the Company within the meaning of the Act, but only in the case of the officers, directors and controlling persons of the Permanent Issuer and the Guarantors upon the execution by the Permanent Issuer or such Guarantor of the Joinder Agreement.

10.

(a) If any Purchaser shall default in its obligation to purchase the Securities which it has agreed to purchase hereunder, you may in your discretion arrange for you or another party or other parties to purchase such Securities on the terms contained herein. If within thirty-six hours after such default by any Purchaser you do not arrange for the purchase of such Securities, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to you to purchase such Securities on such terms. In the event that, within the respective prescribed periods, you notify the Company that you have so arranged for the purchase of such Securities, or the Company notifies you that it has so arranged for the purchase of such Securities, you or the Company shall have the right to postpone the Time of Delivery for a period of not more than seven days, in order to effect whatever changes may thereby be made necessary in the Offering Circular, or in any other documents or arrangements, and the Company agrees to prepare promptly any amendments or supplements to the Offering Circular which in your opinion may thereby be made necessary. The term "Purchaser" as used in this Agreement shall include any person substituted under this Section with like effect as if such person had originally been a party to this Agreement with respect to such Securities.

(b) If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Purchaser or Purchasers by you and the Company as provided in subsection (a) above, the aggregate principal amount of such Securities which remains unpurchased does not exceed one-eleventh of the aggregate principal amount of all the Securities, then the Company shall have the right to require each non-defaulting Purchaser to purchase the principal amount of Securities which such Purchaser agreed to purchase hereunder and, in addition, to require each non-defaulting Purchaser to purchase its pro rata share

(based on the principal amount of Securities which such Purchaser agreed to purchase hereunder) of the Securities of such defaulting Purchaser or Purchasers for which such arrangements have not been made; but nothing herein shall relieve a defaulting Purchaser from liability for its default.

If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Purchaser or Purchasers by you and the Company as provided in subsection (a) above, the aggregate principal amount of Securities which remains unpurchased exceeds one-eleventh of the aggregate principal amount of all the Securities, or if the Company shall not exercise the right described in subsection (b) above to require non-defaulting Purchasers to purchase Securities of a defaulting Purchaser or Purchasers, then this Agreement shall thereupon terminate, without liability on the part of any non-defaulting Purchaser or the Company, except for the expenses to be borne by the Company and the Purchasers as provided in Section 6 hereof and the indemnity and contribution agreements in Section 9 hereof; but nothing herein shall relieve a defaulting Purchaser from liability for its default.

11. The respective indemnities, agreements, representations, warranties and other statements of the Escrow Issuer, the Permanent Issuer, the Guarantors and the several Purchasers, as set forth in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Purchaser or any controlling person of any Purchaser, or the Escrow Issuer, the Permanent Issuer, any Guarantor, or any officer or director or controlling person of the Escrow Issuer, the Permanent Issuer or a Guarantor, and shall survive delivery of and payment for the Securities.

12. If this Agreement shall be terminated pursuant to Section 10 hereof, the Escrow Issuer, the Permanent Issuer and the Guarantors shall not then be under any liability to any Purchaser except as provided in Sections 7 and 9 hereof; but, if for any other reason, the Securities are not delivered by or on behalf of the Escrow Issuer, the Permanent Issuer as provided herein, the Escrow Issuer, the Permanent Issuer and the Guarantors will reimburse the Purchasers through you for all expenses approved in writing by you, including fees and disbursements of counsel, reasonably incurred by the Purchasers in making preparations for the purchase, sale and delivery of the Securities, but the Escrow Issuer, the Permanent Issuer and the Guarantors shall then be under no further liability to any Purchaser except as provided in Sections 7 and 9 hereof.

13. In all dealings hereunder, the Representatives shall act on behalf of each of the Purchasers, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Purchaser made or given by the Representatives.

All statements, requests, notices and agreements hereunder shall be in writing, and if to the Purchasers shall be delivered or sent by mail or facsimile transmission to the Representatives: (i) Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Registration Department, and (ii) RBC Capital Markets, LLC, Brookfield Place, 200 Vesey Street, 8th Floor, New York, New York 10281, Attention: Transaction Management, facsimile: (212) 428-6308; and if to the Company shall be delivered or sent by mail or facsimile transmission to the address of the Company set forth in the Offering Circular, Attention: Secretary; provided, however, that any notice to a Purchaser pursuant to Section 9 hereof shall be delivered or sent by mail or facsimile transmission to such Purchaser at its address set forth in its Purchasers' Questionnaire, which address will be supplied to the Company by

you upon request. Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Purchasers are required to obtain, verify and record information that identifies their respective clients, including the Escrow Issuer, the Permanent Issuer and the Guarantors, which information may include the name and address of their respective clients, as well as other information that will allow the Purchasers to properly identify their respective clients.

14. This Agreement shall be binding upon, and inure solely to the benefit of, the Purchasers, the Escrow Issuer and, upon execution and delivery of the Joinder agreement, the Permanent Issuer and the Guarantors, and, to the extent provided in Sections 9 and 11 hereof, the officers and directors of the Escrow Issuer, the Permanent Issuer, the Guarantors and each person who controls the Escrow Issuer, the Permanent Issuer or any Purchaser, and their respective heirs, executors, administrators, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. No purchaser of any of the Securities from any Purchaser shall be deemed a successor or assign by reason merely of such purchase.

15. Time shall be of the essence of this Agreement.

16. The Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each of the Guarantors acknowledges and agrees that, notwithstanding any preexisting relationship, advisory or otherwise, (i) the purchase and sale of the Securities pursuant to this Agreement is an arm's-length commercial transaction between the Escrow Issuer, the Permanent Issuer and the Guarantors, on the one hand, and the several Purchasers, on the other, (ii) in connection therewith and with the process leading to such transaction each Purchaser is acting solely as a principal and not the agent or fiduciary of the Escrow Issuer, the Permanent Issuer or any Guarantor, (iii) no Purchaser has assumed an advisory or fiduciary responsibility in favor of the Escrow Issuer, the Permanent Issuer or any Guarantor with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Purchaser has advised or is currently advising the Escrow Issuer, the Permanent Issuer or any Guarantor on other matters) or any other obligation to the Escrow Issuer, the Permanent Issuer or any Guarantor except the obligations and duties expressly set forth in this Agreement and (iv) the Escrow Issuer, the Permanent Issuer and each of the Guarantors has consulted its own legal and financial advisors to the extent it deemed appropriate. The Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each of the Guarantors agrees that it will not claim that the Purchaser, or any of them, has rendered advisory services of any nature or respect, or owes a fiduciary or similar duty to the Escrow Issuer, the Permanent Issuer or any Guarantor, in connection with such transaction or the process leading thereto.

17. This Agreement supersedes all prior agreements and understandings (whether written or oral) between or among the Escrow Issuer, the Permanent Issuer,, the Guarantors and the Purchasers, or any of them, with respect to the subject matter hereof.

18. THIS AGREEMENT AND ANY MATTERS RELATED TO THIS TRANSACTION SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO PRINCIPLES OF CONFLICT OF LAWS THAT WOULD RESULT IN THE APPLICATION OF ANY LAW OTHER THAN THE LAWS OF THE STATE OF NEW YORK. The Escrow Issuer and, upon execution and delivery

of the Joinder Agreement, the Permanent Issuer and each of the Guarantors agrees that any suit or proceeding arising in respect of this agreement or our engagement will be tried exclusively in the U.S. District Court for the Southern District of New York or, if that court does not have subject matter jurisdiction, in any state court located in The City and County of New York and the Escrow Issuer and the Permanent Issuer agree to submit to the jurisdiction of, and to venue in, such courts.

19. The Escrow Issuer, each of the Purchasers and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and each Guarantor, hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

20. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such respective counterparts shall together constitute one and the same instrument.

21. Notwithstanding anything herein to the contrary, the Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and the Guarantors (and the Escrow Issuer's and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer's and each Guarantor's employees, representatives, and other agents) are authorized to disclose to any and all persons, the tax treatment and tax structure of the potential transaction and all materials of any kind (including tax opinions and other tax analyses) provided to the Escrow Issuer, the Permanent Issuer or any Guarantor relating to that treatment and structure, without the Purchasers' imposing any limitation of any kind. However, any information relating to the tax treatment and tax structure shall remain confidential (and the foregoing sentence shall not apply) to the extent necessary to enable any person to comply with securities laws. For this purpose, "tax treatment" means US federal and state income tax treatment, and "tax structure" is limited to any facts that may be relevant to that treatment.

22. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that any Purchaser that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Purchaser of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Purchaser that is a Covered Entity or a BHC Act Affiliate of such Purchaser becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Purchaser are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

(c) As used in this section:

"BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841 (k).

"Covered Entity" means any of the following:

(i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

(ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81,47.2 or 382.1, as applicable.

“U.S. Special Resolution Regime” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

If the foregoing is in accordance with your understanding, please sign and return to us five counterparts hereof, and upon the acceptance hereof by you, on behalf of each of the Purchasers, this letter and such acceptance hereof shall constitute a binding agreement among each of the Purchasers, the Escrow Issuer and, upon execution and delivery of the Joinder Agreement, the Permanent Issuer and the Guarantors. It is understood that your acceptance of this letter on behalf of each of the Purchasers is pursuant to the authority set forth in a form of Agreement among Purchasers, the form of which shall be submitted to the Company for examination upon request, but without warranty on your part as to the authority of the signers thereof.

[Signature Page Follows]

Very truly yours,

Chesapeake Escrow Issuer LLC

By: /s/ William M. Buergler

Name: William M. Buergler

Title: Chief Accounting Officer

[Signature Page to Purchase Agreement]

Accepted as of the date hereof.
Goldman Sachs & Co. LLC
RBC Capital Markets, LLC

For themselves and on behalf of the several Purchasers listed in Schedule I hereto.

Goldman Sachs & Co. LLC

By: /s/ Douglas Buffone

Name: Douglas Buffone
Title: Managing Director

RBC Capital Markets, LLC

By: /s/ Stephen Pedone

Name: Stephen Pedone
Title: Managing Director

SCHEDULE I

Purchaser	Principal Amount of 2026 Notes to be Purchased	Principal Amount of 2029 Notes to be Purchased
Goldman Sachs & Co. LLC	$165,000,015	$165,000,050
RBC Capital Markets, LLC	165,000,000	165,000,000
J.P. Morgan Securities LLC	50,000,000	50,000,000
Citigroup Global Markets Inc	17,142,855	17,142,850
BofA Securities, Inc	17,142,855	17,142,850
DNB Markets, Inc	17,142,855	17,142,850
Mizuho Securities USA LLC	17,142,855	17,142,850
Morgan Stanley & Co. LLC	17,142,855	17,142,850
MUFG Securities Americas Inc	17,142,855	17,142,850
Wells Fargo Securities, LLC	17,142,855	17,142,850
Total	**$500,000,000**	**$500,000,000**

SCHEDULE II

(a) Additional Documents Incorporated by Reference:

None

(b) Company Supplemental Disclosure Documents:

Electronic Roadshow Presentation, dated February 2, 2021

(c) Purchaser Supplemental Disclosure Documents:

None

SCHEDULE III

[Attached]

Pricing Supplement dated February 2, 2021
to the
Preliminary Offering Circular dated February 2, 2021
(the "Preliminary Offering Circular")

Chesapeake Escrow Issuer LLC
to be merged with and into
Chesapeake Energy Corporation

$500 million of 5.500% Senior Notes due 2026

$500 million of 5.875%> Senior Notes due 2029

This Pricing Supplement is qualified in its entirety by reference to the Preliminary Offering Circular. The information in this Pricing Supplement supplements the Preliminary Offering Circular and supersedes the information in the Preliminary Offering Circular to the extent inconsistent with the information in the Preliminary Offering Circular. **Other information (including financial information) presented or incorporated by reference in the Preliminary Offering Circular is deemed to have changed to the extent affected by the changes described herein.** Capitalized terms used herein but not defined shall have the meanings assigned to them in the Preliminary Offering Circular.

The notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the **"Securities Act"),** or the securities laws of any other jurisdiction. The notes may be offered and sold only in transactions that are exempt from registration under the Securities Act and applicable state securities laws. The Escrow Issuer and the initial purchasers named below are offering and selling the notes only to persons reasonably believed to be qualified institutional buyers under Rule 144A under the Securities Act and to non-U.S. persons outside the United States in reliance on Regulation S under the Securities Act. For further details about eligible offerees and resale restrictions, see "Transfer restrictions" in the Preliminary Offering Circular.

Issuer:	Prior to the Completion Date, Chesapeake Escrow Issuer LLC, and from and after the Completion Date, Chesapeake Energy Corporation. Prior to the Completion Date, Chesapeake Escrow Issuer LLC will be the issuer of the notes. On the Completion Date, Chesapeake Escrow Issuer LLC will merge with and into Chesapeake Energy Corporation, with Chesapeake Energy Corporation continuing as the surviving entity, and Chesapeake Energy Corporation will assume the obligations of Chesapeake Escrow Issuer LLC as issuer of the notes.
Guarantors:	Prior to the Completion Date, the notes will not be guaranteed. From and after the Completion Date, the notes will be guaranteed by all of the Company's current Subsidiaries that are Guarantors under the Credit Agreement.

Total Aggregate Principal Amount:	$1,000,000,000
Use of Proceeds:	The net proceeds of this offering, together with the anticipated proceeds from the Exit Facility and Rights Offering, are intended to be used to fund the distributions provided for under the Plan, including the repayment of claims under the DIP Facility, and to pay certain fees, commissions and related expenses relating to the foregoing and the Company's emergence from bankruptcy and for general corporate purposes.
Escrow of Proceeds; Special Mandatory Redemption	On the settlement date for the offering of the notes, an amount equal to the gross proceeds of the offering of each series of the notes (together with any additional amounts (as determined solely by the Escrow Issuer) as may be necessary to fund the redemption of all the notes of such series at the Special Mandatory Redemption Price for such series notes, on the Special Mandatory Redemption Date based on the Escrow Outside Date) will be deposited into an escrow account. In the event that (i) the Escrow Outside Date occurs and the Escrow Agent shall not have received the Escrow Release Officer's Certificate on or prior to such date or (ii) the Company informs the Escrow Agent in writing that, in the reasonable good faith judgment of the Company, the Effective Date will not occur on or prior to the Escrow Outside Date, the Escrow Issuer will redeem the notes of each series at a price equal to 100% of the principal amount of the notes of such series, plus accrued and unpaid interest on the notes of such series, if any, from the Issue Date to, but excluding, such date, subject to the right of holders of record on the relevant record date to receive interest due on the relevant interest payment date.

Terms Relating to the 5.500% Senior Notes Due 2026

Title of Securities:	5.500% Senior Notes due 2026 (the "2026 Notes").
Principal Amount:	$500,000,000
Gross Proceeds:	$500,000,000
Final Maturity Date:	February 1, 2026
Issue Price:	100%, plus accrued interest, if any, from February 5, 2021
Coupon:	5.500%
Yield to Maturity:	5.500%
Spread to Treasury:	+ 507 basis points
Benchmark Treasury:	2.625% UST due January 31, 2026

Interest Payment Dates:	February 1 and August 1
First Interest Payment Date:	August 1, 2021
Record Dates:	January 15 and July 15
Optional Redemption	At any time prior to February 5, 2023, the Issuer may, on any one or more occasions, redeem all or a part of the 2026 Notes, upon notice as provided in the indenture, at a redemption price equal to 100% of the principal amount of the 2026 Notes redeemed, plus the 2026 Applicable Premium as of, and accrued and unpaid interest, if any, to the date of redemption, subject to the rights of holders of the 2026 Notes on the relevant record date to receive interest due on the relevant interest payment date. On or after February 5, 2023, the Issuer may on any one or more occasions redeem all or a part of the 2026 Notes, upon notice as provided in the indenture, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accmed and unpaid interest, if any, on the 2026 Notes redeemed, to the applicable date of redemption, if redeemed during the twelve-month period beginning on February 5 of the years indicated below, subject to the rights of holders of the 2026 Notes on the relevant record date to receive interest on the relevant interest payment date:

Year	**Percentage**
2023	102.750%
2024	101.375%
2025 and thereafter	100.000%

Optional Redemption with Equity Proceeds:	The Issuer may also redeem up to 35% of the aggregate principal amount of the 2026 Notes before February 5, 2023 with an amount of cash not greater than the net proceeds that the Issuer raises in certain equity offerings at a redemption price equal to 105.500% of the principal amount of the notes being redeemed, plus accrued and unpaid interest, if any.
Change of Control:	Put @ 101% of principal plus accrued interest
CUSIP Numbers / ISINs:	144A Notes: 165167 DF1 / US165167DF18 Reg S Notes: U16450 BA2 / USU16450BA27

Terms Relating to the 5.875% Senior Notes Due 2029

Title of Securities:	5.875% Senior Notes due 2029 (the “2029 Notes”).
Principal Amount:	$500,000,000
Gross Proceeds:	$500,000,000

Final Maturity Date:	February 1, 2029
Issue Price:	100%, plus accrued interest, if any, from February 5, 2021
Coupon:	5.875%
Yield to Maturity:	5.875%
Spread to Treasury:	+ 498 basis points
Benchmark Treasury:	2.625% UST due February 15, 2029
Interest Payment Dates	February 1 and August 1
First Interest Payment Date:	August 1, 2021
Record Dates:	January 15 and July 15
Optional Redemption:	At any time prior to February 5, 2024, the Issuer may, on any one or more occasions, redeem all or a part of the 2029 Notes, upon notice as provided in the indenture, at a redemption price equal to 100% of the principal amount of the 2029 Notes redeemed, plus the 2029 Applicable Premium as of, and accrued and unpaid interest, if any, to the date of redemption, subject to the rights of holders of the 2029 Notes on the relevant record date to receive interest due on the relevant interest payment date. On or after February 5, 2024, the Issuer may on any one or more occasions redeem all or a part of the 2029 Notes, upon notice as provided in the indenture, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accmed and unpaid interest, if any, on the 2029 Notes redeemed, to the applicable date of redemption, if redeemed during the twelve-month period beginning on February 5 of the years indicated below, subject to the rights of holders of the 2029 Notes on the relevant record date to receive interest on the relevant interest payment date:

Year	**Percentage**
2024	102.938%
2025	101.469%
2026 and thereafter	100.000%

Optional Redemption with Equity Proceeds:	The Issuer may also redeem up to 35% of the aggregate principal amount of the 2029 Notes before February 5, 2024 with an amount of cash not greater than the net proceeds that the Issuer raises in certain equity offerings at a redemption price equal to 105.875% of the principal amount of the notes being redeemed, plus accrued and unpaid interest, if any.
Change of Control:	Put @ 101% of principal plus accrued interest
CUSIP Numbers / ISINs:	144 A Notes: 165167 DG9 / US165167DG90 Reg S Notes: U16450 BBO / USU16450BB00

Terms Applicable to Both Series of Notes

Distribution:	144A/Regulation S for life (without registration rights).
Initial Purchasers:	Goldman Sachs & Co. LLC RBC Capital Markets, LLC Citigroup Global Markets Inc. J.P. Morgan Securities LLC BofA Securities, Inc. DNB Markets, Inc. Mizuho Securities USA LLC Morgan Stanley & Co. LLC MUFG Securities Americas Inc. Wells Fargo Securities, LLC
Trade Date:	February 2, 2021
Settlement Date:	February 5, 2021 The Issuer expects that delivery of the notes will be made against payment therefor on or about February 5, 2021, which will be the third business day following the date of pricing of the notes (this settlement cycle being referred to as "T+3"). Under Rule 15c6-l under the Securities Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes on the date of pricing will be required, by virtue of the fact that the notes initially will settle in T+3, to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of notes who wish to trade notes on the date of pricing should consult their own advisor.

ANNEX I

(1) **The Securities have not been and will not be registered under the Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in accordance with Regulation S under the Act or pursuant to an exemption from the registration requirements of the Act. Each Purchaser represents that it has offered and sold the Securities, and will offer and sell the Securities (i) as part of their distribution at any time and (ii) otherwise until 40 days after the later of the commencement of the offering and the Time of Delivery, only in accordance with Rule 903 of Regulation S or Rule 144A under the Act. Accordingly, each Purchaser agrees that neither it, its affiliates nor any persons acting on its or their behalf has engaged or will engage in any directed selling efforts with respect to the Securities, and it and they have complied and will comply with the offering restrictions requirement of Regulation S. Each Purchaser agrees that, at or prior to confirmation of sale of Securities (other than a sale pursuant to Rule 144A), it will have sent to each distributor, dealer or person receiving a selling concession, fee or other remuneration that purchases Securities from it during the restricted period a confirmation or notice to substantially the following effect:**

"The Securities covered hereby have not been registered under the U.S. Securities Act of 1933 (the "Securities Act") and may not be offered and sold within the United States or to, or for the account or benefit of, U.S. persons (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the closing date, except in either case in accordance with Regulation S (or Rule 144A if available) under the Securities Act. Terms used above have the meaning given to them by Regulation S."

Terms used in this paragraph have the meanings given to them by Regulation S.

Each Purchaser further agrees that it has not entered and will not enter into any contractual arrangement with respect to the distribution or delivery of the Securities, except with its affiliates or with the prior written consent of the Company.

(2) **Notwithstanding the foregoing, Securities in registered form may be offered, sold and delivered by the Purchasers in the United States and to U.S. persons pursuant to Section 3 of this Agreement without delivery of the written statement required by paragraph (1) above.**

(3) **Each Purchaser agrees that it will not offer, sell or deliver any of the Securities in any jurisdiction outside the United States except under circumstances that will result in compliance with the applicable laws thereof, and that it will take at its own expense whatever action is required to permit its purchase and resale of the Securities in such jurisdictions. Each Purchaser understands that no action has been taken to permit a public offering in any jurisdiction outside the United States where action would be required for such purpose. Each Purchaser agrees not to cause any advertisement of the Securities to be published in any newspaper or periodical or posted in any public place and not to issue any circular relating to the Securities, except in any such case with the Representatives' express written consent and then only at its own risk and expense.**

ANNEX II

Guarantors

Chesapeake Energy Corporation

CHESAPEAKE AEZ EXPLORATION, L.L.C.

CHESAPEAKE APPALACHIA, L.L.C.

CHESAPEAKE E&P HOLDING, L.L.C.

CHESAPEAKE ENERGY LOUISIANA, LLC

CHESAPEAKE ENERGY MARKETING, L.L.C.

CHESAPEAKE EXPLORATION, L.L.C.

CHESAPEAKE LAND DEVELOPMENT COMPANY, L.L.C.

CHESAPEAKE MIDSTREAM DEVELOPMENT, L.L.C.

CHESAPEAKE NG VENTURES CORPORATION

CHESAPEAKE OPERATING, L.L.C., on behalf of itself and as general partner of CHESAPEAKE LOUISIANA, L.P.

CHESAPEAKE PLAINS, LLC

CHESAPEAKE ROYALTY, L.L.C.

CHESAPEAKE VRT, L.L.C.

CHESAPEAKE-CLEMENTS ACQUISITION, L.L.C.

CHK ENERGY HOLDINGS, INC.

CHK NGV LEASING COMPANY, L.L.C.

CHK UTICA, L.L.C.

COMPASS MANUFACTURING, L.L.C.

EMLP, L.L.C., on behalf of itself and as the general partner of EMPRESS LOUISIANA PROPERTIES, L.P.

EMPRESS, L.L.C.

GSF, L.L.C.

MC LOUISIANA MINERALS, L.L.C.

MC MINERAL COMPANY, L.L.C.

MIDCON COMPRESSION, L.L.C.

NOMAC SERVICES, L.L.C.

NORTHERN MICHIGAN EXPLORATION COMPANY, L.L.C.

SPARKS DRIVE SWD, INC.

WINTER MOON ENERGY CORPORATION

BRAZOS VALLEY LONGHORN FINANCE CORP.

BRAZOS VALLEY LONGHORN, L.L.C.

BURLESON SAND LLC

BURLESON WATER RESOURCES, LLC

ESQUISTO RESOURCES II, LLC

PETROMAX E&P BURLESON, LLC

WHE ACQCO., LLC

WHR EAGLE FORD LLC

WILDHORSE RESOURCES II, LLC

WILDHORSE RESOURCES MANAGEMENT COMPANY, LLC

ANNEX III

FORM OF JOINDER AGREEMENT

Chesapeake Energy Corporation

and the Guarantors party hereto

$500,000,000 of 5.500% Senior Notes due 2026

$500,000,000 of 5.875% Senior Notes due 2029

[ ], 2021

Goldman Sachs & Co. LLC,
RBC Capital Markets, LLC
As representatives of the several Purchasers named in Schedule I hereto,

c/o Goldman Sachs & Co. LLC
200 West Street
New York, New York 10282

c/o RBC Capital Markets, LLC
Brookfield Place
200 Vesey Street, 8th Floor
New York, New York 10281

Reference is hereby made to that certain purchase agreement (the "Purchase Agreement") dated as of February 2, 2021, among Chesapeake Escrow Issuer LLC, a Delaware limited liability company(the "Escrow Issuer") and Goldman Sachs & Co. LLC and RBC Capital Markets, LLC as representatives of each of the other Purchasers named in Schedule I thereto (collectively, the "Purchasers") relating to the issuance and sale to the Purchasers of $500,000,000 aggregate principal amount of Escrow Issuer's 5.500% Senior Notes due 2026 and $500,000,000 aggregate principal amount of the Escrow Issuer's 5.875% Senior Notes due 2029 (the "Securities"). Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase Agreement.

Chesapeake Energy Corporation, an Oklahoma corporation, has assumed the rights and obligations of the Escrow Issuer with respect to the Securities under the Indenture pursuant to, and in accordance with, the provisions of the Indenture and (ii) the Guarantors that were originally not a party thereto have agreed to join in the Purchase Agreement pursuant to this agreement (this "Joinder Agreement") on the Completion Date pursuant to, and in accordance with, the provisions of the Indenture.

1. **Joinder.** Each of the undersigned hereby acknowledges that it has received a copy of the Purchase Agreement and acknowledges and agrees with the Purchasers that by its execution and delivery hereof it shall (i) join and become a party to the Purchase Agreement; (ii) be bound by all covenants, agreements, representations, warranties and acknowledgements applicable to such party as set forth in and in accordance with the terms of the Purchase Agreement; and (iii) perform all obligations and duties as required of it in accordance with the Purchase Agreement.

2. **Counterparts.** This Joinder Agreement may be signed in one or more counterparts (which may be delivered in original form or via facsimile or other electronic transmission), each of which shall constitute an original when so executed and all of which together shall constitute one and the same agreement.

3. **Amendments.** No amendment or waiver of any provision of this Joinder Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties thereto.

4. **Headings.** The section headings used herein are for convenience only and shall not affect the construction hereof.

5. **GOVERNING LAW.** THIS JOINDER AGREEMENT, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS JOINDER AGREEMENT, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

[Remainder of Page Intentionally Blank]

IN WITNESS WHEREOF, each of the undersigned has caused this Joinder Agreement to be duly executed and delivered, by its proper and duly authorized officer as of the date set forth above.

Chesapeake Energy Corporation

By: _____

Name:

Title:

[Guarantors]

By: _____

Name:

Title:

ANNEX IV

CERTIFICATE OF THE CHIEF FINANCIAL OFFICER

February 2, 2021

Reference is hereby made to the Purchase Agreement, dated February 2, 2021 (the "Purchase Agreement"), among Goldman Sachs & Co. LLC and RBC Capital Markets, LLC, as representatives of the several purchasers named on Schedule I thereto (the "Purchasers"), and Chesapeake Escrow Issuer LLC. Capitalized terms used but not defined in this certificate have the meaning assigned to them in the Purchase Agreement.

I am responsible for the financial accounting matters of the Chesapeake Energy Corporation, an Oklahoma corporation (the "Company") and am familiar with the accounting books and records and internal controls of the Company. To assist the Purchasers in conducting and documenting their investigation of the affairs of the Company and the Escrow Issuer, I, Domenic J. Dell'Osso, Jr., solely in my capacity as Chief Financial Officer of the Company, and not in my individual capacity, do hereby certify pursuant to Section 8(i) of the Purchase Agreement that after reasonable inquiry and investigation by myself or members of my staff who are responsible for the Company's financial and accounting matters:

1. The items marked on the pages of the Offering Circular attached here are derived from the accounting books and records of the Company. Such information is, as of the date of the certificate, a true and accurate measurement of the data purported to be represented for the periods presented, in all material respects.

2. The items marked with a "B" on the pages of the Offering Circular attached here (a) are derived from the accounting books and records of the Company, (b) fairly present, in all material respects, the Company's calculation of the aforementioned information for the period presented (c) are, as of the date of this certificate, a true and accurate measurement of the data purported to be represented for the periods presented, in all material respects and (d) are calculated substantially in accordance with the description thereof contained in the Offering Circular.

3. The items marked with an "C" on the pages of the Offering Circular attached here (a) fairly present, in all material respects, the Company's calculation of the aforementioned information for the period presented, (b) are, as of the date of this certificate, a true and accurate measurement of the data purported to be represented for the periods presented, in all material respects and (c) are calculated substantially in accordance with the description thereof contained in the Offering Circular.

IN WITNESS WHEREOF, I have signed this certificate as of the date first written above.

CHESAPEAKE ENERGY CORPORATION

By: /s/ Domenic J. Dell'Osso, Jr.

Name: Domenic J. Dell'Osso, Jr.

Title: Executive Vice President and Chief Financial Officer

Exhibit 10.11

CHESAPEAKE ESCROW ISSUER LLC

AND EACH OF THE GUARANTORS PARTY HERETO

5.500% SENIOR NOTES DUE 2026

5.875% SENIOR NOTES DUE 2029

INDENTURE

Dated as of February 5, 2021

DEUTSCHE BANK TRUST COMPANY AMERICAS

Trustee

TABLE OF CONTENTS

ARTICLE 13
MISCELLANEOUS

EXHIBITS

INDENTURE dated as of February 5, 2021, among Chesapeake Escrow Issuer LLC, a Delaware limited liability company (the "*Escrow Issuer*" and, prior to the Completion Date (as defined herein), the "*Issuer*"), the Guarantors party hereto from time to time (as defined herein) and Deutsche Bank Trust Company Americas, a New York banking corporation, as Trustee (in such capacity, the "*Trustee*").

WHEREAS, on the Completion Date, the Escrow Issuer will merge with and into Chesapeake Energy Corporation, an Oklahoma corporation, (the "*Permanent Issuer*") with the Permanent Issuer as the surviving corporation and the Permanent Issuer will assume the Notes (as defined herein) offered hereby and the obligations of Escrow Issuer under the Notes and this Indenture;

WHEREAS, from and after the Completion Date, references to the "*Company*" or the "*Issuer*" shall refer to the Permanent Issuer and not any of its Subsidiaries; and

WHEREAS, from and after the Completion Date, the Notes will be guaranteed by all of the Permanent Issuer's Subsidiaries (as defined herein) that are guarantors under the Credit Agreement (as defined herein) or otherwise as required under this Indenture, in each case that executes a supplemental indenture in the form attached hereto as Exhibit D or Exhibit E, as applicable;

NOW THEREFORE, the Issuer, the Guarantors and the Trustee agree as follows for the benefit of each other and for the equal and ratable benefit of the Holders (as defined herein) of the 5.500% Senior Notes due 2026 (the "*2026 Notes*") and of the 5.875% Senior Notes due 2029 (the "*2029 Notes*", together with the 2026 Notes, the "*Notes*"):

ARTICLE 1
DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.01 *Definitions*.

"144A Global Note" means a Global Note substantially in the form of Exhibit A-I or Exhibit A-II hereto bearing the Global Note Legend and the Private Placement Legend and deposited with or on behalf of, and registered in the name of, the Depositary or its nominee that will be issued in a denomination equal to the outstanding principal amount of the Notes initially sold in reliance on Rule 144A.

"*2026 Applicable Premium*" means, with respect to any 2026 Note on any redemption date, the greater of:

(1) 1.0% of the principal amount of the 2026 Note; or

(2) the excess of:

(a) the present value at such redemption date of (i) the redemption price of the 2026 Note at February 5, 2023 (such redemption price being set forth in the table appearing in Section 3.07 hereof) *plus* (ii) all required interest payments due on the 2026 Note through February 5, 2023 (in each case excluding accrued but unpaid

interest to the redemption date), computed using a discount rate equal to the 2026 Treasury Rate as of such redemption date plus 50 basis points discounted to the redemption date on a semi-annual basis (assuming a 360 day year consisting of twelve 30 day months), over

(b) the principal amount of the 2026 Note.

"*2026 Notes*" has the meaning assigned to it in the recitals of this Indenture.

"*2026 Treasury Rate*" means, in respect of any redemption date for the 2026 Notes, the yield to maturity as of the time of computation of United States Treasury securities with a constant maturity (as compiled and published in the most recent Federal Reserve Statistical Release H.15 that has become publicly available at least two Business Days prior to the redemption date (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption date to February 5, 2023; *provided, however*, that if the period from the redemption date to February 5, 2023 is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year will be used. The Company will (1) calculate the 2026 Treasury Rate on the second Business Day preceding the applicable redemption date and (2) prior to such redemption date file with the trustee an Officers' Certificate setting forth the 2026 Applicable Premium and the 2026 Treasury Rate and showing the calculation of each in reasonable detail.

"*2029 Applicable Premium*" means, with respect to any 2029 Note on any redemption date, the greater of:

(1) 1.0% of the principal amount of the 2029 Note; or

(2) the excess of:

(a) the present value at such redemption date of (i) the redemption price of the 2029 Note at February 5, 2024 (such redemption price being set forth in the table appearing in Section 3.07 hereof) *plus* (ii) all required interest payments due on the 2029 Note through February 5, 2024 (in each case excluding accrued but unpaid interest to the redemption date), computed using a discount rate equal to the 2029 Treasury Rate as of such redemption date plus 50 basis points discounted to the redemption date on a semi-annual basis (assuming a 360 day year consisting of twelve 30 day months), over

(b) the principal amount of the 2029 Note.

"*2029 Notes*" has the meaning assigned to it in the recitals of this Indenture.

"*2029 Treasury Rate*" means, in respect of any redemption date for the 2029 Notes, the yield to maturity as of the time of computation of United States Treasury securities with a constant maturity (as compiled and published in the most recent Federal Reserve Statistical Release H.15 that has become publicly available at least two Business Days prior to the redemption date (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption date to February 5, 2024; *provided*,

however, that if the period from the redemption date to February 5, 2024 is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year will be used. The Company will (1) calculate the 2029 Treasury Rate on the second Business Day preceding the applicable redemption date and (2) prior to such redemption date file with the trustee an Officers' Certificate setting forth the 2019 Applicable Premium and the 2029 Treasury Rate and showing the calculation of each in reasonable detail.

"*Acquired Debt*" means, with respect to any specified Person:

(1) Indebtedness of any other Person existing at the time such other Person is merged with or into or became a Subsidiary of such specified Person, whether or not such Indebtedness is incurred in connection with, or in contemplation of, such other Person merging with or into, or becoming a Restricted Subsidiary of, such specified Person; and

(2) Indebtedness secured by a Lien encumbering any asset acquired by such specified Person.

"*Additional Notes*" means additional Notes (other than the Initial Notes) of any series issued under this Indenture in accordance with Sections 2.02 and 4.09 hereof, as part of the same series as the Initial Notes.

"*Adjusted Consolidated Net Tangible Assets*" means (without duplication), as of the date of determination,

(a) the sum of:

(i) the discounted future net revenues from proved oil and natural gas reserves of the Company and its Restricted Subsidiaries calculated in accordance with SEC guidelines before any state or federal income taxes, as estimated in a reserve report prepared as of the end of the Company's most recently completed fiscal year for which a reserve report is available, or at the Company's option, the Company's most recently completed fiscal quarter for which a reserve report is available, in each case, which reserve report is prepared or audited by independent petroleum engineers or, with respect to proved oil and natural gas reserves not exceeding 20% of the volume of the proved oil and natural gas reserves of the Company and its Restricted Subsidiaries, the Company's petroleum engineers (it being understood that with respect to no less than 80% of the volume of the proved oil and natural gas reserves of the Company and its Restricted Subsidiaries, such reserve report shall have been prepared or audited by independent petroleum engineers), as *increased by*, as of the date of determination, the estimated discounted future net revenues from:

(A) estimated proved oil and natural gas reserves of the Company and its Restricted Subsidiaries acquired since the date of such year-end or quarterly reserve report, as applicable; and

(B) estimated proved oil and natural gas reserves of the Company and its Restricted Subsidiaries attributable to extensions,

discoveries and other additions and upward revisions of estimates of proved oil and natural gas reserves (including previously estimated development costs incurred during the period and the accretion of discount since the prior period end) since the date of such year-end or quarterly reserve report, as applicable, due to exploration, development or exploitation, production or other activities which would, in accordance with standard industry practice, cause such revisions, and

decreased by, as of the date of determination, the discounted future net revenue attributable to:

(C) estimated proved oil and natural gas reserves of the Company and its Restricted Subsidiaries reflected in such reserve report produced or disposed of since the date of such year-end or quarterly reserve report, as applicable; and

(D) reductions in estimated proved oil and natural gas reserves of the Company and its Restricted Subsidiaries reflected in such reserve report attributable to downward revisions of estimates of proved oil and natural gas reserves since such year- or quarter-end, as applicable, due to changes in geological conditions or other factors which would, in accordance with standard industry practice, cause such revisions;

in the case of the preceding clauses (A) through (D), calculated on a pre-tax basis in accordance with SEC guidelines (utilizing the prices utilized in such Person's year-end or quarterly reserve report, as applicable) and estimated by the Company's petroleum engineers or any independent petroleum engineers engaged by the Company for that purpose;

(ii) the capitalized costs that are attributable to oil and gas properties of the Company and its Restricted Subsidiaries to which no proved oil and natural gas reserves are attributable, based on the Company's books and records as of a date no earlier than the last day of the Company's most recent quarterly or annual period for which internal financial statements are available;

(iii) the Consolidated Net Working Capital of the Company and its Restricted Subsidiaries as of a date no earlier than the last day of the Company's most recent quarterly or annual period for which internal financial statements are available; and

(iv) the greater of:

(A) the net book value and

(B) the appraised value, as estimated by independent appraisers, of other tangible assets (including Investments in unconsolidated Subsidiaries)

in each case, of the Company and its Restricted Subsidiaries as of a date no earlier than the last day of the date of the Company's most recent quarterly or annual period for which internal financial statements are available; *provided* that if no such appraisal has been performed, the Company shall not be required to obtain such an appraisal and only clause (a)(iv)(A) of this definition shall apply, *minus*, to the extent not otherwise taken into account in this clause (a),

(b) the sum of

(i) minority interests;

(ii) any net gas balancing liabilities of the Company and its Restricted Subsidiaries as of the last day of the Company's most recent annual or quarterly period for which internal financial statements are available;

(iii) to the extent included in clause (a)(i) above, the discounted future net revenues, calculated in accordance with SEC guidelines (utilizing the prices utilized in the Company's year-end or quarterly reserve report, as applicable), attributable to reserves that are required to be delivered to third parties to fully satisfy the obligations of the Company and its Restricted Subsidiaries with respect to Volumetric Production Payments on the schedules specified with respect thereto; and

(iv) the discounted future net revenues, calculated in accordance with SEC guidelines, attributable to reserves subject to Dollar-Denominated Production Payments that, based on the estimates of production and price assumptions included in determining the discounted future net revenues specified in (a)(i) above, would be necessary to fully satisfy the payment obligations of the Company and its Restricted Subsidiaries with respect to Dollar-Denominated Production Payments on the schedules specified with respect thereto.

If the Company changes its method of accounting from the successful efforts method to the full costs method or a similar method of accounting, "Adjusted Consolidated Net Tangible Assets" will continue to be calculated as if the Company were still using the successful efforts method of accounting. For the avoidance of doubt, "oil and gas reserves" shall include any reserves attributable to natural gas liquids.

"Affiliate" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control," as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise. For purposes of this definition, the terms "controlling," "controlled by" and "under common control with" have correlative meanings.

"Agent" means any Registrar or Paying Agent.

"*Applicable Premium*" means, with respect to the 2026 Notes, the 2026 Applicable Premium, and with respect to the 2029 Notes, the 2029 Applicable Premium.

"Applicable Procedures" means, with respect to any transfer or exchange of or for beneficial interests in any Global Note, the rules and procedures of the Depositary, Euroclear and Clearstream that apply to such transfer or exchange.

"*Asset Sale*" means:

(1) the sale, lease, conveyance or other disposition of any assets or rights by the Company or any of the Company's Restricted Subsidiaries (including, without limitation, Production Payments and Reserve Sales); *provided* that the sale, lease, conveyance or other disposition of all or substantially all of the properties or assets of the Company and its Subsidiaries taken as a whole will be governed by Section 4.15 and/or by Section 5.01 and not by the provisions of Section 4.10; and

(2) the issuance of Equity Interests by any of the Company's Restricted Subsidiaries or the sale by the Company or any of the Company's Restricted Subsidiaries of Equity Interests in any of the Company's Subsidiaries.

Notwithstanding the preceding, none of the following items will be deemed to be an Asset Sale:

(1) any single transaction or series of related transactions that involves assets having a Fair Market Value of less than $50.0 million; *provided* that the Fair Market Value of all transactions excluded pursuant to this subclause (1) shall not exceed $200.0 million in the aggregate in any calendar year;

(2) a transfer of assets between or among the Company and its Restricted Subsidiaries;

(3) an issuance or sale of Equity Interests by a Restricted Subsidiary of the Company to the Company or to a Restricted Subsidiary of the Company;

(4) the sale, lease or other transfer of products, services or accounts receivable in the ordinary course of business and any sale or other disposition of damaged, worn-out or obsolete assets in the ordinary course of business (including the abandonment or other disposition of intellectual property that is, in the reasonable judgment of the Company, no longer economically practicable to maintain or useful in the conduct of the business of the Company and its Restricted Subsidiaries taken as whole);

(5) licenses and sublicenses by the Company or any of its Restricted Subsidiaries of software or intellectual property, including seismic data and interpretations thereof, in the ordinary course of business;

(6) any surrender or waiver of contract rights or settlement, release, recovery on or surrender of contract, tort or other claims in the ordinary course of business;

(7) the granting of Liens not prohibited by Section 4.12 and dispositions in connection with Permitted Liens;

(8) the sale or other disposition of cash, Cash Equivalents or other financial instruments;

(9) a Restricted Payment (or payment or transfer that would be a Restricted Payment but for an exception to the definition thereof) that does not violate Section 4.07 or a Permitted Investment;

(10) sale or other disposition of Hydrocarbons or other mineral products in the ordinary course of business;

(11) an Asset Swap;

(12) dispositions of crude oil and natural gas properties, *provided* that at the time of any such disposition such properties do not have associated with them any proved reserves;

(13) any Production Payments and Reserve Sales; *provided* that any such Production Payments and Reserve Sales, other than incentive compensation programs on terms that are reasonably customary in the Oil and Gas Business for geologists, geophysicists and other providers of technical services to the Company or a Restricted Subsidiary, shall have been created, incurred, issued, assumed or Guaranteed in connection with the financing of, and within 60 days after the acquisition of, the property that is subject thereto;

(14) the abandonment, farmout, lease or sublease of developed or undeveloped Oil and Gas Properties in the ordinary course of business or which are usual and customary in the Oil and Gas Business generally or in the geographic region in which such activities occur, including pursuant to any agreement or arrangement described in the definition of Permitted Business Investments;

(15) any sale or other disposition of Equity Interests in or Indebtedness of an Unrestricted Subsidiary; and

(16) the early termination or unwinding of any Hedging Obligations.

"*Asset Swap*" means any substantially contemporaneous (and in any event occurring within 180 days of each other) purchase and sale or exchange of any assets or properties used or useful in the Oil and Gas Business between the Company or any of its Restricted Subsidiaries and another Person; *provided*, that the Fair Market Value of the properties or assets traded or exchanged by the Company or such Restricted Subsidiary (together with any cash) is reasonably equivalent to the Fair Market Value of the properties or assets (together with any cash) to be received by the Company or such Restricted Subsidiary, and *provided further* that any net cash received must be applied in accordance with Section 4.10 if then in effect.

"*Bankruptcy Law*" means Title 11, U.S. Code or any similar federal or state law for the relief of debtors.

"*Beneficial Owner*" has the meaning assigned to such term in Rule 13d-3 and Rule 13d-5 under the Exchange Act, except that in calculating the beneficial ownership of any particular "person" (as that term is used in Section 13(d)(3) of the Exchange Act), such "person" will be deemed to have beneficial ownership of all securities that such "person" has the right to acquire by conversion or exercise of other securities, whether such right is currently exercisable or is exercisable only after the passage of time. The terms "Beneficially Owns" and "Beneficially Owned" have corresponding meanings. For purposes of this definition, a Person shall be deemed not to Beneficially Own securities that are the subject of a stock purchase agreement, merger agreement, amalgamation agreement, arrangement agreement or similar agreement until consummation of the transactions or, as applicable, series of related transactions contemplated thereby.

"*Board of Directors*" means:

(1) with respect to a corporation, the board of directors of the corporation or any committee thereof duly authorized to act on behalf of such board;

(2) with respect to a partnership, the Board of Directors of the general partner of the partnership;

(3) with respect to a limited liability company, the board of managers thereof, or if there is no such board, the managing member or members or any controlling committee of managing members thereof; and

(4) with respect to any other Person, the board or committee of such Person serving a similar function.

"Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the applicable Person to have been duly adopted by the Board of Directors of such Person and to be in full force and effect on the date of such certification, and delivered to the Trustee.

"Borrowing Base" means, with respect to borrowings under the Credit Agreement and any amendment to and/or modification or replacement of the foregoing in the form of a reserve-based borrowing base credit facility, in each case with lenders that include commercial banks, the maximum amount determined or re-determined by the lenders thereunder as the aggregate lending value to be ascribed to the Oil and Gas Properties and other assets of the Company and its Restricted Subsidiaries against which such lenders are prepared to provide loans, letters of credit or other Indebtedness to the credit parties, using customary practices and standards for determining reserve-based borrowing base loans and which are generally applied to borrowers in the Oil and Gas Business by commercial lenders, as determined annually and/or on such other occasions as may be required or provided for therein.

"Business Day" means each day that is not a Saturday, Sunday or other day on which banking institutions in Houston, Texas, New York, New York or another place of payment are authorized or required by law to close.

"*Capital Stock*" means:

(1) in the case of a corporation, corporate stock;

(2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;

(3) in the case of a partnership or limited liability company, partnership interests (whether general or limited) or membership interests; and

(4) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person, but excluding from all of the foregoing any debt securities convertible into Capital Stock, whether or not such debt securities include any right of participation with Capital Stock.

"*Cash Equivalents*" means:

(1) United States dollars;

(2) securities issued or directly and fully guaranteed or insured by the United States government or any agency or instrumentality of the United States government (*provided* that the full faith and credit of the United States is pledged in support of those securities) having maturities of not more than one year from the date of acquisition;

(3) certificates of deposit and eurodollar time deposits with maturities of one year or less from the date of acquisition, bankers' acceptances with maturities not exceeding one year and overnight bank deposits, in each case, with any lender party to the Credit Agreement or with any domestic commercial bank or any branch or agency of a non-U.S. bank licensed to conduct business in the United States, in each case having combined capital and surplus of at least $250.0 million and a Thomson BankWatch rating of "B" or better;

(4) repurchase obligations with a term of not more than seven days for underlying securities of the types described in clauses (2) and (3) above entered into with any financial institution meeting the qualifications specified in clause (3) above;

(5) commercial paper having one of the two highest ratings obtainable from Moody's or S&P and, in each case, maturing within one year after the date of acquisition; and

(6) money market funds at least 95% of the assets of which constitute Cash Equivalents of the kinds described in clauses (1) through (5) of this definition.

"Change of Control" means, with respect to any series of Notes, the occurrence of any of the following:

(1) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the properties or assets of the Company and its Subsidiaries taken as a whole to any Person, other than one or more Permitted Holders or a Parent Entity

or a Restricted Subsidiary (including any "person" (as that term is used in Section 13(d)(3) of the Exchange Act) and any "person" (as that term is used in Section 13(d)(3) of the Exchange Act)) is or becomes the "beneficial owner" (as so defined) of more than 50% of the total voting power of the Voting Stock of the transferee Person in such sale or transfer of assets, as the case may be; *provided* that so long as the Company is a Subsidiary of any Parent Entity, no Person shall be deemed to be or become a beneficial owner of more than 50% of the total voting power of the Voting Stock of the Company unless such Person shall be or become a beneficial owner of more than 50% of the total voting power of the Voting Stock of such Parent Entity (other than a Parent Entity that is a Subsidiary of another Parent Entity), which occurrence is followed by a Rating Decline with respect to such series within 60 days thereafter;

(2) the adoption of a plan relating to the liquidation or dissolution of the Company; or

(3) the consummation of any transaction (including any merger or consolidation), the result of which is that any Person (including any "person" (as defined above)), other than one or more Permitted Holders or a Parent Entity, becomes the Beneficial Owner, directly or indirectly, of more than 50% of the Voting Stock of the Company, measured by voting power rather than number of shares, units or the like, which occurrence is followed by a Rating Decline with respect to such series within 60 days thereafter; *provided* that so long as the Company is a Subsidiary of any Parent Entity, no Person shall be deemed to be or become a beneficial owner of more than 50% of the total voting power of the Voting Stock of the Company unless such Person shall be or become a beneficial owner of more than 50% of the total voting power of the Voting Stock of such Parent Entity (other than a Parent Entity that is a Subsidiary of another Parent Entity).

Notwithstanding the preceding or any provision of Section 13d-3 of the Exchange Act, (i) a Person or group shall not be deemed to beneficially own Voting Stock subject to a stock or asset purchase agreement, merger agreement, option agreement, warrant agreement or similar agreement (or voting or option or similar agreement related thereto) until the consummation of the acquisition of the Voting Stock in connection with the transactions contemplated by such agreement, (ii) a Person or group will not be deemed to beneficially own the Voting Stock of another Person as a result of its ownership of Voting Stock or other securities of such other Person's Parent Entity (or related contractual rights) unless it owns 50% or more of the total voting power of the Voting Stock entitled to vote for the election of directors of such Parent Entity having a majority of the aggregate votes on the board of directors (or similar body) of such Parent Entity and (iii) the right to acquire Voting Stock (so long as such Person does not have the right to direct the voting of the Voting Stock subject to such right) or any veto power in connection with the acquisition or disposition of Voting Stock will not cause a party to be a beneficial owner. Notwithstanding anything to the contrary, in no event shall a Change of Control be deemed to occur as a result of or in connection with the Transactions.

"*Clearstream*" means Clearstream Banking S.A.

"*Code*" means the U.S. Internal Revenue Code of 1986 and any successor statute thereto, in each case, as amended from time to time.

"Commission" or *"SEC"* means the Securities and Exchange Commission.

"*Company*" means (i) prior to the Completion Date, the Escrow Issuer and not any of its Affiliates and (ii) from and after the Completion Date, Chesapeake Energy Corporation, and not any of its Subsidiaries.

"*Completion Date*" means the date of the Escrow Release which shall occur promptly following the receipt by the Escrow Agent and the Trustee of the Escrow Release Officer's Certificate.

"*Completion Date Equity Proceeds*" means proceeds received by the Permanent Issuer from contributions to its equity capital in connection with the consummation of the Plan on or about the Effective Date and/or the Completion Date, including in connection with the Completion Date Rights Offering.

"*Completion Date Rights Offering*" means the rights offering of shares of new common stock of the Permanent Issuer to be issued pursuant to the Plan.

"*Confirmation Order*" means the order entered by the U.S. Bankruptcy Court for the Southern District of Texas confirming the Plan as in effect on February 2, 2021, together with any amendments, supplements or modifications thereto [Docket No. 2915].

"Consolidated Cash Flow" means, with respect to any specified Person for any period, the Consolidated Net Income of such Person for such period *plus*, without duplication:

(1) provision for taxes based on income or profits of such Person and its Restricted Subsidiaries for such period, to the extent that such provision for taxes was deducted in computing such Consolidated Net Income; *plus*

(2) the Fixed Charges of such Person and its Restricted Subsidiaries for such period, to the extent that such Fixed Charges were deducted in computing such Consolidated Net Income; *plus*

(3) depreciation, depletion, amortization (including amortization of intangibles but excluding amortization of prepaid cash expenses that were paid in a prior period), impairment and other non-cash charges and expenses (excluding any such non-cash charge or expense to the extent that it represents an accrual of or reserve for cash charges or expenses in any future period or amortization of a prepaid cash charge or expense that was paid in a prior period) of such Person and its Restricted Subsidiaries for such period to the extent that such depreciation, depletion, amortization, impairment and other non-cash charges or expenses were deducted in computing such Consolidated Net Income; *plus*

(4) restructuring costs, charges and reserves to the extent that such costs, charges or reserves were deducted in computing such Consolidated Net Income; *plus*

(5) transaction fees and expenses (including transaction fees or breakup fees paid in connection therewith) incurred in connection with any acquisitions or underwritten

public Equity Offering to the extent that such fees and expenses were deducted in computing such Consolidated Net Income; *plus*

(6) if such Person accounts for its oil and natural gas operations using successful efforts or a similar method of accounting, consolidated exploration and abandonment expense of such Person and its Restricted Subsidiaries, to the extent such expenses were deducted in computing such Consolidated Net Income; *minus*

(7) non-cash items increasing such Consolidated Net Income for such period, other than the accrual of revenue in the ordinary course of business; and *minus*

(8) to the extent increasing such Consolidated Net Income for such period, the sum of (a) the amount of deferred revenues that are amortized during such period and are attributable to reserves that are subject to Volumetric Production Payments and (b) amounts recorded in accordance with GAAP as repayments of principal and interest pursuant to Dollar-Denominated Production Payments, in each case, on a consolidated basis and determined in accordance with GAAP.

"*Consolidated Net Income*" means, with respect to any specified Person for any period, the aggregate of the net income (loss) of such Person and its Restricted Subsidiaries for such period, on a consolidated basis determined in accordance with GAAP and without any reduction in respect of preferred stock dividends or distributions; *provided* that:

(1) all extraordinary gains or losses and all gains or losses realized in connection with the disposition of securities or the early extinguishment of Indebtedness and all gains or losses realized upon the sale or other disposition of any property, plant or equipment of the Company or its consolidated subsidiaries which is not sold or otherwise disposed of in the ordinary course of business or any gain or loss upon the sale or other disposition of any Capital Stock of any Person will be excluded;

(2) the net income (but not loss) of any Person that is not a Restricted Subsidiary or that is accounted for by the equity method of accounting will be included only to the extent of the amount of dividends or similar distributions paid in cash to the specified Person or a Restricted Subsidiary of the Person;

(3) the net income (but not loss) of any Restricted Subsidiary other than a Guarantor will be excluded to the extent that the declaration or payment of dividends or similar distributions by that Restricted Subsidiary of that net income is not at the date of determination permitted without any prior governmental approval (that has not been obtained) or, directly or indirectly, by operation of the terms of its charter or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Restricted Subsidiary or its stockholders, partners or members;

(4) the cumulative effect of a change in accounting principles will be excluded;

(5) unrealized losses and gains under derivative instruments included in the determination of Consolidated Net Income, including those resulting from the application of FASB ASC 815 will be excluded;

(6) any asset impairment or write-downs on Oil and Gas Properties or other assets under GAAP or SEC guidelines will be excluded; and

(7) any non-cash compensation charge or gain arising from any grant of stock, stock options or other equity based awards will be excluded.

"*Consolidated Net Working Capital*" means (a) all current assets of the Company and its Restricted Subsidiaries except current assets from Oil and Gas Hedging Contracts, less (b) all current liabilities of the Company and its Restricted Subsidiaries, except (i) current liabilities included in Indebtedness, (ii) current liabilities associated with asset retirement obligations relating to oil and gas properties and (iii) any current liabilities from Oil and Gas Hedging Contracts, in each case as set forth in the consolidated financial statements of the Company prepared in accordance with GAAP (excluding any adjustments made pursuant to FASB ASC 815).

"continuing" means, with respect to any Default or Event of Default, that such Default or Event of Default has not been cured or waived.

"Corporate Trust Office of the Trustee" will be at the address of the Trustee specified in Section 13.02 hereof (except with respect to payments on the Notes and any exchange, transfer or surrender of the Notes, in which case this address will be Deutsche Bank Trust Company Americas 60 Wall Street 24th Floor, New York, New York 10005, MS:NY60-2405 Attn: Corporates Team or such other address as to which the Trustee may give notice to the Issuer).

"*Credit Agreement*" means the credit agreement to be entered into on or about the Effective Date by and among the Company, the administrative agent, and each lender and issuing bank from time to time party thereto, together with the related documents thereto, providing for the reserve based exit revolving and term loan credit facility of the Permanent Issuer as described under "Description of other Indebtedness" in the Offering Circular (including any letters of credit and reimbursement obligations related thereto, any Guarantees and security documents), as amended, extended, renewed, restated, refunded, replaced, refinanced, supplemented, modified or otherwise changed (in whole or in part, and without limitation as to amount, terms, conditions, covenants and other provisions) from time to time, and any one or more agreements (and related documents) governing Indebtedness, including indentures, incurred to refinance, substitute, supplement, replace or add to (including increasing the amount available for borrowing or adding or removing any Person as a borrower, issuer or guarantor thereunder, in whole or in part), the borrowings and commitments then outstanding or permitted to be outstanding under such Credit Agreement or one or more successors to the Credit Agreement or one or more new credit agreements.

"Credit Facilities" means one or more debt facilities (including, without limitation, the Credit Agreement) or other credit agreements, indentures or commercial paper facilities, in each case, with banks or other institutional lenders or investors providing for revolving credit loans, term loans, term debt, debt securities, capital market financings, receivables financing (including through the sale of receivables to such lenders or to special purpose entities formed to borrow from such lenders against such receivables) or letters of credit, in each case, as amended, restated, modified, renewed, refunded, replaced in any manner (whether upon or after termination or otherwise) or refinanced (including by means of sales of debt securities to institutional investors) in whole or in part from time to time.

"*Custodian"* means the Trustee, as custodian with respect to the Notes in global form, or any successor entity thereto.

"*Customary Recourse Exceptions*" means, with respect to any Non-Recourse Debt of an Unrestricted Subsidiary, exclusions from the exculpation provisions with respect to such Non-Recourse Debt for the voluntary bankruptcy of such Unrestricted Subsidiary, fraud, misapplication of cash, environmental claims, waste, willful destruction and other circumstances customarily excluded by lenders from exculpation provisions or included in separate indemnification agreements in non-recourse financings.

"*Default"* means any event that is, or with the passage of time or the giving of notice or both would be, an Event of Default.

"*Derivative Instrument*" with respect to a Person, means any contract, instrument or other right to receive payment or delivery of cash or other assets to which such Person or any Affiliate of such Person that is acting in concert with such Person in connection with such Person's investment in one or more series of the Notes (other than a Screened Affiliate) is a party (whether or not requiring further performance by such Person), the value and/or cash flows of which (or any material portion thereof) are materially affected by the value and/or performance of one or more series of the Notes and/or the creditworthiness of the Company and/or any one or more of the Guarantors (the "*Performance References*").

"*Definitive Note"* means a certificated Note registered in the name of the Holder thereof and issued in accordance with Section 2.06 hereof, substantially in the form of Exhibit A-I or Exhibit A-II hereto except that such Note shall not bear the Global Note Legend and shall not have the "Schedule of Exchanges of Interests in the Global Note" attached thereto.

"*Depositary"* means, with respect to the Notes issuable or issued in whole or in part in global form, the Person specified in Section 2.03 hereof as the Depositary with respect to the Notes, and any and all successors thereto appointed as depositary hereunder and having become such pursuant to the applicable provision of this Indenture.

"*Designated Non-cash Consideration"* means the Fair Market Value of non-cash consideration received by the Company or a Restricted Subsidiary in connection with an Asset Sale that is so designated as Designated Non-cash Consideration pursuant to an Officers' Certificate, setting forth the basis of such valuation and executed by the chief financial officer and one other Officer of the Company, less the amount of cash or Cash Equivalents received in connection with a subsequent sale of or collection on such Designated Non-cash Consideration.

"*Disqualified Stock"* means any Capital Stock that, by its terms (or by the terms of any security into which it is convertible, or for which it is exchangeable, in each case, at the option of the holder of the Capital Stock), or upon the happening of any event, matures or is mandator ily redeemable, pursuant to a sinking fund obligation or otherwise, or redeemable at the option of the holder of the Capital Stock, in whole or in part, on or prior to the date that is 91 days after the date on which the Notes of the applicable series mature, in each case, other than in exchange for Capital Stock of the Company (other than Disqualified Stock) or of any direct or indirect parent company. Notwithstanding the preceding sentence, any Capital Stock that would constitute Disqualified

Stock solely because the holders of the Capital Stock have the right to require the Company to repurchase or redeem such Capital Stock upon the occurrence of a change of control or an asset sale will not constitute Disqualified Stock if the terms of such Capital Stock provide that the Company may not repurchase or redeem any such Capital Stock pursuant to such provisions unless such repurchase or redemption complies with Section 4.07. The amount of Disqualified Stock deemed to be outstanding at any time for purposes of this Indenture will be the maximum amount that the Company and its Restricted Subsidiaries may become obligated to pay upon the maturity of, or pursuant to any mandatory redemption provisions of, such Disqualified Stock, exclusive of accrued dividends.

"*Dollar-Denominated Production Payments*" means production payment obligations recorded as liabilities in accordance with GAAP, together with all undertakings and obligations in connection therewith.

"*Domestic Subsidiary*" means any Restricted Subsidiary of the Company that was formed under the laws of the United States or any state of the United States or the District of Columbia.

"*Effective Date*" means the effective date of the Plan.

"*Equity Interests*" of any Person means (1) any and all Capital Stock of such Person and (2) all rights to purchase, warrants or options (whether or not currently exercisable), participations or other equivalents of or interests in (however designated) such Capital Stock of such Person, but excluding from all of the foregoing any debt securities convertible into Equity Interests, regardless of whether such debt securities include any right of participation with Equity Interests.

"*Equity Offering*" means a sale by the Company of Equity Interests of the Company (other than Disqualified Stock and other than to a Subsidiary of the Company) made for cash, or any cash contribution to the equity capital of the Company, in each case made after the Completion Date. The Completion Date Rights Offering shall not constitute an Equity Offering.

"*Escrow Account (2026 Notes)*" means a segregated account under the control of the Trustee established pursuant to the Escrow Agreement (2026 Notes).

"*Escrow Account (2029 Notes)*" means a segregated account under the control of the Trustee established pursuant to the Escrow Agreement (2029 Notes).

"*Escrow Accounts*" means the Escrow Account (2026 Notes) and the Escrow Account (2029 Notes).

"*Escrow Agent*" means the Escrow Agent (2026 Notes) and the Escrow Agent (2029 Notes).

"*Escrow Agent (2026 Notes)*" means Deutsche Bank Trust Company Americas, in its capacity as escrow agent under the Escrow Agreement (2026 Notes) and together with its successors.

"*Escrow Agent (2029 Notes)*" means Deutsche Bank Trust Company Americas, in its capacity as escrow agent under the Escrow Agreement (2029 Notes) and together with its successors.

"*Escrow Agreements*" means the Escrow Agreement (2029 Notes) and the Escrow Agreement (2029 Notes).

"*Escrow Agreement (2026 Notes)*" means the escrow agreement, dated as of the Issue Date, as amended, supplemented or modified from time to time in accordance with the terms of this Indenture, among the Escrow Issuer, the Trustee and the Escrow Agent (2026 Notes), relating to the escrow of proceeds from the offer and sale of the 2026 Notes.

"*Escrow Agreement (2029 Notes)*" means the escrow agreement, dated as of the Issue Date, as amended, supplemented or modified from time to time in accordance with the terms of this Indenture, among the Escrow Issuer, the Trustee and the Escrow Agent (2029 Notes), relating to the escrow of proceeds from the offer and sale of the 2029 Notes.

"*Escrow Conditions*" refers to the following conditions which shall have been or, substantially concurrently with the release of the Escrowed Property, shall be, satisfied:

(1) neither the Plan nor the Confirmation Order shall have been amended or modified or any condition contained therein waived, in each case in any manner materially adverse to the Holders of the Notes;

(2) the Plan and the Confirmation Order shall be in full force and effect and no stay thereof shall be in effect;

(3) all conditions precedent to the effectiveness of the Plan (other than the receipt by the Permanent Issuer of the net proceeds from the offering of the Notes) shall have been satisfied or waived (to the extent such waiver is not materially adverse to the Holders of the Notes) and the Effective Date shall have occurred or will occur substantially concurrently with the Escrow Release;

(4) the Credit Agreement and the commitments thereunder shall have become effective or will become effective substantially concurrently with the Escrow Release, on terms that are substantially consistent with the terms described under "Description of Other Indebtedness" in the Offering Circular (substantially as described under "The Restructuring — The Financing Transactions" in the Offering Circular), and the amount of the unused available commitments under the Credit Agreement plus the amount of unrestricted cash and cash equivalents of the Permanent Issuer and its Restricted Subsidiaries that would be reflected on a balance sheet prepared as of such date on a consolidated basis in accordance with GAAP shall be no less than $1.35 billion;

(5) the Escrow Issuer has, or will substantially concurrently with the Escrow Release, merged with and into the Permanent Issuer, with the Permanent Issuer as the surviving corporation, and the Permanent Issuer has assumed or will assume substantially concurrently with the Escrow Release the obligations of the Escrow Issuer under this Indenture and the Notes, and each then existing Subsidiary of the Permanent Issuer that is

a guarantor under the Credit Agreement has become or will become substantially concurrently with the Escrow Release a Guarantor of the Notes, pursuant to a supplemental indenture in the form of Exhibit E hereof; and

(6) all obligations under the Permanent Issuer's Senior Secured Super-Priority Debtor-In-Possession Credit Facility, dated July 1, 2020, between the Permanent Issuer, as borrower, the guarantors party thereto, the lenders party thereto, and MUFG Union Bank, N.A. as agent (other than contingent obligations not yet due and payable) have been paid in full (and all commitments thereunder terminated), or will be paid in full (and all commitments thereunder terminated) substantially concurrently with the Escrow Release, and all Liens related thereto have been extinguished, terminated or otherwise released or shall be extinguished, terminated or otherwise released substantially concurrently with the Escrow Release

"*Escrow Issuer*" has the meaning assigned to it in the recitals of this Indenture.

"*Escrow Outside Date*" means February 28, 2021.

"*Escrow Release*" means, with respect to any Escrowed Property, the release by the applicable Escrow Agent of such Escrowed Property at the entitled direction of the Issuer, other than in connection with a Special Mandatory Redemption.

"*Escrow Release Officer's Certificate*" means the Officer's Certificate required to be delivered to the Escrow Agent and the Trustee in connection with the Escrow Release pursuant to the terms of the Escrow Agreements.

"*Escrowed Property*" shall mean, collectively, the Escrowed Property (2026 Notes) and the Escrowed Property (2029 Notes).

"*Escrowed Property (2026 Notes)*" shall have the meaning assigned to the term "Escrowed Property" in in the Escrow Agreement (2026 Notes).

"*Escrowed Property (2029 Notes)*" shall have the meaning assigned to the term "Escrowed Property" in in the Escrow Agreement (2029 Notes).

"Euroclear" means Euroclear Bank, S.A./N.V., as operator of the Euroclear system.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Excluded Contributions" means the net cash proceeds received by the Company after the Completion Date from contributions to its common equity capital or the sale (other than to a Subsidiary of the Company) of Capital Stock (other than Disqualified Stock) of the Company, in each case designated as "*Excluded Contributions*" pursuant to an Officers' Certificate. Any Completion Date Equity Proceeds shall not constitute Excluded Contributions.

"Existing Indebtedness" means all Indebtedness of the Company and its Subsidiaries in existence on the date of the indenture or the Issue Date, in each case, other than Indebtedness under

the Credit Agreement, until such amounts are repaid, cancelled or otherwise extinguished in accordance with the Plan on or about the Effective Date.

"Fair Market Value" means the value that would be paid by a willing buyer to an unaffiliated willing seller in a transaction not involving distress or necessity of either party, determined in good faith by the Board of Directors of the Company or by an officer of the Company.

"*FASB ASC 815*" means Financial Accounting Standards Board Accounting Standards Codification Topic No. 815, *Derivatives and Hedging*.

"*Finance Lease Obligation*" means, at the time any determination is to be made, the amount of the liability in respect of a finance lease that would at that time be required to be capitalized on a balance sheet prepared in accordance with GAAP, and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be prepaid by the lessee without payment of a penalty. Notwithstanding the foregoing, any lease (whether entered into before or after the date of this Indenture) that would have been classified as an operating lease pursuant to GAAP as in effect on the date of this Indenture will be deemed not to represent a Finance Lease Obligation.

"Fitch" means Fitch Ratings, Inc. or any of its successors or assigns that is a Nationally Recognized Statistical Rating Organization.

"Fixed Charge Coverage Ratio" means with respect to any specified Person for any four-quarter period, the ratio of the Consolidated Cash Flow of such Person for such period to the Fixed Charges of such Person for such period. In the event that the specified Person or any of its Restricted Subsidiaries incurs, assumes, Guarantees, repays, repurchases, redeems, defeases or otherwise discharges any Indebtedness (other than ordinary working capital borrowings under a revolving credit facility) or issues, repurchases or redeems Preferred Stock subsequent to the commencement of the period for which the Fixed Charge Coverage Ratio is being calculated and on or prior to the date on which the event for which the calculation of the Fixed Charge Coverage Ratio is made (the *"Calculation Date"*), then the Fixed Charge Coverage Ratio will be calculated giving pro forma effect to such incurrence, assumption, Guarantee, repayment, repurchase, redemption, defeasance or other discharge of Indebtedness, or such issuance, repurchase or redemption of Preferred Stock, and the use of the proceeds therefrom, as if the same had occurred at the beginning of the applicable four-quarter reference period. For purposes of this definition, whenever pro forma effect is to be given to any calculation under this definition, the pro forma calculations will be determined either (i) in accordance with Regulation S-X under the Securities Act or (ii) in good faith by the chief financial or accounting officer of such Person; *provided* that such officer may in his or her discretion include any reasonably identifiable and factually supportable pro forma changes to Consolidated Cash Flow, including any pro forma expenses and cost reductions, that have occurred or in the judgment of such officer are reasonably expected to occur within 12 months of the date of the applicable transaction (regardless of whether such expense or cost reduction or any other operating improvements could then be reflected properly in pro forma financial statements prepared in accordance with Regulation S-X under the Securities Act or any other regulation or policy of the SEC) and that are set forth in an Officers' Certificate signed by the chief financial or accounting officer of such Person that states (a) the amount of each

such adjustment, (b) that such adjustments are based on the reasonable good faith belief of the officers executing such Officers' Certificate at the time of such execution and (c) the factual basis on which such good faith belief is based.

In addition, for purposes of calculating the Fixed Charge Coverage Ratio:

(1) acquisitions that have been made by the specified Person or any of its Restricted Subsidiaries, including through mergers or consolidations, or any Person or any of its Restricted Subsidiaries acquired by the specified Person or any of its Restricted Subsidiaries, and including all related financing transactions and including increases in ownership of Restricted Subsidiaries, during the four-quarter reference period or subsequent to such four-quarter reference period and on or prior to the Calculation Date, or that are to be made on the Calculation Date, will be given pro forma effect (in accordance with Regulation S-X under the Securities Act) as if they had occurred on the first day of the four-quarter reference period;

(2) the Consolidated Cash Flow attributable to discontinued operations, as determined in accordance with GAAP, and operations or businesses (and ownership interests therein) disposed of on or prior to the Calculation Date, will be excluded;

(3) the Fixed Charges attributable to discontinued operations, as determined in accordance with GAAP, and operations or businesses (and ownership interests therein) disposed of on or prior to the Calculation Date, will be excluded, but only to the extent that the obligations giving rise to such Fixed Charges will not be obligations of the specified Person or any of its Restricted Subsidiaries following the Calculation Date;

(4) any Person that is a Restricted Subsidiary of the specified Person immediately following the Calculation Date will be deemed to have been a Restricted Subsidiary at all times during such four-quarter reference period;

(5) any Person that is not to be a Restricted Subsidiary of the specified Person following the Calculation Date will be deemed not to have been a Restricted Subsidiary at any time during such four-quarter reference period; and

(6) if any Indebtedness bears a floating rate of interest, the interest expense on such Indebtedness will be calculated as if the rate in effect on the Calculation Date had been the applicable rate for the entire period (taking into account any Hedging Obligation applicable to such Indebtedness if such Hedging Obligation has a remaining term as at the Calculation Date in excess of 12 months).

"Fixed Charges" means, with respect to any specified Person for any period, the sum, without duplication, of:

(1) the consolidated interest expense of such Person and its Restricted Subsidiaries for such period, whether paid or accrued (excluding (i) any interest attributable to Dollar-Denominated Production Payments, (ii) the write-off of deferred financing costs and (iii) accretion of interest charges on future plugging and abandonment obligations, future retirement benefits and other obligations that do not constitute Indebtedness, but

including, without limitation, amortization of debt issuance costs and original issue discount, non-cash interest payments, the interest component of all payments associated with Finance Lease Obligations, commissions, discounts and other fees and charges incurred in respect of letter of credit or bankers' acceptance financings), and net of the effect of all payments made or received pursuant to Hedging Obligations in respect of interest rates; plus

(2) the consolidated interest expense of such Person and its Restricted Subsidiaries that was capitalized during such period; plus

(3) any interest on Indebtedness of another Person that is Guaranteed by such Person or one of its Restricted Subsidiaries or secured by a Lien on assets of such Person or one of its Restricted Subsidiaries, whether or not such Guarantee or Lien is called upon; plus

(4) all dividends or distributions, whether paid or accrued and regardless of whether in cash, on any series of Disqualified Stock of such Person or any series of Preferred Stock of its Restricted Subsidiaries, other than dividends or distributions on Equity Interests payable solely in Equity Interests of such Person (other than Disqualified Stock) or to such Person or a Restricted Subsidiary of such Person, in each case, on a consolidated basis and determined in accordance with GAAP.

"*GAAP*" means generally accepted accounting principles in the United States, which are in effect from time to time.

"*Global Note Legend*" means the legend set forth in Section 2.06(g)(2) hereof, which is required to be placed on all Global Notes issued under this Indenture.

"*Global Notes*" means, individually and collectively, each of the Restricted Global Notes and the Unrestricted Global Notes deposited with or on behalf of and registered in the name of the Depository or its nominee, substantially in the form of Exhibit A-I or Exhibit A-II hereto and that bears the Global Note Legend and that has the "Schedule of Exchanges of Interests in the Global Note" attached thereto, issued in accordance with Section 2.01, 2.06(b)(3), 2.06(b)(4) or 2.06(d)(2) hereof.

"*Government Securities*" means direct obligations of, or obligations guaranteed by, the United States of America, and the payment for which the United States pledges its full faith and credit.

"*Guarantee*" means a guarantee other than by endorsement of negotiable instruments for collection in the ordinary course of business, direct or indirect, in any manner including by way of a pledge of assets or through letters of credit or reimbursement agreements in respect thereof, of all or any part of any Indebtedness (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services, to take or pay or to maintain financial statement conditions or otherwise). When used as a verb, "*Guarantee*" has a correlative meaning.

"*Guarantors*" means, with respect to each series of Notes, any Subsidiary of the Company that Guarantees the Notes of such series in accordance with the provisions of this Indenture, and their respective successors and assigns, in each case, until the Note Guarantee of such Person with respect to the Notes of such series has been released in accordance with the provisions of this Indenture. On the Issue Date, there will be no Guarantors. As of the Completion Date as one of the Escrow Conditions, the Permanent Issuer and each of the Initial Guarantors will be required to execute and deliver a supplemental indenture to this Indenture, the form of which is attached as Exhibit E hereto, pursuant to which such Initial Guarantor shall Guarantee the Notes.

"*Hedging Obligations*" means, with respect to any specified Person, the obligations of such Person under any (a) Interest Rate Agreement and (b) Oil and Gas Hedging Contract.

"*Holder*" means a Person in whose name a Note is registered.

"*Hydrocarbons*" means oil, natural gas, casing head gas, drip gasoline, natural gasoline, condensate, distillate, liquid hydrocarbons, gaseous hydrocarbons and all constituents, elements or compounds thereof and products refined or processed therefrom.

"*Indebtedness*" means, with respect to any specified Person, any indebtedness of such Person (excluding accrued expenses and trade payables), whether or not contingent:

(1) in respect of borrowed money;

(2) (a) evidenced by bonds, notes, debentures or similar instruments or (b) constituting letters of credit (or reimbursement agreements in respect thereof); (other than obligations with respect to letters of credit securing obligations (other than obligations described in clauses (1), (2)(a), (3), (4), (5) or (6) of this definition) entered into in the ordinary course of business of such Person to the extent such letters of credit are not drawn upon or, if and to the extent drawn upon, such drawing is reimbursed no later than the tenth Business Day following payment on the letter of credit);

(3) in respect of bankers' acceptances;

(4) representing Finance Lease Obligations;

(5) representing the balance deferred and unpaid of the purchase price of any property or services due more than six months after such property is acquired or such services are completed; or

(6) representing any Hedging Obligations, if and to the extent any of the preceding items (other than letters of credit and Hedging Obligations) would appear as a liability upon a balance sheet of the specified Person prepared in accordance with GAAP. In addition, the term "Indebtedness" includes (i) all Indebtedness of others secured by a Lien on any asset of the specified Person (whether or not such Indebtedness is assumed by the specified Person), provided that the amount of such Indebtedness shall be the lesser of (x) the Fair Market Value of such asset as such date of determination and (y) the amount of such Indebtedness of such other Person, and (ii) to the extent not otherwise included, the Guarantee by the specified Person of any Indebtedness of any other Person (including,

with respect to any Production Payment, any warranties or guarantees of production or payment by such Person with respect to such Production Payment, but excluding other contractual obligations of such Person with respect to such Production Payment). Subject to the preceding sentence, neither Dollar-Denominated Production Payments nor Volumetric Production Payments shall be deemed to be Indebtedness.

In addition, "Indebtedness" of any Person shall include Indebtedness described in the preceding paragraph that would not appear as a liability on the balance sheet of such Person if:

(1) such Indebtedness is the obligation of a Joint Venture;

(2) such Person or a Restricted Subsidiary of such Person is a general partner of the Joint Venture (a "*Joint Venture General Partner*"); and

(3) there is recourse, by contract or operation of law, with respect to the payment of such Indebtedness to property or assets of such Person or a Restricted Subsidiary of such Person; and then such Indebtedness shall be included in an amount not to exceed:

(a) the lesser of (i) the net assets of the Joint Venture General Partner and (ii) the amount of such obligations to the extent that there is recourse, by contract or operation of law, to the property or assets of such Person or a Restricted Subsidiary of such Person; or

(b) if less than the amount determined pursuant to clause (a) immediately above, the actual amount of such Indebtedness that is recourse to such Person or a Restricted Subsidiary of such Person, if the Indebtedness is evidenced by a writing and is for a determinable amount and the related interest expense shall be included in Fixed Charges to the extent actually paid by such Person or its Restricted Subsidiaries.

Notwithstanding the preceding, "Indebtedness" of a Person shall not include:

(1) accrued expenses, royalties and trade payables;

(2) any indebtedness that has been defeased in accordance with GAAP or defeased pursuant to the deposit of cash or Cash Equivalents (in an amount sufficient to satisfy all such indebtedness obligations at maturity or redemption, as applicable, and all payments of interest and premium, if any) in a trust or account created or pledged for the sole benefit of the holders of such indebtedness, and subject to no other Liens;

(3) any obligation of such Person in respect of a farm-in agreement or similar arrangement whereby such Person agrees to pay all or a share of the drilling, completion or other expenses of an exploratory or development well (which agreement may be subject to a maximum payment obligation, after which expenses are shared in accordance with the working or participation interest therein or in accordance with the agreement of the parties) or perform the drilling, completion or other operation on such well in exchange for an ownership interest in an oil or gas property; and

(4) any repayment or reimbursement obligation of such Person or any of its Restricted Subsidiaries with respect to Customary Recourse Exceptions, unless and until an event or circumstance occurs that triggers the Person's or such Restricted Subsidiary's direct repayment or reimbursement obligation (as opposed to contingent or performance obligations) to the lender or other Person to whom such obligation is actually owed, in which case the amount of such direct payment or reimbursement obligation shall constitute Indebtedness.

"*Indenture*" means this Indenture, as amended or supplemented from time to time.

"*Indirect Participant*" means a Person who holds a beneficial interest in a Global Note through a Participant.

"*Initial Guarantors*" as of the Completion Date, all of the Company's current Subsidiaries that are guarantors under the Credit Agreement.

"*Initial Notes*" means the Notes issued under this Indenture on the date hereof.

"*Initial Purchasers*" means Goldman Sachs & Co. LLC, RBC Capital Markets, LLC and the other purchasers pursuant to the purchase agreement relating to the issuance of the Initial Notes.

"*Interest Rate Agreement*" means any interest rate swap agreement (whether from fixed to floating or from floating to fixed), interest rate cap agreement, interest rate collar agreement or other similar agreement or arrangement designed to protect the Company or any of its Restricted Subsidiaries against or manage exposure to fluctuations in interest rates and is not for speculative purposes.

"*Investments*" means, with respect to any Person, all direct or indirect investments by such Person in other Persons (including Affiliates) in the forms of loans (including Guarantees or other obligations), advances or capital contributions (excluding commission, travel and similar advances to officers and employees made in the ordinary course of business and excluding trade payables), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities (excluding any interest in an oil or natural gas leasehold to the extent constituting a security under applicable law), together with all items that are or would be classified as investments on a balance sheet prepared in accordance with GAAP. If the Company or any Restricted Subsidiary of the Company sells or otherwise disposes of any Equity Interests of any direct or indirect Restricted Subsidiary of the Company such that, after giving effect to any such sale or disposition, such Person is no longer a Restricted Subsidiary of the Company, the Company will be deemed to have made an Investment on the date of any such sale or disposition equal to the Fair Market Value of the Company's Investments in such Subsidiary that were not sold or disposed of in an amount determined as provided in the final paragraph of Section 4.07 hereof. The acquisition by the Company or any Restricted Subsidiary of the Company of a Person that holds an Investment in a third Person will be deemed to be an Investment by the Company or such Restricted Subsidiary in such third Person in an amount equal to the Fair Market Value of the Investments held by the acquired Person in such third Person in an amount determined as provided in the final paragraph of the Section 4.07 hereof. Except as otherwise provided in this Indenture, the amount of an

Investment will be determined at the time the Investment is made and without giving effect to subsequent changes in value.

"*Issue Date*" means February 5, 2021.

"*Issuer*" means (a) prior to the Completion Date, the Escrow Issuer, and (b) from and after the Completion Date, the Permanent Issuer, in each case, until a successor Person or Persons shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Issuer" shall mean such successor Person or Persons.

"*Joint Venture*" means a partnership or joint venture that is not a Restricted Subsidiary.

"*Lien*" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable law, including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction.

"*Long Derivative Instrument*" means a Derivative Instrument (i) the value of which generally increases, and/or the payment or delivery obligations under which generally decrease, with positive changes to the Performance References and/or (ii) the value of which generally decreases, and/or the payment or delivery obligations under which generally increase, with negative changes to the Performance References.

"*Moody's*" means Moody's Investors Service, Inc., and any successor to the ratings business thereof.

"*Net Proceeds*" means the aggregate cash proceeds and Cash Equivalents received by the Company or any of its Restricted Subsidiaries in respect of any Asset Sale (including any cash or Cash Equivalents received upon the sale or other disposition of any non-cash consideration received in any Asset Sale but excluding any non-cash consideration deemed to be cash for purposes of Section 4.10 hereof), net of the direct costs relating to such Asset Sale, including legal, accounting and investment banking fees, and sales commissions, distributions and other payments required to be made to minority interest holders in Subsidiaries or Joint Ventures as a result of such Asset Sale and any relocation expenses and severance and associated costs, expenses and charges of personnel relating to the assets subject to or incurred as a result of the Asset Sale, taxes paid or payable as a result of the Asset Sale, in each case, after taking into account any available tax credits or deductions and any tax sharing arrangements, and amounts required to be applied to the repayment of Indebtedness, secured by a Lien on the asset or assets that were the subject of such Asset Sale and any reserve for adjustment or indemnification obligations in respect of the sale price of such asset or assets established in accordance with GAAP.

"*Net Short*" means, with respect to a holder or beneficial owner, as of a date of determination, either (i) the value of its Short Derivative Instruments exceeds the sum of the (x) the value of its Notes of the applicable series plus (y) the value of its Long Derivative Instruments as of such date of determination or (ii) it is reasonably expected that such would have been the case were a Failure to Pay or Bankruptcy Credit Event (each as defined in the 2014 ISDA Credit

Derivatives Definitions) to have occurred with respect to the Company or any Guarantor immediately prior to such date of determination.

"*Non-Recourse Debt*" means Indebtedness:

(1) as to which neither the Company nor any of its Restricted Subsidiaries (a) provides credit support of any kind (including any undertaking, agreement or instrument that would constitute Indebtedness) or (b) is directly or indirectly liable as a guarantor or otherwise, except for Customary Recourse Exceptions; and

(2) as to which the lenders will not have any contractual recourse to the Capital Stock or assets of the Company or any of its Restricted Subsidiaries (other than the Equity Interests of an Unrestricted Subsidiary), except for Customary Recourse Exceptions.

"*Non-U.S. Person*" means a Person who is not a U.S. Person.

"*Note Guarantee*", with respect to any series of Notes, means any Guarantee by a Guarantor of the Issuer's obligations under this Indenture and the Notes of such series, as provided in Article 10 hereof.

"*Note Payment Default*" means a Default relating to a failure by the Company to make any payment when due on the Notes.

"*Notes*" has the meaning assigned to it in the preamble to this Indenture. Unless the context otherwise requires, all references to the Notes shall include the Initial Notes and any Additional Notes that may be issued after the Issue Date in accordance with Section 4.09 hereof.

"*Obligations*" means any principal, interest, penalties, fees, indemnifications, reimbursements, damages and other liabilities payable under the documentation governing any Indebtedness.

"*Offering Circular*" means the Offering Circular of the Issuer, dated February 2, 2021, relating to the initial offering of the Notes.

"*Officer*" means, with respect to any Person, the Chairman of the Board, the Executive Chairman, the Chief Executive Officer, the President, the Chief Operating Officer, the Chief Financial Officer, the Treasurer, any Assistant Treasurer, the Controller, the Secretary or any Vice-President of such Person.

"*Officers' Certificate*" means a certificate signed on behalf of the Company by two of its Officers that meets the requirements of Section 13.05 hereof.

"*Oil and Gas Business*" means (i) the acquisition, exploration, development, production, operation and disposition of interests in oil, gas and other Hydrocarbon properties, (ii) the gathering, marketing, treating, processing, storage, selling and transporting of any production from such interests or properties, (iii) any business relating to exploration for or development, production, treatment, processing, storage, transportation or marketing of oil, gas and other

minerals and products produced in association therewith and (iv) any activity that is ancillary to or necessary or appropriate for the activities described in clauses (i) through (iii) of this definition.

"*Oil and Gas Hedging Contracts*" means any puts, cap transactions, floor transactions, collar transactions, forward contract, commodity swap agreement, commodity option agreement or other similar agreement or arrangement in respect of Hydrocarbons to be used, produced, processed or sold by the Company or any of its Restricted Subsidiary that are customary in the Oil and Gas Business and designed to protect such Person against fluctuation in or manage exposure to Hydrocarbon prices and not for speculative purposes.

"*Oil and Gas Properties*" means all properties, including equity or other ownership interest therein, owned by such Person or any of its Restricted Subsidiaries which contain or are believed to contain "proved oil and gas reserves" as defined in Rule 4-10 of Regulation S-X of the Securities Act.

"Opinion of Counsel" means an opinion from legal counsel who is reasonably acceptable to the Trustee, that meets the requirements of Section 13.05 hereof. Such counsel may be an employee of or counsel to the Company, any Subsidiary of the Company or the Trustee.

"*Parent Entity*" means any direct or indirect parent entity of the Company.

"Participant" means, with respect to the Depositary, Euroclear or Clearstream, a Person who has an account with the Depositary, Euroclear or Clearstream, respectively (and, with respect to DTC, shall include Euroclear and Clearstream).

"*Permanent Issuer*" has the meaning assigned to it in the recitals of this Indenture.

"*Permitted Acquisition Indebtedness*" means Indebtedness or Disqualified Stock of the Company or any of its Restricted Subsidiaries to the extent such Indebtedness or Disqualified Stock was Indebtedness or Disqualified Stock (a) of any other Person existing at the time such Person became a Restricted Subsidiary of the Company or such Person was merged or consolidated with or into the Company or any of its Restricted Subsidiaries, or (b) incurred in connection with the foregoing; *provided* that on the date such Person became a Restricted Subsidiary or the date such Person was merged or consolidated with or into the Company or any of its Restricted Subsidiaries, as applicable, either

(1) immediately after giving effect to such transaction and any related financing transaction on a pro forma basis as if the same had occurred at the beginning of the applicable four-quarter period, the Company or such Person (if the Company is not the survivor in the transaction) would be permitted to incur at least $1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in Section 4.09(a) hereof, or

(2) immediately after giving effect to such transaction and any related financing transaction on a pro forma basis as if the same had occurred at the beginning of the applicable four-quarter period, the Fixed Charge Coverage Ratio of the Company or such Person (if the Company is not the survivor in the transaction) is equal to or greater than the Fixed Charge Coverage Ratio of the Company immediately prior to such transaction.

"Permitted Business Investments" means Investments made in the ordinary course of, and of a nature that is or shall have become customary in, the Oil and Gas Business as a means of actively exploiting, exploring for, acquiring, developing, processing, gathering, marketing or transporting oil and gas through agreements, transactions, interests or arrangements which permit one to share risks or costs, comply with regulatory requirements regarding local ownership or satisfy other objectives customarily achieved through the conduct of Oil and Gas Business jointly with third parties, including (i) ownership interests in oil, natural gas, other Hydrocarbon properties or any interest therein or gathering, transportation, processing, storage or related systems or ancillary real property interests, (ii) Investments in the form of or pursuant to operating agreements, working interests, royalty interests, mineral interests, processing agreements, farm in agreements, farm-out agreements, developments agreements, area of mutual interest agreements, unitization agreements, pooling agreements, joint bidding agreements, service contracts, joint venture agreements, limited liability company agreements, partnership agreements (whether general or limited), subscription agreements, stock purchase agreements and other similar agreements with third parties, and (iii) direct or indirect ownership interests or Investments in drilling rigs, fracturing units and other equipment used in the Oil and Gas Business or in persons that own or provide such equipment.

"*Permitted Holders*" means (a) Franklin Advisers, Inc., (b) Fidelity Management and Research Company LLC, (c) PGIM, Inc., (d) Blackrock Inc., (e) Appaloosa LP, (f) DE Shaw & Co., L.P. (g) Capital Research and Management Company, (h) Oaktree Capital Group, LLC and (i) any Affiliates and any investment funds advised, co-advised, managed or co-managed by any of the foregoing.

"*Permitted Investments*" means:

(1) any Investment in the Company or in a Restricted Subsidiary of the Company;

(2) any Investment in Cash Equivalents;

(3) any Investment by the Company or any Restricted Subsidiary of the Company in a Person, if as a result of such Investment:

(a) such Person becomes a Restricted Subsidiary of the Company; or

(b) such Person is merged, consolidated or amalgamated with or into, or transfers or conveys substantially all of its properties or assets to, or is liquidated into, the Company or a Restricted Subsidiary of the Company;

(4) any Investment made as a result of the receipt of non-cash consideration from an Asset Sale (or a disposition excluded from the definitions thereof) that was made pursuant to and in compliance with Section 4.10 hereof, including pursuant to an Asset Swap;

(5) any acquisition of assets or Capital Stock solely in exchange for the issuance of Equity Interests (other than Disqualified Stock) of the Company or a direct or indirect parent of the Company;

(6) any Investments received in compromise or resolution of (a) obligations of trade creditors or customers that were incurred in the ordinary course of business of the Company or any of its Restricted Subsidiaries, including pursuant to any plan of reorganization or similar arrangement upon the bankruptcy or insolvency of any trade creditor or customer; or (b) litigation, arbitration or other disputes;

(7) Investments represented by Hedging Obligations;

(8) loans or advances to officers, directors or employees made in the ordinary course of business of the Company or any Restricted Subsidiary;

(9) repurchases of the Notes;

(10) any Guarantee of Indebtedness permitted to be incurred by Section 4.09 hereof other than a Guarantee of Indebtedness of an Affiliate of the Company that is not a Restricted Subsidiary of the Company;

(11) any Investment existing on, or made pursuant to binding commitments existing on, the date of this Indenture and any Investment consisting of an extension, modification or renewal of any Investment existing on, or made pursuant to a binding commitment existing on, the date of this Indenture; *provided* that the amount of any such Investment may be increased (a) as required by the terms of such Investment as in existence on the date of this Indenture or (b) as otherwise permitted under this Indenture;

(12) Investments acquired after the Completion Date as a result of the acquisition by the Company or any Restricted Subsidiary of the Company of another Person, including by way of a merger, amalgamation or consolidation with or into the Company or any of its Restricted Subsidiaries in a transaction that is not prohibited by Section 5.01 hereof after the Completion Date to the extent that such Investments were not made in contemplation of such acquisition, merger, amalgamation or consolidation and were in existence on the date of such acquisition, merger, amalgamation or consolidation;

(13) Permitted Business Investments;

(14) Investments received as a result of a foreclosure by, or other transfer of title to, the Company or any of its Restricted Subsidiaries with respect to any secured Investment in default;

(15) receivables owing to the Company or any Restricted Subsidiary created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms; *provided*, however, that such trade terms may include such concessionary trade terms as the Company or any such Restricted Subsidiary deems reasonable under the circumstances;

(16) endorsements of negotiable instruments and documents in the ordinary course of business;

(17) such Investments consisting of prepaid expenses, negotiable instruments held for collection and lease, utility and workers' compensation, performance and other similar deposits made in the ordinary course of business by the Company or any Restricted Subsidiary;

(18) Investments consisting of Oil and Gas Hedging Contracts or Interest Rate Agreements permitted to be incurred under Section 4.09;

(19) Guarantees of performance or other obligations (other than Indebtedness) arising in the ordinary course in the Oil and Gas Business, including obligations under oil and natural gas exploration, development, joint operating, and related agreements and licenses, concessions or operating leases related to the Oil and Gas Business;

(20) advances and prepayments for asset purchases in the ordinary course of business in the Oil and Gas Business of the Company or any Restricted Subsidiary; and

(21) other Investments having an aggregate Fair Market Value (measured on the date each such Investment was made and without giving effect to subsequent changes in value), when taken together with all other Investments made pursuant to this clause (21) that are at the time outstanding that do not exceed the greater of (a) $100.0 million and (b) 5.0% of Adjusted Consolidated Net Tangible Assets determined at the time such Investment is made; *provided*, *however*, that if any Investment pursuant to this clause (21) is made in any Person that is not a Restricted Subsidiary of the Company at the date of the making of such Investment and such Person becomes a Restricted Subsidiary of the Company after such date, such Investment shall thereafter be deemed to have been made pursuant to clause (1) above and shall cease to have been made pursuant to this clause (21) for so long as such Person continues to be a Restricted Subsidiary.

"*Permitted Liens*" means:

(1) Liens securing Indebtedness and other Obligations under Credit Facilities that was permitted by the terms of this Indenture to be incurred pursuant to Section 4.09(b)(1) hereof;

(2) Liens in favor of the Company or a Restricted Subsidiary;

(3) Liens on property of a Person existing at the time such Person becomes a Restricted Subsidiary of the Company or is merged with or into or consolidated with the Company or any Restricted Subsidiary of the Company; *provided* that such Liens do not extend to any assets other than those of the Person that becomes a Restricted Subsidiary of the Company or is merged with or into or consolidated with the Company or any Restricted Subsidiary of the Company;

(4) Liens on property (including Capital Stock) existing at the time of acquisition of the property by the Company or any Subsidiary of the Company; *provided* that such Liens were in existence prior to such acquisition;

(5) Liens to secure the performance of statutory obligations, insurance, surety or appeal bonds, workers' compensation obligations, bid, plugging and abandonment and performance bonds or other obligations of a like nature incurred in the ordinary course of business (including Liens to secure letters of credit issued to assure payment of such obligations);

(6) Liens for the purpose of securing the payment of all or a part of the purchase price of, or Finance Lease Obligations, purchase money obligations or other payments incurred to finance the acquisition, lease, improvement or construction of or repairs or additions to, assets or property acquired or constructed by the Company or a Restricted Subsidiary in the ordinary course of business; *provided that*:

(A) the aggregate principal amount of Indebtedness secured by such Liens is otherwise permitted to be incurred under this Indenture and does not exceed the cost of the assets or property so acquired or constructed; and

(B) such Liens are created within 180 days of the later of the acquisition, lease, completion of improvements, construction, repairs or additions or commencement of full operation of the assets or property subject to such Lien and do not encumber any other assets or property of the Company or any Restricted Subsidiary other than such assets or property and assets affixed or appurtenant thereto;

(7) Liens securing the Existing Indebtedness;

(8) Liens created for the benefit of (or to secure) the Notes (or the Note Guarantees);

(9) Liens on pipeline facilities that arise by operation of law;

(10) Liens to secure any Permitted Refinancing Indebtedness permitted to be incurred under Section 4.09(b)(5) that refinances or replaces Indebtedness that was secured (or any Lien replacing or extending the foregoing Liens); *provided*, *however*, that the new Lien is limited to all or part of the same property and assets that secured or, under the written agreements pursuant to which the original Lien arose, could secure the original Lien (plus improvements and accessions to, such property or proceeds or distributions thereof);

(11) Liens on insurance policies and proceeds thereof, or other deposits, to secure insurance premium financings;

(12) filing of Uniform Commercial Code financing statements as a precautionary measure in connection with operating leases;

(13) bankers' Liens, rights of setoff, rights of revocation, refund or chargeback with respect to money or instruments of the Company or any Restricted Subsidiary, Liens arising out of judgments or awards not constituting an Event of Default and notices of lis

pendens and associated rights related to litigation being contested in good faith by appropriate proceedings and for which adequate reserves have been made;

(14) Liens on cash, Cash Equivalents or other property arising in connection with the defeasance, discharge or redemption of Indebtedness;

(15) Liens on specific items of inventory or other goods (and the proceeds thereof) of any Person securing such Person's obligations in respect of bankers' acceptances issued or created in the ordinary course of business for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;

(16) grants of software and other technology licenses in the ordinary course of business;

(17) Liens arising out of conditional sale, title retention, consignment or similar arrangements for the sale of goods;

(18) Liens in respect of Production Payments and Reserve Sales which are customary in the Oil and Gas Business; *provided*, that such Liens are limited to the property that is subject to such Production Payments and Reserve Sales;

(19) Liens arising in the ordinary course of business under oil and gas leases or subleases, assignments, farm-out agreements, farm-in agreements, division orders, contracts for the sale, purchase, exchange, transportation, gathering or processing of Hydrocarbons, unitizations and pooling designations, declarations, orders and agreements, development agreements, joint venture agreements, partnership agreements, operating agreements, royalties, working interests, net profits interests, joint interest billing arrangements, participation agreements, production sales contracts, incentive compensation programs for geologists, geophysicists and other providers of technical services to the Company or a Restricted Subsidiary, area of mutual interest agreements, gas balancing or deferred production agreements, injection, repressuring and recycling agreements, salt water or other disposal agreements, seismic or geophysical permits or agreements, licenses, sublicenses and other agreements which are customary in the Oil and Gas Business; *provided*, *however*, in all instances that such Liens are limited to the assets that are the subject of the relevant agreement, program, order or contract;

(20) Liens to secure performance of Hedging Obligations of the Company or any of its Restricted Subsidiaries;

(21) Liens arising under the indenture in favor of the trustee for its own benefit and similar Liens in favor of other trustees, agents and representatives rising under instruments governing Indebtedness permitted to be incurred under the indenture; *provided*, *however*, that such Liens are solely for the benefit of the trustees, agents or representatives in their capacities as such and not for the benefit of the holders of such Indebtedness;

(22) Liens incurred with respect to Indebtedness, including all Liens incurred pursuant to clause (10) above that had previously renewed, refunded, refinanced, replaced,

defeased or discharged any Indebtedness secured by Liens pursuant to this clause (22), that does not exceed in aggregate principal amount at any one time outstanding, the greater of (i) $250.0 million and (ii) 5.0% of the Company's Adjusted Consolidated Net Tangible Assets determined as of the date of such incurrence or issuance; and

(23) any Lien renewing, extending, refinancing or refunding a Lien permitted by clauses (2) through (21) above; *provided* that (a) the principal amount of the Indebtedness secured by such Lien is not increased except by an amount equal to a reasonable premium or other reasonable amount paid, and fees and expenses reasonably incurred, in connection therewith and by an amount equal to any existing commitments unutilized thereunder and (b) no assets are encumbered by any such Lien other than the assets permitted to be encumbered immediately prior to such renewal, extension, refinance or refund are encumbered thereby (other than improvements thereon, accessions thereto and proceeds thereof).

"Permitted Refinancing Indebtedness" means any Indebtedness of the Company or any of its Restricted Subsidiaries or any Disqualified Stock of the Company issued in exchange for, or the net proceeds of which are used to renew, refund, refinance, replace, defease or discharge other Indebtedness of the Company or any of its Restricted Subsidiaries (other than intercompany Indebtedness) or any Disqualified Stock of the Company; *provided* that:

(1) the principal amount (or accreted value, if applicable), or in the case of Disqualified Stock, the amount thereof determined in accordance with the definition of Disqualified Stock, of such Permitted Refinancing Indebtedness does not exceed the principal amount of the Indebtedness or the amount of the Disqualified Stock renewed, refunded, refinanced, replaced, defeased or discharged (plus all accrued interest on the Indebtedness or accrued and unpaid dividends on the Disqualified Stock, as the case may be, and the amount of all fees and expenses, including premiums, incurred in connection therewith);

(2) such Permitted Refinancing Indebtedness has a final maturity date or redemption date, as applicable, that is either (a) no earlier than the final maturity date of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness or Disqualified Stock being renewed, refunded, refinanced, replaced, defeased or discharged or (b) more than 90 days after the final maturity date of the applicable series of Notes;

(3) if the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged is subordinated in right of payment to the Notes or the Note Guarantees, such Permitted Refinancing Indebtedness is subordinated in right of payment to the Notes or the Note Guarantees, as applicable, on terms at least as favorable to the Holders of the Notes as those contained in the documentation governing the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged; and

(4) such Indebtedness is not incurred (other than by way of a Guarantee) by a Restricted Subsidiary of the Company if the Company is the issuer or other primary obligor on the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged.

"Person" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization, limited liability company or government or other entity.

"*Plan*" means the Fifth Amended Joint Chapter 11 Plan of Reorganization of Chesapeake Energy Corporation and Its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code, confirmed on January 16, 2021, in the form attached to the Confirmation Order, together with any amendments, supplements, or modifications thereto.

"*Preferred Stock*" means, with respect to any Person, any and all preferred or preference stock or other similar Equity Interests (however designated) of such Person whether outstanding or issued after the date of this Indenture.

"Private Placement Legend" means the legend set forth in Section 2.06(g)(1) hereof to be placed on all Notes issued under this Indenture except where otherwise permitted by the provisions of this Indenture.

"Production Payments" means Dollar-Denominated Production Payments and Volumetric Production Payments, collectively.

"Production Payments and Reserve Sales" means the grant or transfer by the Company or any of its Restricted Subsidiaries to any Person of a royalty, overriding royalty, net profits interest, Production Payment, partnership or other interest in Oil and Gas Properties, reserves or the right to receive all or a portion of the production or the proceeds from the sale of production attributable to such properties where the holder of such interest has recourse solely to such production or proceeds of production, subject to the obligation of the grantor or transferor to operate and maintain, or cause the subject interests to be operated and maintained, in a reasonably prudent manner or other customary standard or subject to the obligation of the grantor or transferor to indemnify for environmental, title or other matters customary in the Oil and Gas Business, including any such grants or transfers pursuant to incentive compensation programs on terms that are reasonably customary in the Oil and Gas Business for geologists, geophysicists or other providers of technical services to the Company or any of its Restricted Subsidiaries.

"QIB" means a "qualified institutional buyer" as defined in Rule 144A.

"*Rating Category*" means:

(1) with respect to S&P, any of the following categories: AAA, AA, A, BBB, BB, B, CCC, CC, C and D (or equivalent successor categories); and

(2) with respect to Moody's, any of the following categories: Aaa, Aa, A, Baa, Ba, B, Caa, Ca, C and D (or equivalent successor categories).

"Rating Decline" means, with respect to any series of Notes, a decrease in the rating of the Notes of such series by both Moody's and S&P by one or more gradations (including gradations within Rating Categories as well as between Rating Categories) from the rating of the Notes of such series on the date of the applicable occurrence referred to in clauses (1) or (3) of the definition of "Change of Control." In determining whether the rating of the Notes of such series has decreased

by one or more gradations, gradations within Rating Categories, namely + or - for S&P, and 1, 2, and 3 for Moody's, will be taken into account; for example, in the case of S&P, a rating decline either from BB+ to BB or BB- to B+ will constitute a decrease of one gradation.

"*Regulation S*" means Regulation S promulgated under the Securities Act.

"*Regulation S Permanent Global Note*" means a permanent Global Note substantially in the form of Exhibit A-I or Exhibit A-II hereto bearing the Global Note Legend and the Private Placement Legend and deposited with or on behalf of and registered in the name of the Depositary or its nominee, issued in a denomination equal to the outstanding principal amount of the Regulation S Temporary Global Note upon expiration of the Restricted Period.

"*Regulation S Temporary Global Note*" means a temporary Global Note substantially in the form of Exhibit A-I or Exhibit A-II hereto and bearing the legend specified in Section 2.06(g)(3) deposited with or on behalf of and registered in the name of the Depositary or its nominee, issued in a denomination equal to the outstanding principal amount of the Notes initially sold in reliance on Rule 903 of Regulation S.

"*Responsible Officer,*" when used with respect to the Trustee, means any officer within the Corporate Trust Administration of the Trustee (or any successor group of the Trustee) or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

"*Restricted Definitive Note*" means a Definitive Note bearing the Private Placement Legend.

"*Restricted Global Note*" means a Global Note bearing the Private Placement Legend. "*Restricted Investment*" means an Investment other than a Permitted Investment.

"*Restricted Period*" means the 40-day distribution compliance period as defined in Regulation S.

"*Restricted Subsidiary*" of a Person means any Subsidiary of the referent Person that is not an Unrestricted Subsidiary. Except where expressly stated otherwise, all references to Restricted Subsidiaries refer to Restricted Subsidiaries of the Company.

"*Rule 144*" means Rule 144 promulgated under the Securities Act.

"*Rule 144A*" means Rule 144A promulgated under the Securities Act.

"*Rule 903*" means Rule 903 promulgated under the Securities Act.

"*Rule 904*" means Rule 904 promulgated under the Securities Act.

"*S&P*" means S&P Global Ratings, and any successor to the ratings business thereof.

"*Screened Affiliate*" means any Affiliate of a Holder (i) that makes investment decisions independently from such Holder and any other Affiliate of such Holder that is not a Screened Affiliate, (ii) that has in place customary information screens between it and such Holder and any other Affiliate of such Holder that is not a Screened Affiliate and such screens prohibit the sharing of information with respect to the Company or its Subsidiaries, (iii) whose investment policies are not directed by such Holder or any other Affiliate of such Holder that is acting in concert with such Holder in connection with its investment in the Notes, and (iv) whose investment decisions are not influenced by the investment decisions of such Holder or any other Affiliate of such Holder that is acting in concert with such Holders in connection with its investment in the Notes.

"Securities Act" means the Securities Act of 1933, as amended.

"*Short Derivative Instrument*" means a Derivative Instrument (i) the value of which generally decreases, and/or the payment or delivery obligations under which generally increase, with positive changes to the Performance References and/or (ii) the value of which generally increases, and/or the payment or delivery obligations under which generally decrease, with negative changes to the Performance References.

"Significant Subsidiary" means any Restricted Subsidiary that would be a "significant subsidiary" as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such Regulation is in effect on the date of this Indenture.

"*Stated Maturity*" means, with respect to any installment of interest or principal on any series of Indebtedness, the date on which the payment of interest or principal was scheduled to be paid in the original documentation governing such Indebtedness, and will not include any contingent obligations to repay, redeem or repurchase any such interest or principal prior to the date originally scheduled for the payment thereof.

"Subsidiary" means, with respect to any specified Person:

(1) any corporation, association or other business entity (other than a partnership or limited liability company) of which more than 50% of the total voting power of its Voting Stock is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and

(2) any partnership or limited liability company of which (a) more than 50% of the capital accounts, distribution rights, total equity and voting interests or general and limited partnership interests, as applicable, are owned or controlled, directly or indirectly, by such Person or one or more of the other Subsidiaries of that Person or a combination thereof, whether in the form of membership, general, special or limited partnership interests or otherwise, and (b) such Person or any Subsidiary of such Person is a controlling general partner or otherwise controls such entity.

"TIA" means the Trust Indenture Act of 1939, as amended (15 U.S.C. §§ 77aaa-77bbbb).

"*Transactions*" means any and all of the transactions contemplated by the Plan and consummated in accordance therewith, including the consummation of any financing transactions.

"Trustee" means Deutsche Bank Trust Company Americas, until a successor replaces it in accordance with the applicable provisions of this Indenture and thereafter means the successor serving hereunder.

"*Unrestricted Definitive Note"* means a Definitive Note that does not bear and is not required to bear the Private Placement Legend.

"*Unrestricted Global Note"* means a Global Note that does not bear and is not required to bear the Private Placement Legend.

"*Unrestricted Subsidiary*" means any Subsidiary of the Company (including any newly acquired or newly formed Subsidiary or a Person becoming a Subsidiary through merger or consolidation or Investment therein) that is designated (or deemed designated) by the Company as an Unrestricted Subsidiary pursuant to an Officers' Certificate delivered to the Trustee, but only to the extent that such Subsidiary:

(1) has no Indebtedness other than Non-Recourse Debt (other than, in the case of any such designation (or deemed designation), any guarantee of the Notes or the Guarantees or any Indebtedness that would be released upon such designation);

(2) except as permitted by Section 4.11 hereof, is not party to any agreement, contract, arrangement or understanding with the Company or any Restricted Subsidiary of the Company unless the terms of any such agreement, contract, arrangement or understanding are no less favorable to the Company or such Restricted Subsidiary than those that might be obtained at the time from Persons who are not Affiliates of the Company; and

(3) is a Person with respect to which neither the Company nor any of its Restricted Subsidiaries has any direct or indirect obligation (a) to subscribe for additional Equity Interests or (b) to maintain or preserve such Person's financial condition or to cause such Person to achieve any specified levels of operating results, except to the extent the foregoing would be treated as an Investment permitted under this Indenture.

All Subsidiaries of an Unrestricted Subsidiary shall also be Unrestricted Subsidiaries.

"*U.S. Person"* means a U.S. person as defined in Rule 902(k) promulgated under the Securities Act.

"*Volumetric Production Payments"* means production payment obligations recorded as deferred revenue in accordance with GAAP, together with all undertakings and obligations in connection therewith.

"*Voting Stock"* of any specified Person as of any date means the Capital Stock of such Person entitling the holders thereof (whether at all times or only so long as no senior class of Capital Stock has voting power by reason of any contingency) to vote in the election of members of the Board of Directors of such Person; *provided* that with respect to a limited partnership or other entity which does not have a Board of Directors, Voting Stock means the Capital Stock of

the general partner of such limited partnership or other business entity with the ultimate authority to manage the business and operations of such Person.

"Weighted Average Life to Maturity" means, when applied to any Indebtedness or Disqualified Stock at any date, the number of years obtained by dividing:

(1) the sum of the products obtained by multiplying (a) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity or redemption, in respect of the Indebtedness or Disqualified Stock, by (b) the number of years (calculated to the nearest one-twelfth) that will elapse between such date and the making of such payment; *by*

(2) the then outstanding aggregate amount of such Indebtedness or Disqualified Stock.

Section 1.02 *Other Definitions*.

Term	Defined in Section
"Affiliate Transaction"	4.11
"Alternate Offer"	4.15
"Asset Sale Offer"	4.10
"Authentication Order"	2.02
"Change of Control Offer"	4.15
"Change of Control Payment"	4.15
"Change of Control Payment Date"	4.15
"Covenant Defeasance"	8.03
"Default Direction"	6.06
"Directing Holder"	6.06
"DTC"	2.03
"Event of Default"	6.01
"Excess Proceeds"	4.10
"incur"	4.09
"Initial Lien"	4.12
"Legal Defeasance"	8.02
"Noteholder Direction"	6.06
"Offer Amount"	3.09
"Offer Period"	3.09
"Paying Agent"	2.03
"Payment Default"	6.01
"Permitted Debt"	4.09
"Position Representation"	6.06
"Purchase Date"	3.09
"Special Mandatory Redemption"	3.10(a)
"Special Mandatory Redemption Date"	3.10(b)
"Special Mandatory Redemption Notice"	3.10(b)
"Special Mandatory Redemption Price"	3.10(a)

Term	Defined in Section
"Special Termination Date"	3.10(a)
"Registrar"	2.03
"Restricted Payments"	4.07
"Verification Covenant"	6.06

Section 1.03 *Trust Indenture Act.*

The Indenture is not subject to the TIA except as expressly stated herein. Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture.

Section 1.04 *Rules of Construction.*

Unless the context otherwise requires:

(a) a term has the meaning assigned to it;

(b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;

(c) "or" is not exclusive;

(d) words in the singular include the plural, and in the plural include the singular;

(e) "will" shall be interpreted to express a command;

(f) provisions apply to successive events and transactions;

(g) "including" shall be interpreted to mean "including, without limitation," and the use of the word "including" followed by specific examples shall not be construed as limiting the meaning of the general wording preceding it; and

(h) references to sections of or rules under the Securities Act will be deemed to include substitute, replacement of successor sections or rules adopted by the SEC from time to time.

ARTICLE 2
THE NOTES

Section 2.01 *Form and Dating.*

(a) *General*. The Notes and the Trustee's certificate of authentication will be substantially in the form of Exhibit A-I or Exhibit A-II hereto, as applicable. The Notes may have notations, legends or endorsements required by law, stock exchange rule or usage. Each Note will be dated the date of its authentication. The Notes shall be in minimum denominations of $2,000 and integral multiples of $1,000 in excess thereof. The terms and provisions contained in the Notes will constitute, and are hereby expressly made, a part of this Indenture and the Issuer, the

Guarantors and the Trustee, by their execution and delivery of this Indenture, expressly agree to such terms and provisions and to be bound thereby. However, to the extent any provision of any Note conflicts with the express provisions of this Indenture, the provisions of this Indenture shall govern and be controlling.

(b) *Global Notes*. Notes issued in global form will be substantially in the form of Exhibit A-I hereto, in the case of the 2026 Notes, and Exhibit A-II hereto, in the case of the 2029 Notes (in each case including the Global Note Legend thereon and the "Schedule of Exchanges of Interests in the Global Note" attached thereto). Notes issued in definitive form will be substantially in the form of Exhibit A-I hereto, in the case of the 2026 Notes, and Exhibit A-II hereto, in the case of the 2029 Notes (but in each case without the Global Note Legend thereon and without the "Schedule of Exchanges of Interests in the Global Note" attached thereto). Each Global Note will represent such of the outstanding Notes of the applicable series as will be specified therein and each shall provide that it represents the aggregate principal amount of outstanding Notes of the applicable series from time to time endorsed thereon and that the aggregate principal amount of outstanding Notes of the applicable series represented thereby may from time to time be reduced or increased, as appropriate, to reflect exchanges and redemptions. Any endorsement of a Global Note to reflect the amount of any increase or decrease in the aggregate principal amount of outstanding Notes of the applicable series represented thereby will be made by the Trustee or the Custodian, at the direction of the Trustee, in accordance with instructions given by the Holder thereof as required by Section 2.06 hereof.

(c) *Temporary Global Notes*. Notes of a series offered and sold in reliance on Regulation S will be issued initially in the form of the Regulation S Temporary Global Note, which will be deposited on behalf of the purchasers of the Notes of such series represented thereby with the Trustee, as custodian for the Depositary, and registered in the name of the Depositary or the nominee of the Depositary for the accounts of designated agents holding on behalf of Euroclear or Clearstream, duly executed by the Issuer and authenticated by the Trustee as hereinafter provided. The Restricted Period will terminate upon the delivery by the Issuer to the Trustee of a written certificate from the Depositary as to the expiration of the Restricted Period, together with copies of certificates from Euroclear and Clearstream certifying that they have received certification of non-United States beneficial ownership of 100% of the aggregate principal amount of the Regulation S Temporary Global Note of a series (except to the extent of any beneficial owners thereof who acquired an interest therein during the Restricted Period pursuant to another exemption from registration under the Securities Act and who will take delivery of a beneficial ownership interest in a 144A Global Note bearing a Private Placement Legend, all as contemplated by Section 2.06(b) hereof).

Following the termination of the Restricted Period, the Company shall instruct, which instructions shall be in writing and comply with Rule 9.03(b)(3)(ii)(B) of Regulation S, the Trustee to, and upon such instructions, the Trustee shall, exchange beneficial interests in the Regulation S Temporary Global Note of a series for beneficial interests in the Regulation S Permanent Global Note, pursuant to the Applicable Procedures. Simultaneously with the exchange of such beneficial interests and in accordance with Section 2.06(h), the Trustee will (i) reduce and endorse the Regulation S Temporary Global Note for such series accordingly and (ii) increase and endorse the Regulation S Permanent Global Note for such series accordingly. The aggregate principal amount of the Regulation S Temporary Global Note for a series and the Regulation S Permanent Global

Note for such series may from time to time be increased or decreased by adjustments made on the records of the Trustee and the Depositary or its nominee, as the case may be, in connection with transfers of interest as hereinafter provided.

(d) *Euroclear and Clearstream Procedures Applicable*. The provisions of the "Operating Procedures of the Euroclear System" and "Terms and Conditions Governing Use of Euroclear" and the "General Terms and Conditions of Clearstream Banking" and "Customer Handbook" of Clearstream will be applicable to transfers of beneficial interests in the Regulation S Temporary Global Note of a series and the Regulation S Permanent Global Note of a series that are held by Participants through Euroclear or Clearstream.

Section 2.02 *Execution and Authentication.*

At least one Officer must sign the Notes of any series for the Issuer by manual, facsimile or electronically transmitted signature.

If an Officer whose signature is on a Note no longer holds that office at the time a Note is authenticated, the Note will nevertheless be valid.

A Note will not be valid until authenticated by the manual or electronic signature of the Trustee. The signature will be conclusive evidence that the Note has been authenticated under this Indenture.

The Trustee will, upon receipt of a written order of the Issuer signed by an Officer of the Issuer (an "*Authentication Order*"), authenticate 2026 Initial Notes and 2029 Initial Notes for original issue (i) on the date hereof as 2026 Initial Notes in the aggregate principal amount of $500.0 million, (ii) on the date hereof as 2029 Initial Notes in the aggregate principal amount of $500.0 million, and (iii) thereafter any Additional Notes of any series that may be validly issued under this Indenture. The aggregate principal amount of Notes of any series outstanding at any time may not exceed the aggregate principal amount of Notes of such series authorized for issuance by the Issuer pursuant to one or more Authentication Orders, except as provided in Section 2.07 hereof.

The Trustee shall also authenticate and deliver Notes of any series at the times and in the manner specified in Section 2.06, Section 2.07, Section 2.10, Section 3.06, Section 3.09, Section 4.15 and Section 9.04.

Any issuance of Additional Notes of any series is subject to all of the covenants in this Indenture, including Section 4.09.

With respect to any Additional Notes of any series, the Issuer shall set forth in an Officers' Certificate, a copy of which shall be delivered to the Trustee at or prior to original issuance thereof, the following information:

(a) the aggregate principal amount of such Additional Notes of such series to be authenticated and delivered pursuant to this Indenture;

(b) the series, issue price, the issue date (and the corresponding date from which interest shall accrue thereon and the first interest payment date therefor) and the CUSIP and/or ISIN number of such Additional Notes; and

(c) whether such Additional Notes shall be subject to the restrictions on transfer set forth in Section 2.06 relating to Restricted Global Notes and Restricted Definitive Notes.

The Trustee may appoint an authenticating agent acceptable to the Issuer to authenticate Notes. An authenticating agent may authenticate Notes whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with Holders or an Affiliate of the Company.

The Initial Notes and the Additional Notes of the same series shall be treated as a single class for all purposes under this Indenture; *provided* that if any such Additional Notes of a series are not fungible with the existing Notes of such series for United States federal income tax purposes, such Additional Notes of such series will have a separate CUSIP number from the existing Notes of such series. Holders of the Initial Notes and the Additional Notes of any series will vote and consent together on all matters to which such Holders are entitled to vote or consent as one class, and none of the Holders of the Initial Notes and the Additional Notes of the same series shall have the right to vote or consent as a separate class on any matter to which such Holders are entitled to vote or consent.

Section 2.03 *Registrar and Paying Agent.*

The Issuer will maintain an office or agency where Notes of any series may be presented for registration of transfer or for exchange ("*Registrar*") and an office or agency where Notes of any series may be presented for payment ("*Paying Agent*"). The Registrar for the Notes of any series will keep a register of the Notes of such series and of their transfer and exchange. The Issuer may appoint one or more co-registrars and one or more additional paying agents. The term "Registrar" includes any co-registrar and the term "Paying Agent" includes any additional paying agent. The Issuer may change any Paying Agent or Registrar without notice to any Holder. The Issuer will notify the Trustee in writing of the name and address of any Agent not a party to this Indenture. If the Issuer fails to appoint or maintain another entity as Registrar or Paying Agent, the Trustee shall act as such. The Issuer or any of the Company's Subsidiaries may act as Paying Agent or Registrar.

The Issuer initially appoints The Depository Trust Company (*"DTC"*) to act as Depositary with respect to the Global Notes.

The Issuer initially appoints the Trustee to act as the Registrar and Paying Agent for each series of Notes (at its office in New York, New York indicated in the definition of Corporate Trust Office of the Trustee in Section 1.01 hereof) and to act as Custodian with respect to the Global Notes.

Section 2.04 *Paying Agent to Hold Money in Trust*.

The Issuer will require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust for the benefit of Holders of the Notes of any series or the Trustee all money held by the Paying Agent for the payment of principal of, premium, if any, on, and interest, if any, on, the Notes of such series, and will notify the Trustee of any default by the Issuer in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Issuer at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Issuer or a Subsidiary) will have no further liability for the money. If the Issuer or a Subsidiary acts as Paying Agent, it will segregate and hold in a separate trust fund for the benefit of the Holders all money held by it as Paying Agent. Upon any bankruptcy or reorganization proceedings relating to the Issuer, the Trustee will serve as Paying Agent for the Notes.

Section 2.05 *Section 2.05 Holder Lists*.

The Trustee will preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of all Holders of Notes of each series and shall otherwise comply with TIA §312(a). If the Trustee is not the Registrar, the Issuer will furnish to the Trustee at least seven Business Days before each interest payment date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of the Holders of the Notes of each series and the Issuer shall otherwise comply with TIA §312(a).

Section 2.06 *Transfer and Exchange*.

(a) *Transfer and Exchange of Global Notes*. A Global Note of a series may not be transferred except as a whole by the Depositary to a nominee of the Depositary, by a nominee of the Depositary to the Depositary or to another nominee of the Depositary, or by the Depositary or any such nominee to a successor Depositary or a nominee of such successor Depositary. All Global Notes of a series will be exchanged by the Issuer for Definitive Notes of such series if:

(1) the Depositary notifies the Issuer (A) that it is unwilling or unable to continue to act as Depositary or (B) that it is no longer a clearing agency registered under the Exchange Act and, in either case, a successor Depositary is not appointed by the Issuer within 90 days after the date of such notice from the Depositary;

(2) the Issuer, at its option but subject to the Depositary's requirements, notify the Trustee in writing that they elect to cause the issuance of the Definitive Notes for the applicable series; *provided* that in no event shall the Regulation S Temporary Global Note of such series be exchanged by the Issuer for Definitive Notes of such series prior to (A) the expiration of the Restricted Period and (B) the receipt by the Registrar of any certificates required pursuant to Rule 903(b)(3)(ii)(B) under the Securities Act; or

(3) there has occurred and is continuing an Event of Default with respect to such series and the Depositary notifies the Trustee of its decision to exchange such Global Note of the applicable series for Definitive Notes of such series.

Upon the occurrence of the preceding events in (1), (2) or (3) above, Definitive Notes of the applicable series shall be issued in such names as the Depositary shall instruct the Trustee. Global Notes of a series also may be exchanged or replaced, in whole or in part, as provided in Sections 2.07 and 2.10 hereof. Every Note of a series authenticated and delivered in exchange for, or in lieu of, a Global Note of such series or any portion thereof, pursuant to this Section 2.06 or Section 2.07 or 2.10 hereof, shall be authenticated and delivered in the form of, and shall be, a Global Note of such series. A Global Note of a series may not be exchanged for another Note of the same series other than as provided in this Section 2.06(a); however, beneficial interests in a Global Note of a series may be transferred and exchanged as provided in Section 2.06(b) or (c) hereof. Whenever any provision herein refers to issuance by the Issuer and authentication and delivery by the Trustee of a new Note of a series in exchange for the portion of a surrendered Note of such series that has not been redeemed or repurchased, as the case may be, in lieu of the surrender of any Global Note of such series and the issuance, authentication and delivery of a new Global Note of such series in exchange therefor, the Trustee or the Depositary at the direction of the Trustee may endorse such Global Note to reflect a reduction in the principal amount represented thereby in the amount of Notes of such series so represented that have been so redeemed or repurchased.

(b) *Transfer and Exchange of Beneficial Interests in the Global Notes*. The transfer and exchange of beneficial interests in the Global Notes of any series will be effected through the Depositary, in accordance with the provisions of this Indenture and the Applicable Procedures. Participants and Indirect Participants shall have no rights under this Indenture with respect to any Global Note of a series held on their behalf by the Depositary or by the Trustee as the Custodian with respect to the Global Notes of such series, and the Issuer, the Trustee and any agent of the Issuer or the Trustee shall be entitled to treat the Depositary as the absolute owner of such Global Note of such series for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Issuer, the Trustee or any agent of the Issuer or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and its Participants or the Indirect Participants, the operation of customary practices of such Depositary governing the exercise of the rights of a holder of a beneficial interest in any Global Note of any series. Subject to the provisions of this Section 2.06 and Section 13.16, the Holder of a Global Note of a series shall be entitled to grant proxies and otherwise authorize any Person, including Participants and Indirect Participants and Persons that may hold interests through such Persons, to take any action that a Holder of Notes of such series is entitled to take under this Indenture or the Notes of such series. Beneficial interests in the Restricted Global Notes of a series will be subject to restrictions on transfer comparable to those set forth herein to the extent required by the Securities Act. Except for the transfer of beneficial interests in the Regulation S Temporary Global Note of a series for beneficial interests in the Regulation S Permanent Global Note of such series as provided in Section 2.01(c), transfers of beneficial interests in the Global Notes of a series also will require compliance with either subparagraph (1) or (2) below, as applicable, as well as one or more of the other following subparagraphs, as applicable:

(1) *Transfer of Beneficial Interests in the Same Global Note*. Beneficial interests in any Restricted Global Note of a series may be transferred to Persons who take delivery thereof in the form of a beneficial interest in the same Restricted Global Note of such series in accordance with the transfer restrictions set forth in the Private Placement

Legend; *provided, however*, that prior to the expiration of the Restricted Period, transfers of beneficial interests in the Regulation S Temporary Global Note of a series may not be made to a U.S. Person or for the account or benefit of a U.S. Person (other than an Initial Purchaser). Beneficial interests in any Unrestricted Global Note of a series may be transferred to Persons who take delivery thereof in the form of a beneficial interest in an Unrestricted Global Note of such series. No written orders or instructions shall be required to be delivered to the Registrar to effect the transfers described in this Section 2.06(b)(1).

(2) *All Other Transfers and Exchanges of Beneficial Interests in Global Notes.* In connection with all transfers and exchanges of beneficial interests that are not subject to Section 2.06(b)(1) above, the transferor of such beneficial interest must deliver to the Registrar either:

(A) both:

(i) a written order from a Participant or an Indirect Participant given to the Depositary in accordance with the Applicable Procedures directing the Depositary to credit or cause to be credited a beneficial interest in another Global Note of such series in an amount equal to the beneficial interest to be transferred or exchanged; and

(ii) instructions given in accordance with the Applicable Procedures containing information regarding the Participant account to be credited with such increase; or

(B) both:

(i) a written order from a Participant or an Indirect Participant given to the Depositary in accordance with the Applicable Procedures directing the Depositary to cause to be issued a Definitive Note of such series in an amount equal to the beneficial interest to be transferred or exchanged; and

(ii) instructions given by the Depositary to the Registrar containing information regarding the Person in whose name such Definitive Note of such series shall be registered to effect the transfer or exchange referred to in (1) above;

provided that in no event shall Definitive Notes of any series be issued upon the transfer or exchange of beneficial interests in the Regulation S Temporary Global Note of such series prior to (A) the expiration of the Restricted Period and (B) the receipt by the Registrar of any certificates required pursuant to Rule 903(b)(3)(ii)(B) under the Securities Act.

Upon satisfaction of all of the requirements for transfer or exchange of beneficial interests in Global Notes of a series contained in this Indenture and the Notes of such series or otherwise applicable under the Securities Act, the Trustee shall adjust the principal amount of the relevant Global Note(s) for such series pursuant to Section 2.06(h) hereof.

(3) *Transfer of Beneficial Interests in a Restricted Global Note for Beneficial Interests in Another Restricted Global Note.* A beneficial interest in any Restricted Global Note of a series may be transferred to a Person who takes delivery thereof in the form of a beneficial interest in another Restricted Global Note for the same series if the transfer complies with the requirements of Section 2.06(b)(2) above and the Registrar receives the following:

(A) if the transferee will take delivery in the form of a beneficial interest in the 144A Global Note, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (1) thereof; and

(B) if the transferee will take delivery in the form of a beneficial interest in the Regulation S Temporary Global Note or the Regulation S Permanent Global Note, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (2) thereof.

(4) Transfer and Exchange of Beneficial Interests in a Restricted Global Note for Beneficial Interests in an Unrestricted Global Note. A beneficial interest in any Restricted Global Note of a series may be exchanged by any holder thereof for a beneficial interest in an Unrestricted Global Note for the same series or transferred to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Note of the same series if the exchange or transfer complies with the requirements of Section 2.06(b)(2) above and the Registrar receives the following:

(i) the holder of such beneficial interest in a Restricted Global Note of such series proposes to exchange such beneficial interest for a beneficial interest in an Unrestricted Global Note of such series, a certificate from such holder in the form of Exhibit C hereto, including the certifications in item (1)(a) thereof; or

(ii) if the holder of such beneficial interest in a Restricted Global Note of such series proposes to transfer such beneficial interest to a Person who shall take delivery thereof in the form of a beneficial interest in an Unrestricted Global Note of such series, a certificate from such holder in the form of Exhibit B hereto, including the certifications in item (4) thereof;

and, in each such case set forth in this Section 2.06(b)(4), if the Registrar so requests or if the Applicable Procedures so require, an Opinion of Counsel in form reasonably acceptable to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act.

If any such transfer is effected pursuant to this Section 2.06(b)(4) at a time when an Unrestricted Global Note of a series has not yet been issued, the Issuer shall issue and, upon receipt of an Authentication Order in accordance with Section 2.02 hereof, the Trustee shall authenticate one or more Unrestricted Global Notes of such series in an aggregate principal amount equal to

the aggregate principal amount of beneficial interests transferred pursuant to this Section 2.06(b)(4).

Beneficial interests in an Unrestricted Global Note cannot be exchanged for, or transferred to Persons who take delivery thereof in the form of, a beneficial interest in a Restricted Global Note.

(c) *Transfer or Exchange of Beneficial Interests for Definitive Notes*. The following provisions of this Section 2.06(c) shall apply to transfers or exchanges of beneficial interests in a Global Note of series for a Definitive Note of the same series pursuant to Section 2.06(a). Except as provided in Section 2.06(a), Holders shall not be entitled to effect such an exchange.

(1) *Beneficial Interests in Restricted Global Notes to Restricted Definitive Notes.* If any holder of a beneficial interest in a Restricted Global Note of such series proposes to exchange such beneficial interest for a Restricted Definitive Note for the same series or to transfer such beneficial interest to a Person who takes delivery thereof in the form of a Restricted Definitive Note of such series, then, upon receipt by the Registrar of the following documentation:

(A) if the holder of such beneficial interest in a Restricted Global Note of such series proposes to exchange such beneficial interest for a Restricted Definitive Note for the same series, a certificate from such holder in the form of Exhibit C hereto, including the certifications in item (2)(a) thereof;

(B) if such beneficial interest is being transferred to a QIB in accordance with Rule 144A, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (1) thereof;

(C) if such beneficial interest is being transferred to a Non-U.S. Person in an offshore transaction in accordance with Rule 903 or Rule 904, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (2) thereof;

(D) if such beneficial interest is being transferred pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(a) thereof;

(E) if such beneficial interest is being transferred to an Institutional Accredited Investor in reliance on an exemption from the registration requirements of the Securities Act other than those listed in subparagraphs (B) through (D) above, a certificate to the effect set forth in Exhibit B hereto, including the certifications, certificates and Opinion of Counsel required by item (3) thereof, if applicable;

(F) if such beneficial interest is being transferred to the Company or any of its Subsidiaries, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(b) thereof; or

(G) if such beneficial interest is being transferred pursuant to an effective registration statement under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(c) thereof, the Trustee shall cause the aggregate principal amount of the applicable Global Note to be reduced accordingly pursuant to Section 2.06(h) hereof, and the Issuer shall execute and the Trustee shall authenticate and deliver to the Person designated in the instructions a Definitive Note of the same series in the appropriate principal amount. Any Definitive Note issued in exchange for a beneficial interest in a Restricted Global Note pursuant to this Section 2.06(c) shall be registered in such name or names and in such authorized denomination or denominations as the holder of such beneficial interest shall instruct the Registrar through instructions from the Depositary and the Participant or Indirect Participant. The Trustee shall deliver such Definitive Notes to the Persons in whose names such Notes are so registered. Any Definitive Note issued in exchange for a beneficial interest in a Restricted Global Note pursuant to this Section 2.06(c)(1) shall bear the Private Placement Legend and shall be subject to all restrictions on transfer contained therein.

(2) *Beneficial Interests in Regulation S Temporary Global Note to Definitive Notes.* Notwithstanding Section 2.06(c)(1)(A) and (C) hereof, a beneficial interest in the Regulation S Temporary Global Note of a series may not be exchanged for a Definitive Note for the same series or transferred to a Person who takes delivery thereof in the form of a Definitive Note for such series prior to (A) the expiration of the Restricted Period and (B) the receipt by the Registrar of any certificates required pursuant to Rule 903(b)(3)(ii)(B) under the Securities Act, except in the case of a transfer pursuant to an exemption from the registration requirements of the Securities Act other than Rule 903 or Rule 904.

(3) *Beneficial Interests in Restricted Global Notes to Unrestricted Definitive Notes.* A holder of a beneficial interest in a Restricted Global Note of a series may exchange such beneficial interest for an Unrestricted Definitive Note for the same series or may transfer such beneficial interest to a Person who takes delivery thereof in the form of an Unrestricted Definitive Note of such series only if the Registrar receives the following:

(i) if the holder of such beneficial interest in a Restricted Global Note of such series proposes to exchange such beneficial interest for an Unrestricted Definitive Note for the same series, a certificate from such holder in the form of Exhibit C hereto, including the certifications in item (1)(b) thereof; or

(ii) if the holder of such beneficial interest in a Restricted Global Note of such series proposes to transfer such beneficial interest to a Person who shall take delivery thereof in the form of an Unrestricted Definitive Note for the same series, a certificate from such holder in the form of Exhibit B hereto, including the certifications in item (4) thereof;

and, in each such case set forth in this Section 2.06(c)(3), if the Registrar so requests or if the Applicable Procedures so require, an Opinion of Counsel in form reasonably acceptable

to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act.

(4) *Beneficial Interests in Unrestricted Global Notes to Unrestricted Definitive Notes.* If any holder of a beneficial interest in an Unrestricted Global Note of a series proposes to exchange such beneficial interest for a Definitive Note for the same series or to transfer such beneficial interest to a Person who takes delivery thereof in the form of a Definitive Note of such series, then, upon satisfaction of the conditions set forth in Section 2.06(b)(2) hereof, the Trustee will cause the aggregate principal amount of the applicable Global Note to be reduced accordingly pursuant to Section 2.06(h) hereof, and the Issuer will execute and the Trustee will authenticate and deliver to the Person designated in the instructions a Definitive Note for the same series in the appropriate principal amount. Any Definitive Note of a series issued in exchange for a beneficial interest pursuant to this Section 2.06(c)(4) will be registered in such name or names and in such authorized denomination or denominations as the holder of such beneficial interest requests through instructions to the Registrar from or through the Depositary and the Participant or Indirect Participant. The Trustee will deliver such Definitive Notes to the Persons in whose names such Notes are so registered. Any Definitive Note issued in exchange for a beneficial interest pursuant to this Section 2.06(c)(4) will not bear the Private Placement Legend.

(d) *Transfer and Exchange of Definitive Notes for Beneficial Interests.*

(1) *Restricted Definitive Notes to Beneficial Interests in Restricted Global Notes.* If any Holder of a Restricted Definitive Note of a series proposes to exchange such Note for a beneficial interest in a Restricted Global Note for the same series or to transfer such Restricted Definitive Notes to a Person who takes delivery thereof in the form of a beneficial interest in a Restricted Global Note of such series, then, upon receipt by the Registrar of the following documentation:

(A) if the Holder of such Restricted Definitive Note proposes to exchange such Note for a beneficial interest in a Restricted Global Note for the same series, a certificate from such Holder in the form of Exhibit C hereto, including the certifications in item (2)(b) thereof;

(B) if such Restricted Definitive Note is being transferred to a QIB in accordance with Rule 144A, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (1) thereof;

(C) if such Restricted Definitive Note is being transferred to a Non-U.S. Person in an offshore transaction in accordance with Rule 903 or Rule 904, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (2) thereof;

(D) if such Restricted Definitive Note is being transferred pursuant to an exemption from the registration requirements of the Securities Act in accordance

with Rule 144, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(a) thereof;

(E) if such Restricted Definitive Note is being transferred to an Institutional Accredited Investor in reliance on an exemption from the registration requirements of the Securities Act other than those listed in subparagraphs (B) through (D) above, a certificate to the effect set forth in Exhibit B hereto, including the certifications, certificates and Opinion of Counsel required by item (3) thereof, if applicable;

(F) if such Restricted Definitive Note is being transferred to the Company or any of its Subsidiaries, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(b) thereof; or

(G) if such Restricted Definitive Note is being transferred pursuant to an effective registration statement under the Securities Act, a certificate to the effect set forth in Exhibit B hereto, including the certifications in item (3)(c) thereof, the Trustee will cancel the Restricted Definitive Note, increase or cause to be increased the aggregate principal amount of, in the case of clause (A) above, the appropriate Restricted Global Note, in the case of clause (B) above, the 144A Global Note, and in the case of clause (C) above, the Regulation S Global Note.

(2) *Restricted Definitive Notes to Beneficial Interests in Unrestricted Global Notes.* A Holder of a Restricted Definitive Note of a series may exchange such Note for a beneficial interest in an Unrestricted Global Note for the same series or transfer such Restricted Definitive Note to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Note of such series only if the Registrar receives the following:

(i) if the Holder of such Definitive Notes proposes to exchange such Notes for a beneficial interest in the Unrestricted Global Note of the same series, a certificate from such Holder in the form of Exhibit C hereto, including the certifications in item (1)(c) thereof; or

(ii) if the Holder of such Definitive Notes proposes to transfer such Notes to a Person who shall take delivery thereof in the form of a beneficial interest in the Unrestricted Global Note of the same series, a certificate from such Holder in the form of Exhibit B hereto, including the certifications in item (4) thereof;

and, in each such case set forth in this Section 2.06(d)(2), if the Registrar so requests or if the Applicable Procedures so require, an Opinion of Counsel in form reasonably acceptable to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act.

Upon satisfaction of the conditions of any of the subparagraphs in this Section 2.06(d)(2), the Trustee will cancel the Definitive Notes and increase or cause to be increased the aggregate principal amount of the Unrestricted Global Note.

(3) *Unrestricted Definitive Notes to Beneficial Interests in Unrestricted Global Notes.* A Holder of an Unrestricted Definitive Note of a series may exchange such Note for a beneficial interest in an Unrestricted Global Note for the same series or transfer such Definitive Notes to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Note of such series at any time. Upon receipt of a request for such an exchange or transfer, the Trustee will cancel the applicable Unrestricted Definitive Note and increase or cause to be increased the aggregate principal amount of one of the Unrestricted Global Notes of such series.

If any such exchange or transfer from a Definitive Note to a beneficial interest is effected pursuant to subparagraph (2) or (3) above at a time when an Unrestricted Global Note for such series has not yet been issued, the Issuer will issue and, upon receipt of an Authentication Order in accordance with Section 2.02 hereof, the Trustee will authenticate one or more Unrestricted Global Notes of a series in an aggregate principal amount equal to the principal amount of Definitive Notes of such series so transferred.

(e) *Transfer and Exchange of Definitive Notes for Definitive Notes.* Upon request by a Holder of Definitive Notes of a series and such Holder's compliance with the provisions of this Section 2.06(e), the Registrar will register the transfer or exchange of Definitive Notes of a series for Definitive Notes of the same series. Prior to such registration of transfer or exchange, the requesting Holder must present or surrender to the Registrar the Definitive Notes duly endorsed or accompanied by a written instruction of transfer in form satisfactory to the Registrar duly executed by such Holder or by its attorney, duly authorized in writing. In addition, the requesting Holder must provide any additional certifications, documents and information, as applicable, required pursuant to the following provisions of this Section 2.06(e).

(1) *Restricted Definitive Notes to Restricted Definitive Notes.* Any Restricted Definitive Note of a series may be transferred to and registered in the name of Persons who take delivery thereof in the form of a Restricted Definitive Note for the same series if the Registrar receives the following:

(A) if the transfer will be made pursuant to Rule 144A, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (1) thereof;

(B) if the transfer will be made pursuant to Rule 903 or Rule 904, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications in item (2) thereof; and

(C) if the transfer will be made pursuant to any other exemption from the registration requirements of the Securities Act, then the transferor must deliver a certificate in the form of Exhibit B hereto, including the certifications, certificates and Opinion of Counsel required by item (3) thereof, if applicable.

(2) *Restricted Definitive Notes to Unrestricted Definitive Notes.* Any Restricted Definitive Note of a series may be exchanged by the Holder thereof for an Unrestricted Definitive Note for the same series or transferred to a Person or Persons who take delivery thereof in the form of an Unrestricted Definitive Note of such series if the Registrar receives the following:

(i) if the Holder of such Restricted Definitive Notes proposes to exchange such Notes for an Unrestricted Definitive Note of the same series, a certificate from such Holder in the form of Exhibit C hereto, including the certifications in item (1)(d) thereof; or

(ii) if the Holder of such Restricted Definitive Notes proposes to transfer such Notes to a Person who shall take delivery thereof in the form of an Unrestricted Definitive Note of the same series, a certificate from such Holder in the form of Exhibit B hereto, including the certifications in item (4) thereof;

and, in each such case set forth in this 2.06(e)(2), if the Registrar so requests, an Opinion of Counsel in form reasonably acceptable to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act.

(3) *Unrestricted Definitive Notes to Unrestricted Definitive Notes.* A Holder of Unrestricted Definitive Notes of a series may transfer such Notes to a Person who takes delivery thereof in the form of an Unrestricted Definitive Note for the same series. Upon receipt of a request to register such a transfer, the Registrar shall register the Unrestricted Definitive Notes pursuant to the instructions from the Holder thereof.

(f) [Reserved.]

(g) *Legends.* The following legends will appear on the face of all Global Notes and Definitive Notes issued under this Indenture unless specifically stated otherwise in the applicable provisions of this Indenture.

(1) Private Placement Legend.

(A) Except as permitted by subparagraph (B) below, each Global Note and each Definitive Note (and all Notes issued in exchange therefor or substitution thereof) shall bear the legend in substantially the following form:

"THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR

NOT SUBJECT TO, SUCH REGISTRATION. THE HOLDER OF THIS SECURITY, BY ITS ACCEPTANCE HEREOF, AGREES ON ITS OWN BEHALF AND ON BEHALF OF ANY INVESTOR ACCOUNT FOR WHICH IT HAS PURCHASED SECURITIES, TO OFFER, SELL OR OTHERWISE TRANSFER SUCH SECURITY, PRIOR TO THE DATE (THE "RESALE RESTRICTION TERMINATION DATE") THAT IS, IN THE CASE OF RULE 144A NOTES, ONE YEAR (OR SUCH SHORTER PERIOD OF TIME AS PERMITTED BY RULE 144 UNDER THE SECURITIES ACT OR ANY SUCCESSOR PROVISION THEREUNDER) AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF, THE ORIGINAL ISSUE DATE OF THE ISSUANCE OF ANY ADDITIONAL NOTES AND THE LAST DATE ON WHICH THE ISSUER OR ANY AFFILIATE OF THE ISSUER WAS THE OWNER OF THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY), OR, IN THE CASE OF REGULATION S NOTES, 40 DAYS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE DATE ON WHICH THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) WAS FIRST OFFERED TO PERSONS OTHER THAN DISTRIBUTORS (AS DEFINED IN RULE 902 OF REGULATION S) IN RELIANCE ON REGULATION S, ONLY (A) TO THE ISSUER OR ANY SUBSIDIARY THEREOF, (B) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, (C) FOR SO LONG AS THE SECURITIES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT ("RULE 144A"), TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (D) PURSUANT TO OFFERS AND SALES TO NON-U.S. PERSONS THAT OCCUR OUTSIDE THE UNITED STATES WITHIN THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, OR (E) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE ISSUER'S AND THE TRUSTEE'S RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSES (D) OR (E) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/ OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER AFTER THE RESALE RESTRICTION TERMINATION DATE. [BY ITS ACQUISITION HEREOF, THE HOLDER HEREOF REPRESENTS THAT IT IS NOT A U.S. PERSON NOR IS IT PURCHASING FOR THE ACCOUNT OF A U.S. PERSON AND IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S UNDER THE SECURITIES ACT][1]."

[1] Bracketed language only to be included in Regulation S Notes.

(B) Notwithstanding the foregoing, any Global Note or Definitive Note issued pursuant to subparagraphs (b)(4), (c)(3), (c)(4), (d)(2), (d)(3), (e)(2) or (e)(3) of this Section 2.06 (and all Notes issued in exchange therefor or substitution thereof) will not bear the Private Placement Legend.

(2) *Global Note Legend*. Each Global Note will bear a legend in substantially the following form:

"THIS GLOBAL NOTE IS HELD BY THE DEPOSITARY (AS DEFINED IN THE INDENTURE GOVERNING THIS NOTE) OR ITS NOMINEE IN CUSTODY FOR THE BENEFIT OF THE BENEFICIAL OWNERS HEREOF, AND IS NOT TRANSFERABLE TO ANY PERSON UNDER ANY CIRCUMSTANCES EXCEPT THAT (1) THE TRUSTEE MAY MAKE SUCH NOTATIONS HEREON AS MAY BE REQUIRED PURSUANT TO SECTION 2.06 OF THE INDENTURE, (2) THIS GLOBAL NOTE MAY BE EXCHANGED IN WHOLE BUT NOT IN PART PURSUANT TO SECTION 2.06(a) OF THE INDENTURE, (3) THIS GLOBAL NOTE MAY BE DELIVERED TO THE TRUSTEE FOR CANCELLATION PURSUANT TO SECTION 2.11 OF THE INDENTURE AND (4) THIS GLOBAL NOTE MAY BE TRANSFERRED TO A SUCCESSOR DEPOSITARY WITH THE PRIOR WRITTEN CONSENT OF THE ISSUER.

UNLESS AND UNTIL IT IS EXCHANGED IN WHOLE OR IN PART FOR NOTES IN DEFINITIVE FORM, THIS NOTE MAY NOT BE TRANSFERRED EXCEPT AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY OR BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY OR BY THE DEPOSITARY OR ANY SUCH NOMINEE TO A SUCCESSOR DEPOSITARY OR A NOMINEE OF SUCH SUCCESSOR DEPOSITARY. UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY (55 WATER STREET, NEW YORK, NEW YORK) ("DTC"), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR SUCH OTHER NAME AS MAY BE REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR SUCH OTHER ENTITY AS MAY BE REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN."

(3) *Regulation S Temporary Global Note Legend.* The Regulation S Temporary Global Note will bear a Legend in substantially the following form:

"THE RIGHTS ATTACHING TO THIS REGULATION S TEMPORARY GLOBAL NOTE, AND THE CONDITIONS AND PROCEDURES GOVERNING ITS EXCHANGE FOR A REGULATION S PERMANENT GLOBAL NOTE, ARE AS SPECIFIED IN THE INDENTURE (AS DEFINED HEREIN). NEITHER THE HOLDER NOR THE BENEFICIAL OWNERS OF THIS REGULATION S TEMPORARY GLOBAL NOTE SHALL BE ENTITLED TO RECEIVE PAYMENT OF INTEREST HEREON PRIOR TO EXPIRATION OF THE RESTRICTED PERIOD."

(h) *Cancellation and/or Adjustment of Global Notes.* At such time as all beneficial interests in a particular Global Note of a series have been exchanged for beneficial interests in another Global Note or Definitive Notes of the same series, or a particular Global Note has been redeemed, repurchased or canceled in whole and not in part, each such Global Note will be returned to or retained and canceled by the Trustee in accordance with Section 2.11 hereof. At any time prior to such cancellation, if any beneficial interest in a Global Note of a series is exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Note or for Definitive Notes, in either case for the same series, the principal amount of Notes represented by such Global Note will be reduced accordingly and an endorsement will be made on such Global Note by the Trustee or by the Depositary at the direction of the Trustee to reflect such reduction; and if the beneficial interest is being exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Note of such series, such other Global Note will be increased accordingly and an endorsement will be made on such Global Note by the Trustee or by the Depositary at the direction of the Trustee to reflect such increase.

(i) *General Provisions Relating to Transfers and Exchanges.*

(1) To permit registrations of transfers and exchanges, the Issuer will execute and the Trustee will authenticate Global Notes and Definitive Notes upon receipt of an Authentication Order in accordance with Section 2.02 hereof or at the Registrar's request.

(2) No service charge will be made to a Holder of a beneficial interest in a Global Note or to a Holder of a Definitive Note for any registration of transfer or exchange, but the Issuer may require payment of a sum sufficient to cover any transfer tax or similar governmental charge payable in connection therewith (other than any such transfer taxes or similar governmental charge payable upon exchange or transfer pursuant to Sections 2.10, 3.06, 3.09, 4.10, 4.15 and 9.04 hereof).

(3) All Global Notes and Definitive Notes issued upon any registration of transfer or exchange of Global Notes or Definitive Notes will be the valid obligations of the Issuer, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Global Notes or Definitive Notes for the same series surrendered upon such registration of transfer or exchange.

(4) Neither the Registrar nor the Issuer will be required:

(A) to issue, to register the transfer of or to exchange any Notes during a period beginning at the opening of business 15 days before the day of any selection of Notes for redemption under Section 3.02 hereof and ending at the close of business on the day of selection;

(B) to register the transfer of or to exchange any Note selected for redemption in whole or in part, except the unredeemed portion of any Note being redeemed in part; or

(C) to register the transfer of or to exchange a Note between a record date and the next succeeding interest payment date.

(5) Prior to due presentment for the registration of a transfer of any Note, the Trustee, any Agent and the Issuer may deem and treat the Person in whose name any Note is registered as the absolute owner of such Note for the purpose of receiving payment of principal of and interest on such Notes and for all other purposes, and none of the Trustee, any Agent or the Issuer shall be affected by notice to the contrary.

(6) The Trustee will authenticate Global Notes and Definitive Notes in accordance with the provisions of Section 2.02 hereof.

(7) All certifications, certificates and Opinions of Counsel required to be submitted to the Registrar pursuant to this Section 2.06 to effect a registration of transfer or exchange may be submitted by facsimile or electronic image scan.

Section 2.07 *Replacement Notes*.

If any mutilated Note is surrendered to the Trustee or the Issuer and the Trustee and the Issuer receive evidence to their satisfaction of the destruction, loss or theft of any Note, and such other reasonable requirements as may be imposed by the Issuer as permitted by Section 8-405 of the Uniform Commercial Code have been satisfied, then, in the absence of notice to the Issuer or the Trustee that such Note has been acquired by a "protected purchaser" within the meaning of Section 8-405 of the Uniform Commercial Code, the Issuer will issue and the Trustee, upon receipt of an Authentication Order, will authenticate a replacement Note if the Trustee's requirements are met. If required by the Trustee or the Issuer, an indemnity bond must be supplied by the Holder that is sufficient in the judgment of the Trustee and the Issuer to protect the Issuer, the Trustee, any Agent and any authenticating agent from any loss that any of them may suffer if a Note is replaced. The Issuer may charge for its expenses in replacing a Note.

Every replacement Note is an additional obligation of the Issuer and will be entitled to all of the benefits of this Indenture equally and proportionately with all other Notes of the same series duly issued hereunder.

Section 2.08 *Outstanding Notes*.

The Notes of a series outstanding at any time are all the Notes of such series authenticated by the Trustee except for those canceled by it, those delivered to it for cancellation, those reductions in the interest in a Global Note of such series effected by the Trustee in accordance with

the provisions hereof, and those described in this Section 2.08 as not outstanding. Except as set forth in Section 2.09 hereof, a Note does not cease to be outstanding because the Issuer or an Affiliate of the Issuer holds the Note; however, Notes held by the Company or a Subsidiary of the Company shall not be deemed to be outstanding for purposes of Section 3.07(a) hereof.

If a Note is replaced pursuant to Section 2.07 hereof, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Note is held by a protected purchaser within the meaning of Section 8-405 of the Uniform Commercial Code.

If the principal amount of any Note is considered paid under Section 4.01 hereof, it ceases to be outstanding and interest on it ceases to accrue.

If the Paying Agent (other than the Issuer, a Subsidiary or an Affiliate of any thereof) holds, by 11:00 a.m. Eastern Time on a redemption date or other maturity date, money sufficient to pay Notes payable on that date, then on and after that date such Notes will be deemed to be no longer outstanding and will cease to accrue interest.

Section 2.09 *Treasury Notes*.

In determining whether the Holders of the required principal amount of Notes of a series have concurred in any direction, waiver or consent, Notes of such series owned by the Issuer or any Guarantor, or by any Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Issuer or any Guarantor, will be considered as though not outstanding, except that for the purposes of determining whether the Trustee will be protected in relying on any such direction, waiver or consent, only Notes of such series that the Trustee knows are so owned will be so disregarded.

Section 2.10 *Temporary Notes*.

Until certificates representing Notes are ready for delivery, the Issuer may prepare and the Trustee, upon receipt of an Authentication Order, will authenticate temporary Notes. Temporary Notes will be substantially in the form of certificated Notes but may have variations that the Issuer considers appropriate for temporary Notes and as may be reasonably acceptable to the Trustee. Without unreasonable delay, the Issuer will prepare and the Trustee will authenticate definitive Notes of a series in exchange for temporary Notes of the same series.

Holders of temporary Notes will be entitled to all of the benefits of this Indenture.

Section 2.11 *Cancellation*.

The Issuer at any time may deliver Notes to the Trustee for cancellation. The Registrar and Paying Agent will forward to the Trustee any Notes surrendered to them for registration of transfer, exchange or payment. The Trustee and no one else will cancel all Notes surrendered for registration of transfer, exchange, payment, replacement or cancellation and will destroy canceled Notes (subject to the record retention requirement of the Exchange Act). Certification of the destruction of all canceled Notes will be delivered to the Issuer. The Issuer may not issue new Notes to replace Notes that it has paid or that have been delivered to the Trustee for cancellation.

Section 2.12 *Defaulted Interest*.

If the Issuer defaults in a payment of interest on the Notes of a series, it will pay the defaulted interest in any lawful manner plus, to the extent lawful, interest payable on the defaulted interest, to the Persons who are Holders on a subsequent special record date, in each case at the rate provided in the Notes of such series and in Section 4.01 hereof, provided that no special record date shall be required with respect to defaulted interest paid within the applicable grace period. The Issuer will notify the Trustee in writing of the amount of defaulted interest proposed to be paid on each Note of such series and the date of the proposed payment. The Issuer will fix or cause to be fixed each such special record date and payment date; *provided* that no such special record date may be less than 10 days prior to the related payment date for such defaulted interest. At least 15 days before the special record date, the Issuer (or, upon the written request of the Issuer, the Trustee in the name and at the expense of the Issuer) will mail or cause to be mailed to Holders of Notes of such series a notice that states the special record date, the related payment date and the amount of such interest to be paid.

Section 2.13 *Computation of Interest*.

Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months.

Section 2.14 *CUSIP Numbers*.

The Issuer will promptly notify the Trustee in writing of any change in the "CUSIP" numbers.

ARTICLE 3
REDEMPTION AND PREPAYMENT

Section 3.01 *Notices to Trustee*.

If the Issuer elects to redeem Notes of a series pursuant to the optional redemption provisions of Section 3.07 hereof, they must furnish to the Trustee, at least five Business Days (or such shorter time as may be acceptable to the Trustee) prior to the giving of notice of a redemption, an Officers' Certificate setting forth:

(a) the clause of this Indenture pursuant to which the redemption shall occur;

(b) the redemption date;

(c) the series of Notes to be redeemed;

(d) the principal amount of Notes to be redeemed; and

(e) the redemption price (if then determined and otherwise the method of determination).

Section 3.02 *Selection of Notes to Be Redeemed*.

If less than all of the Notes of a series are to be redeemed at any time, the Trustee will select Notes of such series for redemption on a *pro rata* basis (or, in the case of Notes issued in global form pursuant to Article 2 hereof, by such method as DTC or its nominee or successor may require or, where such nominee or successor is the Trustee, a method that most nearly approximates *pro rata* selection as the Trustee deems fair and appropriate unless otherwise required by law) unless otherwise required by law or applicable stock exchange or depositary requirements. Notwithstanding the foregoing, no Notes of $2,000 or less can be redeemed in part. The Issuer may elect, in its sole discretion, to redeem only the 2026 Notes, only the 2029 Notes, or any combination thereof.

In the event of partial redemption by lot, the particular Notes to be redeemed will be selected, unless otherwise provided herein, not less than 10 nor more than 60 days prior to the redemption date by the Trustee from the outstanding Notes not previously called for redemption.

The Trustee will promptly notify the Issuer in writing of the Notes selected for redemption and, in the case of any Note selected for partial redemption, the principal amount thereof to be redeemed. Notes and portions of Notes selected will be in amounts of $2,000 or whole multiples of $1,000 in excess thereof; except that if all of the Notes of any series of a Holder are to be redeemed, the entire outstanding amount of Notes of such series held by such Holder shall be redeemed. Except as provided in the preceding sentence, provisions of this Indenture that apply to Notes called for redemption also apply to portions of Notes called for redemption.

Section 3.03 *Notice of Redemption*.

At least 10 days but not more than 60 days before a redemption date, the Issuer will mail or cause to be mailed by first class mail (or sent electronically if DTC is the recipient) a notice of redemption to each Holder whose Notes are to be redeemed at its registered address, except that redemption notices may be given more than 60 days prior to a redemption date if the notice is issued in connection with a defeasance of a series of Notes or a satisfaction and discharge of this Indenture with respect to any series of Notes pursuant to Article 8 or 11 hereof.

The notice will state:

(a) the redemption date;

(b) the series of Notes to be redeemed and the redemption price (if then determined and otherwise the method of determination);

(c) if any Note of a series is being redeemed in part, the portion of the principal amount of such Note to be redeemed and that, after the redemption date upon surrender of such Note, a new Note or Notes of the same series in principal amount equal to the unredeemed portion will be issued in the name of the Holder thereof upon cancellation of the original Note;

(d) the name and address of the Paying Agent;

(e) that Notes called for redemption must be surrendered to the Paying Agent to collect the redemption price;

(f) that, unless the Issuer defaults in making such redemption payment, interest on Notes called for redemption ceases to accrue on and after the redemption date;

(g) the paragraph of the Notes and/or Section of this Indenture pursuant to which the Notes called for redemption are being redeemed;

(h) that no representation is made as to the correctness or accuracy of the CUSIP number, if any, listed in such notice or printed on the Notes; and

(i) any conditions precedent to the redemption.

At the Issuer's request, the Trustee will give the notice of redemption in the Issuer's names and at the Issuer's expense; *provided, however*, that the Officers' Certificate delivered to the Trustee pursuant to Section 3.01 hereof requests that the Trustee give such notice and sets forth the information to be stated in such notice as provided in the preceding paragraph.

If such redemption is subject to the satisfaction of one or more conditions precedent, the related notice shall describe each such condition, and if applicable, shall state that, in the Company's discretion, the date of redemption may be delayed until such time as any or all such conditions shall be satisfied or waived (provided that in no event shall such date of redemption be delayed to a date later than 60 days after the date on which such notice was sent), or such redemption may not occur and such notice may be rescinded in the event that any or all such conditions shall not have been satisfied or waived by the date of redemption, or by the date of redemption as so delayed. The Issuer shall provide written notice of the delay of such date of redemption or the rescission of such notice of redemption to the Trustee no later than 11:00 a.m. Eastern Time on the date of redemption. Upon receipt of such notice of the delay of such date of redemption or the rescission of such notice of redemption, such date of redemption shall be automatically delayed or such notice of redemption shall be automatically rescinded, as applicable, and the redemption of the Notes to be redeemed shall be automatically delayed or rescinded and cancelled, as applicable, as provided in such notice.

Section 3.04 *Effect of Notice of Redemption*.

Once notice of redemption is mailed or given in accordance with Section 3.03 hereof, Notes called for redemption will become irrevocably due and payable (subject to Section 3.03) on the redemption date at the redemption price, subject to satisfaction of any condition specified with respect to such redemption.

Section 3.05 *Deposit of Redemption Price*.

No later than 11:00 a.m. Eastern Time on the redemption date, the Issuer will deposit with the Trustee or with the Paying Agent money sufficient to pay the redemption price of, and accrued interest, if any, on all Notes to be redeemed on that date. The Trustee or the Paying Agent will promptly return to the Issuer any money deposited with the Trustee or the Paying Agent by the

Issuer in excess of the amounts necessary to pay the redemption price of, and accrued interest, if any, on all Notes to be redeemed.

If the Issuer complies with the provisions of the preceding paragraph, on and after the redemption date, interest will cease to accrue on the Notes or the portions of Notes called for redemption. If a Note is redeemed on or after an interest record date but on or prior to the related interest payment date, then any accrued and unpaid interest, if any, shall be paid to the Person in whose name such Note was registered at the close of business on such record date. If any Note called for redemption is not so paid upon surrender for redemption because of the failure of the Issuer to comply with the preceding paragraph, interest shall be paid on the unpaid principal, from the redemption date until such principal is paid, and to the extent lawful on any interest not paid on such unpaid principal, in each case at the rate provided in the Notes and in Section 4.01 hereof.

Section 3.06 *Notes Redeemed in Part.*

Upon surrender of a Note of a series that is redeemed in part, the Issuer will issue and, upon receipt of an Authentication Order, the Trustee will authenticate for the Holder at the expense of the Issuer a new Note for the same series equal in principal amount to the unredeemed portion of the Note surrendered.

Section 3.07 *Optional Redemption.*

(a) At any time prior to February 5, 2023, the Issuer may on any one or more occasions redeem up to 35% of the aggregate principal amount of 2026 Notes issued under this Indenture, upon notice as provided in this Indenture, at a redemption price equal to 105.500% of the principal amount of the 2026 Notes redeemed, plus accrued and unpaid interest, if any, to the date of redemption (subject to the rights of Holders on the relevant record date to receive interest on the relevant interest payment date), with an amount of cash not greater than the net cash proceeds of one or more Equity Offerings, *provided* that:

(1) at least 65% of the aggregate principal amount of 2026 Notes originally issued on the Issue Date (excluding 2026 Notes held by the Company and its Subsidiaries) remains outstanding immediately after the occurrence of such redemption; and

(2) the redemption occurs within 180 days after the date of the closing of such Equity Offering.

(b) At any time prior to February 5, 2024, the Issuer may on any one or more occasions redeem up to 35% of the aggregate principal amount of 2029 Notes issued under this Indenture, upon notice as provided in this Indenture, at a redemption price equal to 105.875% of the principal amount of the 2029 Notes redeemed, plus accrued and unpaid interest, if any, to the date of redemption (subject to the rights of Holders on the relevant record date to receive interest on the relevant interest payment date), with an amount of cash not greater than the net cash proceeds of one or more Equity Offerings, *provided* that:

(1) at least 65% of the aggregate principal amount of 2029 Notes originally issued on the Issue Date (excluding 2029 Notes held by the Company and its Subsidiaries) remains outstanding immediately after the occurrence of such redemption; and

(2) the redemption occurs within 180 days after the date of the closing of such Equity Offering.

(c) At any time prior to February 5, 2023, the Issuer may on any one or more occasions redeem all or a part of the 2026 Notes, upon notice as provided in this Indenture, at a redemption price equal to:

(1) 100% of the principal amount thereof, plus

(2) the 2026 Applicable Premium as of the redemption date, plus accrued and unpaid interest, if any, to the redemption date (subject to the rights of Holders of the 2026 Notes on the relevant record date to receive interest due on the relevant interest payment date).

(d) At any time prior to February 5, 2024, the Issuer may on any one or more occasions redeem all or a part of the 2029 Notes, upon notice as provided in this Indenture, at a redemption price equal to:

(1) 100% of the principal amount thereof, plus

(2) the 2029 Applicable Premium as of the redemption date, plus accrued and unpaid interest, if any, to the redemption date (subject to the rights of Holders of the 2029 Notes on the relevant record date to receive interest due on the relevant interest payment date).

(e) The Issuer may redeem the Notes when permitted by, and pursuant to the conditions in, Section 4.15(e) hereof.

(f) Except pursuant to Section 3.07(a), (c) or (i), the 2026 Notes will not be redeemable at the Issuer's option prior to February 5, 2023 and except pursuant to Section 3.07(b), (d) or (j), the 2029 Notes will not be redeemable at the Issuer's option prior to February 5, 2024.

(g) On and after February 5, 2023, the Issuer may on any one or more occasions redeem all or a part of the 2026 Notes, upon notice as provided in this Indenture, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, on the 2026 Notes redeemed, to the applicable redemption date, if redeemed during the twelve-month period beginning on February 5 of the years indicated below, subject to the rights of Holders of the 2026 Notes on the relevant record date to receive interest on the relevant interest payment date:

Year	Percentage
2023	102.750%
2024	101.375%
2025 and thereafter	100.000%

(h) On and after February 5, 2024, the Issuer may on any one or more occasions redeem all or a part of the 2029 Notes, upon notice as provided in this Indenture, at the redemption prices

(expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, on the 2029 Notes redeemed, to the applicable redemption date, if redeemed during the twelve-month period beginning on February 5 of the years indicated below, subject to the rights of Holders of the 2029 Notes on the relevant record date to receive interest on the relevant interest payment date:

Year	Percentage
2024	102.938%
2025	101.469%
2026 and thereafter	100.000%

(i) In connection with any tender offer for the 2026 Notes that is a Change of Control Offer or Asset Sale Offer, if Holders of not less than 90% in aggregate principal amount of the then-outstanding 2026 Notes validly tender and do not validly withdraw such 2026 Notes in such tender offer and the Company, or any third party making such tender offer in lieu of the Company, purchases all of the 2026 Notes validly tendered and not validly withdrawn by such Holders, the Company or such third party will have the right upon not less than 10 nor more than 60 days' prior notice, given not more than 30 days following such purchase date, to redeem all 2026 Notes that remain outstanding following such purchase at a redemption price equal to the price offered to each other Holder of 2026 Notes (excluding any early tender or incentive fee) in such tender offer plus, to the extent not included in the tender offer payment, accrued and unpaid interest, if any, thereon, to, but excluding, the date of such redemption.

(j) In connection with any tender offer for the 2029 Notes that is a Change of Control Offer or Asset Sale Offer, if Holders of not less than 90% in aggregate principal amount of the then-outstanding 2029 Notes validly tender and do not validly withdraw such 2029 Notes in such tender offer and the Company, or any third party making such tender offer in lieu of the Company, purchases all of the 2029 Notes validly tendered and not validly withdrawn by such Holders, the Company or such third party will have the right upon not less than 10 nor more than 60 days' prior notice, given not more than 30 days following such purchase date, to redeem all 2029 Notes that remain outstanding following such purchase at a redemption price equal to the price offered to each other Holder of 2029 Notes (excluding any early tender or incentive fee) in such tender offer plus, to the extent not included in the tender offer payment, accrued and unpaid interest, if any, thereon, to, but excluding, the date of such redemption.

(k) Any redemption pursuant to this Section 3.07 shall be made pursuant to the provisions of Sections 3.01 through 3.06 hereof.

Section 3.08 *Mandatory Redemption*.

Except as provided in Section 3.10, the Issuer is not required to make mandatory redemption or sinking fund payments with respect to the Notes.

Section 3.09 *Offer to Purchase by Application of Excess Proceeds*.

In the event that, pursuant to Section 4.10 hereof, the Company is required to commence an Asset Sale Offer to all Holders to purchase Notes of each series, it will follow the procedures specified below.

The Asset Sale Offer shall be made to all Holders and all holders of other Indebtedness that is *pari passu* with the Notes containing provisions similar to those set forth in this Indenture with respect to offers to purchase, prepay or redeem with the proceeds of sales of assets. The Asset Sale Offer will remain open for a period of at least 20 Business Days following its commencement and not more than 30 Business Days, except to the extent that a longer period is required by applicable law (the "*Offer Period*"). No later than three Business Days after the termination of the Offer Period (the "*Purchase Date*"), the Company will apply all Excess Proceeds (the "*Offer Amount*") to the purchase of Notes and such other *pari passu* Indebtedness (on a *pro rata* basis based on the principal amount of Notes and such other *pari passu* Indebtedness surrendered, if applicable) or, if less than the Offer Amount has been tendered, all Notes and other Indebtedness tendered in response to the Asset Sale Offer.

If the Purchase Date is on or after an interest record date and on or before the related interest payment date, any accrued and unpaid interest, if any, will be paid to the Person in whose name a Note is registered at the close of business on such record date, and no additional interest will be payable to Holders who tender Notes pursuant to the Asset Sale Offer.

Upon the commencement of an Asset Sale Offer, the Company will send, by first class mail, a notice to the Trustee and each of the Holders, with a copy to the Trustee. The notice will contain all instructions and materials necessary to enable such Holders to tender Notes pursuant to the Asset Sale Offer. The notice, which will govern the terms of the Asset Sale Offer, will state:

(a) that the Asset Sale Offer is being made pursuant to this Section 3.09 and Section 4.10 hereof and the length of time the Asset Sale Offer will remain open;

(b) the Offer Amount, the purchase price for each applicable series and the Purchase Date;

(c) that any Note not tendered or accepted for payment will continue to accrue interest;

(d) that, unless the Company defaults in making such payment, any Note accepted for payment pursuant to the Asset Sale Offer will cease to accrue interest on and after the Purchase Date;

(e) that Holders electing to have a Note purchased pursuant to an Asset Sale Offer may elect to have Notes purchased in minimum denominations of $2,000 or an integral multiple of $1,000 in excess thereof;

(f) that Holders electing to have Notes purchased pursuant to any Asset Sale Offer will be required to surrender the Note, with the form entitled "Option of Holder to Elect Purchase" attached to the Notes completed, or transfer by book-entry transfer, to the Company, a depositary,

if appointed by the Company, or a Paying Agent at the address specified in the notice at least three days before the Purchase Date;

(g) that Holders will be entitled to withdraw their election if the Company, the Depositary or the Paying Agent, as the case may be, receives, not later than the expiration of the Offer Period, a telegram, electronic image scan, facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Note the Holder delivered for purchase and a statement that such Holder is withdrawing his election to have such Note purchased;

(h) that, if the aggregate principal amount of Notes surrendered by Holders thereof exceeds the Offer Amount allocated to the purchase of Notes in the Asset Sale Offer, the Trustee will select the Notes and other *pari passu* Indebtedness to be purchased on a *pro rata* basis (except that any Notes represented by a Global Note shall be selected by such method as DTC or its nominee or successor may require or, where such nominee or successor is the Trustee, a method that most nearly approximates *pro rata* selection as the Trustee deems fair and appropriate unless otherwise required by law) based on the principal amount of Notes surrendered (with such adjustments as may be deemed appropriate by the Company so that only Notes in minimum denominations of $2,000, or an integral multiple of $1,000 in excess thereof, will be purchased); and

(i) that Holders whose Notes of series were purchased only in part will be issued new Notes of the same series equal in principal amount to the unpurchased portion of the Notes surrendered (or transferred by book-entry transfer).

(j) On or before the Purchase Date, the Company will, to the extent lawful, accept for payment, on a *pro rata* basis to the extent necessary, the Notes or portions thereof tendered pursuant to the Asset Sale Offer and required to be purchased pursuant to this Section 3.09 and Section 4.10 hereof, or if Notes in an aggregate principal amount less than the Offer Amount allocated to the purchase of Notes in the Asset Sale Offer have been tendered, all Notes tendered, and will deliver or cause to be delivered to the Trustee the Notes properly accepted together with an Officers' Certificate stating that such Notes or portions thereof were accepted for payment by the Company in accordance with the terms of this Section 3.09. The Company, the depositary for the Asset Sale Offer or the Paying Agent, as the case may be, will promptly (but in any case not later than five days after the Purchase Date) mail or deliver to each tendering Holder an amount equal to the purchase price of the Notes tendered by such Holder and accepted by the Company for purchase (or, if such Notes are then in global form, it will make such payment thereon through the facilities of DTC), and the Issuer will promptly issue a new Note of the same series, and, upon receipt of an Authentication Order in accordance with Section 2.02, the Trustee, upon the written request of the Issuer, will authenticate and mail or deliver (or cause to be transferred by book entry) such new Note to such Holder, in a principal amount equal to any unpurchased portion of the Note surrendered. Any Note not so accepted shall be promptly mailed or delivered by the Company to the Holder thereof. The Company will publicly announce the results of the Asset Sale Offer on the Purchase Date.

Section 3.10 *Special Mandatory Redemption*.

(a) In the event that the Company informs an Escrow Agent in writing prior to 5:00 p.m. (New York City time) on the Escrow Outside Date that, in the reasonable good faith judgment of the Company, the Effective Date will not occur on or prior to the Escrow Outside Date (the date of any such event being the "*Special Termination Date*"), the Issuer shall redeem the Notes of the applicable series (the "*Special Mandatory Redemption*") at a price (the "*Special Mandatory Redemption Price*") equal to 100% of the principal amount of the Notes of such series, plus accrued and unpaid interest on the Notes of such series, if any, from the Issue Date to, but excluding, the Special Mandatory Redemption Date, subject to the right of Holders of record of the Notes of such series on the relevant record date to receive interest due on the relevant interest payment date.

(b) Subject to Section 3.10(c), notice of the Special Mandatory Redemption will be delivered by the Company no later than one Business Day following the Special Termination Date, to the Trustee, each Escrow Agent and the Holders of each series of Notes substantially in the form attached as Exhibit F hereto (the "*Special Mandatory Redemption Notice*"), which will provide that the Notes shall be redeemed on a date that is no later than the third Business Day after such notice is given by the Company in accordance with the terms of the applicable Escrow Agreement and this Indenture (the "*Special Mandatory Redemption Date*") or otherwise in accordance with the applicable procedures of DTC.

(c) If, at or prior to 5:00 p.m. (New York City time) on the Escrow Outside Date, any Escrow Agent for any series of Notes shall not have received, with respect to such series, any of (1) an Escrow Release Officer's Certificate pursuant to Section 3(b)(i) of the Escrow Agreement for such series of Notes, (2) an Acceleration Notice (as defined in the Escrow Agreement for such series of Notes) or (3) a Special Mandatory Redemption Notice pursuant to Section 3(b)(ii) of the Escrow Agreement for such series of Notes or pursuant to Section 3.10(b) hereof, then (x) the Issuer shall redeem the Notes of such series in accordance with Section 3.10(a) hereof and (y) the Trustee shall, on the Escrow Outside Date, (i) send electronically, mail or cause to be mailed by first-class mail, postage prepaid, a Special Mandatory Redemption Notice to each Holder of Notes of such series, substantially in the form attached as Exhibit F hereto and (ii) deliver a Special Mandatory Redemption Notice for all Notes of such series pursuant to Section 3(b)(ii) of the Escrow Agreement with respect to the Notes of such series prior to 5:00 p.m. (New York City time) on the Escrow Outside Date.

(d) On the Special Mandatory Redemption Date, the Escrow Agent shall pay to the Paying Agent for payment to each Holder of Notes of each series the applicable Special Mandatory Redemption Price for such Holder's Notes of such series and, concurrently with the payment to such Holders and after deduction for any unpaid fees and expenses of the Trustee and Escrow Agent, deliver any excess Escrowed Property (if any) to the Company. In the event that the Escrowed Property is insufficient to pay the Special Mandatory Redemption Price on the Special Mandatory Redemption Date, plus fees and expenses of the Trustee and Escrow Agent, the Issuer shall deposit any shortfall with the Paying Agent on or prior to the Special Mandatory Redemption Date.

(e) Any redemption made pursuant to this Section 3.10 shall be made pursuant to the procedures set forth in this Indenture and the Escrow Agreements, except to the extent inconsistent with this Section 3.10.

ARTICLE 4
COVENANTS

Section 4.01 *Payment of Notes*.

The Issuer will pay or cause to be paid the principal of, premium, if any, on, and interest, if any, on, the Notes on the dates and in the manner provided in the Notes. Principal, premium, if any, and interest, if any, will be considered paid on the date due if the Paying Agent, if other than the Issuer or a Subsidiary of the Company, holds as of 11:00 a.m. Eastern Time on the due date money deposited by the Issuer in immediately available funds and designated for and sufficient to pay all principal, premium, if any, and interest, if any, then due.

The Issuer will pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue principal at a rate that is equal to the then applicable interest rate on the Notes of the applicable series to the extent lawful; it will pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue installments of interest, if any (without regard to any applicable grace period), at the same rate to the extent lawful.

The Company may at any time, for the purpose of obtaining satisfaction and discharge with respect to the Notes or for any other purpose, pay, or direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same terms as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such money.

Any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of, premium, if any, or interest on any Note and remaining unclaimed for two years after such principal, and premium, if any, or interest has become due and payable shall be paid to the Company on its request, or (if then held by the Company) shall be discharged from such trust; and the Holder of such Note shall thereafter look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; *provided*, *however*, that the Trustee or such Paying Agent, before being required to make any such repayment, shall, at the expense of the Company, cause to be published once, in *The New York Times* or *The Wall Street Journal* (national edition), notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

Section 4.02 *Maintenance of Office or Agency*.

The Issuer will maintain, an office or agency (which may be an office of the Trustee or an affiliate of the Trustee) where Notes may be surrendered for registration of transfer or for exchange. If the Definitive Notes are issued and outstanding, such office must be in the City and State of New York. The Issuer initially designates the Corporate Trust Office of the Trustee for

such purposes. The Issuer will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Issuer fails to maintain any such required office or agency or fail to furnish the Trustee with the address thereof, such presentations and surrenders may be made or served at the Corporate Trust Office of the Trustee.

The Issuer may also from time to time designate one or more other offices or agencies where the Notes may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided, however*, that no such designation or rescission will in any manner relieve the Issuer of its obligation to maintain an office or agency in the City and State of New York for such purposes if required. The Issuer will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

With respect to any Global Notes, the Corporate Trust Office of the Trustee shall be the office or agency where such Global Notes may be presented or surrendered for payment or for registration of transfer or exchange, or where successor Notes may be delivered in exchange therefor; *provided, however*, that any such presentation, surrender or delivery effected pursuant to the Applicable Procedures of the Depositary shall be deemed to have been effected at such office or agency in accordance with the provisions of this Indenture.

Section 4.03 *Reports*.

(a) So long as any Notes are outstanding, the Company will furnish to the Holders of the Notes or the Trustee:

(1) no later than 90 days after the end of each fiscal year, (a) audited financial statements prepared in accordance with GAAP (with footnotes to such financial statements), including the audit report on such financial statements issued by the Company's certified independent accountants and (b) a "Management's Discussion and Analysis of Financial Condition and Results of Operations" consistent with the presentation thereof in the Offering Circular;

(2) no later than 45 days after the end of each of the first three calendar quarters of each fiscal year, (a) unaudited quarterly financial statements prepared in accordance with GAAP (with condensed footnotes to such financial statements consistent with past practice) and (b) a "Management's Discussion and Analysis of Financial Condition and Results of Operations" consistent with the presentation thereof in the Offering Circular (but omitting the discussion included in the "Overview" section); and

(3) within ten Business Days after the occurrence of any of the following events, a current report that contains a brief summary of the material terms, facts and/or circumstances involved to the extent not otherwise publicly disclosed: (i) entry by the Company or a Restricted Subsidiary into an agreement outside the ordinary course of business that is material to the Company and its Subsidiaries, taken as a whole, any material amendment thereto or termination of any such agreement other than in accordance with its terms (excluding, for the avoidance of doubt, employee compensatory or benefit agreements or plans), (ii) completion of a merger of the Company with or into another

Person or a material acquisition or disposition of assets by the Company or a Restricted Subsidiary outside the ordinary course of business, (iii) the institution of, or material development under, bankruptcy proceedings under the U.S. Bankruptcy Code or similar proceedings under state or federal law with respect to the Company or a Significant Subsidiary, (iv) the Company's incurring Indebtedness outside the ordinary course of business that is material to the Company (other than under a Credit Facility or other arrangement which has been described in the Offering Circular or borrowings under a Credit Facility that has otherwise been disclosed previously), or a triggering event that causes the increase or acceleration of any such obligation and, in any such case, the consequences thereof are material to the Company or any Restricted Subsidiary.

(b) The requirements of Section 4.03(a) may be satisfied by the filing with the SEC for public availability by any direct or indirect parent company of the Company, the Company or a Subsidiary of either of the foregoing of (i) any Annual Report on Form 10-K, (ii) a Quarterly Report on Form 10-Q or (iii) a Current Report on Form 8-K, containing the information required by Section 4.03(a) or part thereof with respect to the Company or parent company, as applicable, provided that, if applicable, any such financial information contains information reasonably sufficient to identify the material differences, if any, between the financial information of the parent company, on the one hand, and the Company and its Subsidiaries on a stand-alone basis, on the other hand.

(c) For the avoidance of doubt, the information provided pursuant to Section 4.03(a) (i) will not be required to contain the separate financial information for Guarantors as contemplated by Rule 3-10 of Regulation S-X or any financial statements of unconsolidated subsidiaries or 50% or less owned persons as contemplated by Rule 3-09 of Regulation S-X or any schedules required by Regulation S-X, or in each case any successor provisions and (ii) such information shall not be required to comply with Regulation G under the Exchange Act or Item 10(e) of Regulation S-K with respect to any non-GAAP financial measures contained therein.

(d) Any and all Defaults or Events of Default arising from a failure to furnish in a timely manner any information required by this Section 4.03 shall be deemed cured (and the Company shall be deemed to be in compliance with this covenant) upon furnishing such information as contemplated by this covenant (but without regard to the date on which such information or report is so furnished); *provided* that such cure shall not otherwise affect the rights of the Holders in Section 6.01 if the principal of, premium, if any, on, and interest, if any, on, the Notes have been accelerated in accordance with the terms of this Indenture and such acceleration has not been rescinded or cancelled prior to such cure.

(e) The Company will hold and participate in conference calls with the Holders of the Notes, beneficial owners of the Notes, bona fide prospective investors, securities analysts and market makers to discuss the financial information required to be furnished pursuant to Section 4.03(a)(1) and Section 4.03(a)(2) no later than ten Business Days after distribution of such financial information, unless, in each case, the Company reasonably determines that to do so would conflict with applicable securities laws, including in connection with any pending offering of securities. The Company shall be permitted to combine this conference call with any other conference call for other debt or equity holders or lenders. The Company shall, no later than three Business Days prior to the date of the conference calls required to be held in accordance with this

paragraph, announce the date and time of such conference calls and all information necessary to enable Holders of Notes and security analysts to obtain access to such calls.

(f) So long as any Notes are outstanding, the Company will also maintain a website to which Holders, prospective investors, broker-dealers and securities analysts are given access (which may be password protected) and to which all of the reports required by this Section 4.03 are posted, unless they are otherwise publicly filed with the SEC.

(g) The Company shall furnish to the Holders and Beneficial Owners of the Notes, prospective investors, broker-dealers and securities analysts, upon their request, any information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act so long as the Notes are not freely transferable under the Securities Act.

(h) Delivery of such reports, information and documents to the Trustee is for informational purposes only, and the Trustee's receipt of such shall not constitute actual or constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates). The Trustee shall not be obligated to monitor or confirm, on a continuing basis or otherwise, the Company's compliance with this covenant and shall have no responsibility to determine whether any reports, information or documents have been filed with the SEC via the EDGAR (or successor) filing system, made available electronically or posted on any website.

Section 4.04 *Compliance Certificate*.

(a) The Company shall deliver to the Trustee, within 90 days after the end of each fiscal year ending after the date of this Indenture, an Officers' Certificate stating that a review of the activities of the Company and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officers with a view to determining whether the Issuer has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to each such Officer signing such certificate, that to the best of his or her knowledge the Issuer has kept, observed, performed and fulfilled each and every covenant contained in this Indenture and are not in default in the performance or observance of any of the terms, provisions and conditions of this Indenture (or, if a Default or Event of Default has occurred, describing all such Defaults or Events of Default of which he or she may have knowledge and what action the Issuer is taking or propose to take with respect thereto).

(b) So long as any of the Notes are outstanding, the Company will deliver to the Trustee, forthwith upon any Officer of the Company becoming aware of any Default or Event of Default, a written statement specifying such Default or Event of Default and what action the Issuer is taking or propose to take with respect thereto.

Section 4.05 *Taxes*.

The Company will pay, and will cause each of its Subsidiaries to pay, prior to delinquency, all material taxes, assessments, and governmental levies except such as are contested in good faith and by appropriate proceedings or where the failure to effect such payment is not adverse in any material respect to the Holders of the Notes.

Section 4.06 *Stay, Extension and Usury Laws*.

The Issuer and each of the Guarantors covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, that may affect the covenants or the performance of this Indenture; and the Issuer and each of the Guarantors (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law has been enacted.

Section 4.07 *Restricted Payments*.

(a) The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly:

(1) declare or pay any dividend or make any other payment or distribution on account of the Company's or any of its Restricted Subsidiaries' Equity Interests (including any payment in connection with any merger or consolidation involving the Company or any of its Restricted Subsidiaries) or to the direct or indirect holders of the Company's or any of its Restricted Subsidiaries' Equity Interests in their capacity as such (other than dividends or distributions payable in Equity Interests (other than Disqualified Stock) of the Company and other than dividends or distributions payable to the Company or a Restricted Subsidiary of the Company);

(2) repurchase, redeem or otherwise acquire or retire for value (including in connection with any merger or consolidation involving the Company) any Equity Interests of the Company or any direct or indirect parent of the Company;

(3) make any payment on or with respect to, or repurchase, redeem, defease or otherwise acquire or retire for value any Indebtedness of the Issuer or any Guarantor that is contractually subordinated to the Notes or to any Note Guarantee (excluding any intercompany Indebtedness between or among the Company and any of its Restricted Subsidiaries), except a payment of interest or principal at or within one year of the Stated Maturity thereof; or

(4) make any Restricted Investment (all such payments and other actions set forth in clauses (1) through (4) of this Section 4.07(a) being collectively referred to as "*Restricted Payments*"),

unless, at the time of and after giving effect to such Restricted Payment:

(A) no Note Payment Default or Event of Default has occurred and is continuing or would occur as a consequence of such Restricted Payment;

(B) the Company would, at the time of such Restricted Payment and after giving pro forma effect thereto as if such Restricted Payment had been made at the beginning of the applicable four-quarter period, have been permitted to incur

at least $1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in Section 4.09(a) hereof; and

(C) such Restricted Payment, together with the aggregate amount of all other Restricted Payments made by the Company and its Restricted Subsidiaries since the Issue Date (excluding Restricted Payments permitted by clauses (2) through (10) of Section 4.07(b)), is less than the sum, without duplication, of:

(i) 50% of the Consolidated Net Income of the Company for the period (taken as one accounting period) from January 1, 2021 to the end of the Company's most recently ended fiscal quarter for which internal financial statements are available at the time of such Restricted Payment (or, if such Consolidated Net Income for such period is a deficit, less 100% of such deficit); *plus*

(ii) 100% of the aggregate net cash proceeds (other than Completion Date Equity Proceeds) and the Fair Market Value of property or securities other than cash (including Capital Stock of Persons, other than the Company or a Subsidiary of the Company, engaged primarily in the Oil and Gas Business or any other assets that are used or useful in the Oil and Gas Business), in each case received by the Company since the Completion Date as a contribution to its common equity capital or from the issue or sale of Equity Interests of the Company (other than (x) Disqualified Stock and (y) net cash proceeds received from an issuance or sale of such Equity Interests to a Subsidiary of the Company or an employee stock ownership plan, option plan or similar trust to the extent such sale to an employee stock ownership plan, option plan or similar trust is financed by loans from or Guaranteed by the Company or any Restricted Subsidiary (unless such loans have been repaid with cash on or prior to the date of determination)); *plus*

(iii) to the extent not already included in Consolidated Net Income for such period, if any Restricted Investment that was made by the Company or any of its Restricted Subsidiaries after the Completion Date is sold for cash (other than to the Company or any Subsidiary of the Company) or otherwise cancelled, liquidated or repaid for cash, the cash return of capital with respect to such Restricted Investment resulting from such sale, liquidation or repayment (less any out-of-pocket costs incurred in connection with any such sale); *plus*

(iv) the amount by which Indebtedness of the Company or its Restricted Subsidiaries is reduced on the Company's balance sheet upon the conversion or exchange (other than by a Restricted Subsidiary of the Company) subsequent to the Completion Date of any such Indebtedness of the Company or its Restricted Subsidiaries convertible or exchangeable for Equity Interests (other than Disqualified Stock) of the Company (less the amount of any cash, or the Fair Market Value of any other property (other than such Equity Interests), distributed by the Company upon such

conversion or exchange and excluding the net cash proceeds from the conversion or exchange financed, directly or indirectly, using funds borrowed from the Company or any Restricted Subsidiary), together with the net proceeds, if any, received by the Company or any of its Restricted Subsidiaries upon such conversion or exchange; *plus*

(v) to the extent that any Unrestricted Subsidiary of the Company designated as such after the Completion Date is redesignated as a Restricted Subsidiary pursuant to the terms of this Indenture or is merged or consolidated with or into, or transfers or otherwise disposes of all or substantially all of its properties or assets to or is liquidated into, the Company or a Restricted Subsidiary after the Completion Date, the lesser of, as of the date of such redesignation, merger, consolidation, transfer, disposition or liquidation, (A) the Fair Market Value of the Company's Restricted Investment in such Subsidiary (or of the properties or assets disposed of, as applicable) as of the date of such redesignation, merger, consolidation, transfer, disposition or liquidation and (B) such Fair Market Value as of the date on which such Subsidiary was originally designated as an Unrestricted Subsidiary after the Completion Date; *plus*

(vi) any dividends or distributions received in cash by the Company or a Restricted Subsidiary of the Company after the Completion Date from an Unrestricted Subsidiary of the Company, to the extent that such dividends or distributions were not otherwise included in the Consolidated Net Income of the Company for such period.

(b) The provisions of Section 4.07(a) hereof will not prohibit:

(1) the payment of any dividend or distribution or the consummation of any irrevocable redemption within 60 days after the date of declaration of the dividend or distribution or giving of the redemption notice, as the case may be, if at the date of declaration or notice, the dividend, distribution or redemption payment would have complied with the provisions of this Indenture;

(2) the making of any Restricted Payment in exchange for, or out of or with Excluded Contributions or with the net cash proceeds of the substantially concurrent sale (other than to a Subsidiary of the Company) of, Equity Interests of the Company (other than Disqualified Stock) or any direct or indirect parent or from the substantially concurrent contribution of common equity capital to the Company, in each case, other than Completion Date Equity Proceeds; *provided* that the amount of any such net cash proceeds or Excluded Contributions that are utilized for any such Restricted Payment will not be considered to be net proceeds of Equity Interests for purposes of clause (4)(C)(ii) of Section 4.07(a) and will not be considered to be net cash proceeds from an Equity Offering for purposes of Section 3.07 hereof;

(3) the payment of any dividend or distribution by a Restricted Subsidiary of the Company to the holders of its Equity Interests on a pro rata basis;

(4) the repurchase, redemption, defeasance, satisfaction and discharge or other acquisition or retirement for value of Indebtedness of the Company or any Guarantor that is contractually subordinated to the Notes or to any Note Guarantee with the net cash proceeds from a substantially concurrent incurrence of Permitted Refinancing Indebtedness;

(5) repurchases of Indebtedness of the Company or any Guarantor that is contractually subordinated in right of payment to the Notes or a Note Guarantee at a purchase price not greater than (i) 101% of the principal amount of such subordinated Indebtedness in the event of a Change of Control or (ii) 100% of the principal amount of such subordinated Indebtedness in the event of an Asset Sale, in each case plus accrued and unpaid interest thereon, to the extent required by the terms of such Indebtedness, but only if, with respect to each series:

(A) in the case of a Change of Control with respect to any series of Notes, the Company has first complied with and fully satisfied its obligations under the provisions described in Section 4.15 with respect to such series; or

(B) in the case of an Asset Sale, the Company has complied with and fully satisfied its obligations in accordance with the covenant in Section 4.10 with respect to such series;

(6) so long as no Note Payment Default or Event of Default has occurred and is continuing, the repurchase, redemption or other acquisition or retirement for value of any Equity Interests of the Company, any Restricted Subsidiary of the Company or any direct or indirect parent thereof held by any current or former officer, director or employee of the Company or any of its Restricted Subsidiaries or any direct or indirect parent thereof pursuant to any equity subscription agreement, stock option agreement, shareholders' agreement, compensation agreement or arrangement or similar agreement; *provided* that the aggregate price paid for all such repurchased, redeemed, acquired or retired Equity Interests may not exceed $10.0 million in any calendar year (with any portion of such $10.0 million amount that is unused in any calendar year to be carried forward to successive calendar years and added to such amount);

(7) the repurchase of Equity Interests deemed to occur upon the exercise of stock or other equity options to the extent such Equity Interests represent a portion of the exercise price of those stock or other equity options and any repurchase or other acquisition of Equity Interests made in lieu of withholding taxes in connection with any exercise or exchange of stock options, warrants, incentives or other rights to acquire Equity Interests;

(8) so long as no Note Payment Default or Event of Default has occurred and is continuing, the declaration and payment of regularly scheduled or accrued dividends or distributions to holders of any class or series of Disqualified Stock of the Company or any Preferred Stock of any Restricted Subsidiary of the Company issued on or after the Completion Date in accordance with Section 4.09 hereof;

(9) payments of cash, dividends, distributions, advances or other Restricted Payments by the Company or any of its Restricted Subsidiaries to allow the payment of cash in lieu of the issuance of fractional shares upon (i) the exercise of options or warrants or (ii) the conversion or exchange of Capital Stock of any such Person;

(10) so long as no Default or Event of Default has occurred and is continuing or would be caused thereby, other Restricted Payments in an aggregate amount not to exceed $125.0 million since the Issue Date.

The amount of all Restricted Payments (other than cash) will be the Fair Market Value on the date of the Restricted Payment (or, in the case of a dividend or distribution, on the date of declaration) of the asset(s) or securities proposed to be transferred or issued by the Company or such Restricted Subsidiary, as the case may be, pursuant to the Restricted Payment. For purposes of determining compliance with the foregoing covenant, in the event that a Restricted Payment meets the criteria of more than one of the categories of Restricted Payments described in Section 4.07(b)(1) through (10), or is permitted pursuant to Section 4.07(a), the Company will be permitted to classify (or later classify or reclassify in whole or in part in its sole discretion) such Restricted Payment or other such transaction (or portion thereof) on the date made or later reclassify such Restricted Payment or other such transaction (or portion thereof) in any manner that complies with this Section 4.07.

Section 4.08 *Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries*.

(a) The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create or permit to exist or become effective any consensual encumbrance or restriction on the ability of any Restricted Subsidiary to:

(1) pay dividends or make any other distributions on its Capital Stock to the Company or any of its Restricted Subsidiaries, or with respect to any other interest or participation in, or measured by, its profits, or pay any Indebtedness owed to the Company or any of its Restricted Subsidiaries; *provided* that the priority that any series of Preferred Stock of a Restricted Subsidiary has in receiving dividends, distributions or liquidating distributions before dividends, distributions or liquidating distributions are paid in respect of common stock of such Restricted Subsidiary shall not constitute a restriction on the ability to make dividends or distributions on Capital Stock for purposes of this Section 4.08;

(2) make loans or advances to the Company or any of its Restricted Subsidiaries (it being understood that the subordination of loans or advances made to the Company or any of its Restricted Subsidiaries to other Indebtedness incurred by the Company or any of its Restricted Subsidiaries shall not be deemed a restriction on the ability to make loans or advances); or

(3) sell, lease or transfer any of its properties or assets to the Company or any of its Restricted Subsidiaries.

(b) The restrictions in Section 4.08(a) hereof will not apply to encumbrances or restrictions existing under or by reason of:

(1) agreements governing Existing Indebtedness as in effect on the date of this Indenture and the Credit Agreement as in effect on the Completion Date and, solely in respect of the Credit Agreement, any amendments, restatements, modifications, renewals, supplements, refundings, replacements or refinancings of those agreements; *provided* that the encumbrances or restrictions contained in the amendments, restatements, modifications, renewals, supplements, refundings, replacements or refinancings are not in the good faith judgment of an Officer of the Company materially more restrictive, taken as a whole, with respect to such dividend and other payment restrictions than those contained in those agreements on the date of this Indenture;

(2) this Indenture, the Notes and the Note Guarantees;

(3) agreements governing other Indebtedness permitted to be incurred under the provisions of Section 4.09 hereof and any amendments, restatements, modifications, renewals, supplements, refundings, replacements or refinancings of those agreements; *provided* that the encumbrances or restrictions contained therein are in the reasonable good faith judgment of an Officer of the Company, either (a) not materially more restrictive, taken as a whole, than those contained in this Indenture, the Notes of each series and the Note Guarantees with respect to the Notes of each series or the Credit Agreement as in effect on the date of this Indenture or (b) not reasonably likely to have a material adverse effect on the ability of the Company to make required payments on the Notes;

(4) applicable law, rule, regulation or order;

(5) any instrument governing Indebtedness or Capital Stock of a Person acquired by the Company or any of its Restricted Subsidiaries as in effect at the time of such acquisition (except to the extent such Indebtedness or Capital Stock was incurred in connection with or in contemplation of such acquisition), which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person, or the property or assets of the Person, so acquired, and any amendments, restatements, modifications, renewals, extensions, supplements, increases, refundings, replacements or refinancings thereof; *provided*, that the encumbrances and restrictions in any such amendments, restatements, modifications, renewals, extensions, supplements, increases, refundings, replacements or refinancings are, in the reasonable good faith judgment of an Officer of the Company, no more restrictive, taken as a whole, than those in effect on the date of the acquisition; *provided further,* that, in the case of Indebtedness, such Indebtedness was permitted by the terms of this Indenture to be incurred;

(6) customary non-assignment provisions in Hydrocarbon purchase and sale or exchange agreements or similar operational agreements or in licenses, easements or leases, in each case, entered into in the ordinary course of business;

(7) purchase money obligations for property acquired in the ordinary course of business and Finance Lease Obligations that impose restrictions on the property purchased or leased of the nature described in clause (3) of Section 4.08(a);

(8) any agreement for the sale or other disposition of a Restricted Subsidiary that restricts distributions by that Restricted Subsidiary pending its sale or other disposition;

(9) Permitted Refinancing Indebtedness; provided that the restrictions contained in the agreements governing such Permitted Refinancing Indebtedness are, in the reasonable good faith judgment of an Officer of the Company, not materially more restrictive, taken as a whole, than those contained in the agreements governing the Indebtedness being refinanced;

(10) Liens permitted to be incurred under the provisions of Section 4.12 that limit the right of the debtor to dispose of the assets subject to such Liens;

(11) provisions limiting the disposition or distribution of assets or property in joint venture agreements, asset sale agreements, sale-leaseback agreements, stock sale agreements and other similar agreements (including agreements entered into in connection with a Restricted Investment) entered into with the approval of the Company's Board of Directors, which limitation is applicable only to the assets that are the subject of such agreements;

(12) encumbrances or restrictions applicable only to a Restricted Subsidiary that is not a Domestic Subsidiary;

(13) encumbrances or restrictions on cash, Cash Equivalents or other deposits or net worth imposed by customers or lessors under contracts or leases entered into in the ordinary course of business;

(14) customary encumbrances and restrictions contained in agreements of the types described in the definition of Permitted Business Investments;

(15) agreements governing Hedging Obligations incurred in the ordinary course of business; and

(16) any encumbrance or restriction with respect to an Unrestricted Subsidiary pursuant to or by reason of an agreement that the Unrestricted Subsidiary is a party to or entered into before the date on which such Unrestricted Subsidiary became a Restricted Subsidiary; *provided* that such agreement was not entered into in anticipation of the Unrestricted Subsidiary becoming a Restricted Subsidiary and any such encumbrance or restriction does not extend to any assets or property of the Company or any other Restricted Subsidiary other than the assets and property of such Unrestricted Subsidiary.

In each case set forth above, notwithstanding any stated limitation on the assets or property that may be subject to such encumbrance or restriction, an encumbrance or restriction on a specified asset or property or group or type of assets or property may also apply to all improvements, additions, repairs, attachments or accessions thereto, assets and property affixed or appurtenant thereto, parts, replacements and substitutions therefor, and all products and proceeds thereof, including dividends, distributions, interest and increases in respect thereof.

Section 4.09 *Incurrence of Indebtedness and Issuance of Preferred Stock.*

(a) The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur, issue, assume, Guarantee or otherwise become directly or indirectly liable, contingently or otherwise, with respect to (collectively, "*incur*") any Indebtedness (including Acquired Debt), and the Company will not issue any Disqualified Stock and will not permit any of its Restricted Subsidiaries to issue any Preferred Stock; *provided, however*, that the Issuer may incur Indebtedness (including Acquired Debt) or issue Disqualified Stock, and any Restricted Subsidiary may incur Indebtedness (including Acquired Debt) or issue Preferred Stock, if the Fixed Charge Coverage Ratio for the Company's most recently ended four full fiscal quarters for which internal financial statements are available immediately preceding the date on which such additional Indebtedness is incurred or such Disqualified Stock or such Preferred Stock is issued, as the case may be, would have been at least 2.0 to 1.0, determined on a pro forma basis (including a pro forma application of the net proceeds therefrom), as if the additional Indebtedness had been incurred or the Disqualified Stock or the Preferred Stock had been issued, as the case may be, at the beginning of such four-quarter period.

(b) Section 4.09(a) will not prohibit the incurrence of any of the following items of Indebtedness or issuances of Disqualified Stock or Preferred Stock, as applicable (collectively, "*Permitted Debt*"):

(1) the incurrence by the Issuer and the Restricted Subsidiaries, of Indebtedness and letters of credit under Credit Facilities in an aggregate principal amount at any one time outstanding under this clause (1) (with letters of credit being deemed to have a principal amount equal to the maximum potential liability of the Company and its Restricted Subsidiaries thereunder) not to exceed the greatest of (i) $1.5 billion, (ii) the Borrowing Base in effect under the Credit Agreement at such time, and (iii) 30.0% of the Company's Adjusted Consolidated Net Tangible Assets determined on the date of such incurrence;

(2) the incurrence by the Company and its Restricted Subsidiaries of the Existing Indebtedness;

(3) the incurrence by the Issuer and the Guarantors of Indebtedness represented by the Notes to be issued on the date of this Indenture (other than any Additional Notes) and the related Note Guarantees;

(4) the incurrence by the Company or any of its Restricted Subsidiaries of Indebtedness represented by Finance Lease Obligations, mortgage financings or purchase money obligations, in each case, incurred for the purpose of financing all or any part of the purchase price or other acquisition cost or cost of design, construction, installation or improvement of property, plant or equipment used in the business of the Company or any of its Restricted Subsidiaries, in an aggregate principal amount outstanding, including all Permitted Refinancing Indebtedness incurred to renew, refund, refinance, replace, defease or discharge any Indebtedness incurred pursuant to this clause (4), not to exceed the greater of (i) $150.0 million and (ii) 3.0% of the Company's Adjusted Consolidated Net Tangible Assets determined as of the date of such incurrence or issuance;

(5) the incurrence by the Company or any of its Restricted Subsidiaries of Permitted Refinancing Indebtedness in exchange for, or the net proceeds of which are used to renew, refund, refinance, replace, defease or discharge any Indebtedness (other than intercompany Indebtedness) of the Company or any of its Restricted Subsidiaries or any Disqualified Stock of the Company, in each case that was permitted by this Indenture to be incurred under Section 4.09(a) or clauses (2), (3), (4), (5), (14) or (15) of this Section 4.09(b);

(6) the incurrence by the Company or any of its Restricted Subsidiaries of intercompany Indebtedness between or among the Company and any of its Restricted Subsidiaries; *provided*, *however*, that:

(A) if the Company or any Guarantor is the obligor on such Indebtedness and the payee is not the Company or a Guarantor, such Indebtedness must be unsecured and expressly subordinated to the prior payment in full in cash of all Obligations then due with respect to the Notes, in the case of the Company, or the Note Guarantee, in the case of a Guarantor; and

(B) (i) any subsequent issuance or transfer of Equity Interests that results in any such Indebtedness being held by a Person other than the Company or a Restricted Subsidiary of the Company and (ii) any sale or other transfer of any such Indebtedness to a Person that is not either the Company or a Restricted Subsidiary of the Company, will be deemed, in each case, to constitute an incurrence of such Indebtedness by the Company or such Restricted Subsidiary, as the case may be, that was not permitted by this clause (6);

(7) the issuance by any of the Company's Restricted Subsidiaries to the Company or to any of its Restricted Subsidiaries of any Preferred Stock; *provided*, *however*, that:

(A) any subsequent issuance or transfer of Equity Interests that results in any such Preferred Stock being held by a Person other than the Company or a Restricted Subsidiary of the Company; and

(B) any sale or other transfer of any such Preferred Stock to a Person that is not either the Company or a Restricted Subsidiary of the Company, will be deemed, in each case, to constitute an issuance of such Preferred Stock by such Restricted Subsidiary that was not permitted by this clause (7);

(8) the incurrence by the Company or any of its Restricted Subsidiaries of Hedging Obligations;

(9) the Guarantee by the Company or any of its Restricted Subsidiaries of Indebtedness of the Company or a Restricted Subsidiary of the Company to the extent that the guaranteed Indebtedness was permitted to be incurred by another provision of this Section 4.09; *provided* that if the Indebtedness being guaranteed is subordinated to or *pari passu* with the Notes, then the Guarantee must be subordinated or *pari passu*, as applicable, to the same extent as the Indebtedness guaranteed;

(10) the incurrence by the Company or any of its Restricted Subsidiaries of Indebtedness in respect of self-insurance obligations or bid, plugging and abandonment, appeal, reimbursement, performance, surety and similar bonds and completion guarantees provided by the Company or a Restricted Subsidiary in the ordinary course of business and any Guarantees or letters of credit functioning as or supporting any of the foregoing bonds or obligations and workers' compensation claims in the ordinary course of business;

(11) the incurrence by the Company or any of its Restricted Subsidiaries of Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument inadvertently drawn against insufficient funds, so long as such Indebtedness is covered within five Business Days;

(12) the incurrence by the Company or any of its Restricted Subsidiaries of in-kind obligations relating to net oil or natural gas balancing positions arising in the ordinary course of business;

(13) any obligation arising from agreements of the Company or any Restricted Subsidiary of the Company providing for indemnification, adjustment of purchase price, earn outs, or similar obligations, in each case, incurred or assumed in connection with the disposition or acquisition of any business, assets or Capital Stock of a Restricted Subsidiary in a transaction permitted by this Indenture; *provided* that such obligation is not reflected as a liability on the face of the balance sheet of the Company or any Restricted Subsidiary;

(14) any Permitted Acquisition Indebtedness;

(15) the incurrence by the Company or any of its Restricted Subsidiaries of Indebtedness in the ordinary course of business consisting of the financing of insurance premiums in amounts and on terms consistent with the operations and business of the Company and its Restricted Subsidiaries; and

(16) the incurrence by the Company or any of its Restricted Subsidiaries of additional Indebtedness or the issuance by the Company of any Disqualified Stock in an aggregate principal amount (or accreted value, as applicable) at any time outstanding, including all Permitted Refinancing Indebtedness incurred to renew, refund, refinance, replace, defease or discharge any Indebtedness incurred or Disqualified Stock issued pursuant to this clause (16), not to exceed the greater of (i) $250.0 million and (ii) 5.0% of the Company's Adjusted Consolidated Net Tangible Assets determined as of the date of such incurrence or issuance.

For purposes of determining compliance with this Section 4.09, in the event that an item of Indebtedness meets the criteria of more than one of the categories of Permitted Debt described in clauses (1) through (16) above, or is entitled to be incurred pursuant to Section 4.09(a), the Company will be permitted to divide, classify and reclassify such item of Indebtedness on the date of its incurrence, or later redivide or reclassify all or a portion of such item of Indebtedness, in any manner that complies with this Section 4.09. Indebtedness under the Credit Agreement outstanding on or prior to the Completion Date will initially be deemed to have been incurred on such date in

reliance on the exception provided by clause (1) of the definition of Permitted Debt and may not be redivided or reclassified prior to the Completion Date.

The accrual of interest or Preferred Stock or Disqualified Stock dividends or distributions, the accretion or amortization of original issue discount, the payment of interest on any Indebtedness not secured by a Lien in the form of additional Indebtedness with the same terms, the reclassification of Preferred Stock or Disqualified Stock as Indebtedness due to a change in accounting principles, and the payment of dividends or distributions on Preferred Stock or Disqualified Stock in the form of additional securities of the same class of Preferred Stock or Disqualified Stock will not be deemed to be an incurrence of Indebtedness or an issuance of Preferred Stock or Disqualified Stock for purposes of this Section 4.09; *provided* that the amount thereof shall be included in Fixed Charges of the Company as accrued to the extent required by the definition of such term.

The amount of any Indebtedness outstanding as of any date will be:

(a) the accreted value of the Indebtedness, in the case of any Indebtedness issued with original issue discount;

(b) the principal amount of the Indebtedness, in the case of any other Indebtedness; and

(c) in respect of Indebtedness of another Person secured by a Lien on the assets of the specified Person, the lesser of:

(1) the Fair Market Value of such assets at the date of determination; and

(2) the amount of the Indebtedness of the other Person.

Section 4.10 Asset Sales.

The Company will not, and will not permit any of its Restricted Subsidiaries to, consummate an Asset Sale unless:

(a) the Company (or a Restricted Subsidiary, as the case may be) receives consideration at the time of the Asset Sale at least equal to the Fair Market Value (measured as of the date of the definitive agreement with respect to such Asset Sale) of the assets or Equity Interests issued or sold or otherwise disposed of; and

(b) at least 75% of the aggregate consideration received in the Asset Sale by the Company or a Restricted Subsidiary and all other Asset Sales consummated since the Issue Date is in the form of cash or Cash Equivalents or any combination thereof. For purposes of this provision, each of the following will be deemed to be cash:

(1) any liabilities, as shown on the Company's most recent consolidated balance sheet, of the Company or any Restricted Subsidiary (other than contingent liabilities and liabilities that are by their terms subordinated to the Notes or any Note Guarantee) that are assumed by the transferee of any such assets pursuant to a novation or

indemnity agreement that releases the Company or such Restricted Subsidiary from or indemnifies the Company or such Restricted Subsidiary against further liability;

(2) with respect to any Asset Sale of oil and natural gas properties by the Company or any Restricted Subsidiary where the Company or such Restricted Subsidiary retains an interest in such property, the costs and expenses of the Company or such Restricted Subsidiary related to the exploration, development, completion or production of such properties and activities related thereto which the transferee (or an Affiliate thereof) agrees to pay;

(3) any securities, notes or other obligations received by the Company or any Restricted Subsidiary from such transferee that are, within 180 days of the Asset Sale, converted by the Company or such Restricted Subsidiary into cash or Cash Equivalents, to the extent of the cash or Cash Equivalents received in that conversion;

(4) any Capital Stock or assets of the kind referred to in clause (2) or (4) of Section 4.10(c); and

(5) any Designated Non-cash Consideration received by the Company or such Restricted Subsidiary in such Asset Sale having an aggregate Fair Market Value, taken together with all other Designated Non-cash Consideration received pursuant to this clause (e), not to exceed an amount equal to 5.0% of the Company's Adjusted Consolidated Net Tangible Assets (determined at the time of receipt of such Designated Non-cash Consideration), with the Fair Market Value of each item of Designated Non-cash Consideration being measured at the time received and without giving effect to subsequent changes in value.

(c) Within 365 days after the receipt of any Net Proceeds from an Asset Sale, the Company (or any Restricted Subsidiary) may apply such Net Proceeds at its option to any combination of the following:

(1) to repay, repurchase or redeem any Indebtedness of the Company or a Restricted Subsidiary of the Company, other than (i) Indebtedness of the Issuer or a Guarantor that is subordinated to the Notes or the Note Guarantees, (ii) Capital Stock or (iii) Indebtedness owed to an Affiliate of the Company;

(2) to acquire all or substantially all of the assets, or any Capital Stock, of one or more other Persons primarily engaged in the Oil and Gas Business, if, after giving effect to any such acquisition of Capital Stock, such Person becomes a Restricted Subsidiary of the Company;

(3) to make capital expenditures in respect of the Company's or any Restricted Subsidiaries' Oil and Gas Business; or

(4) to acquire other assets that are not classified as current assets under GAAP and that are used or useful in the Oil and Gas Business.

The requirement of clause (2) or (4) of Section 4.10(c) shall be deemed to be satisfied if a bona fide binding contract committing to make the investment, acquisition or expenditure referred to therein is entered into by the Company or any of its Restricted Subsidiaries with a Person other than an Affiliate of the Company within the time period specified in the preceding paragraph and such Net Proceeds are subsequently applied in accordance with such contract within 180 days following the date such agreement is entered into.

Pending the final application of any Net Proceeds, the Company (or any Restricted Subsidiary) may invest the Net Proceeds in any manner that is not prohibited by this Indenture.

Any Net Proceeds from Asset Sales that are not applied or invested as provided in Section 4.10(c) will constitute "*Excess Proceeds*." When the aggregate amount of Excess Proceeds exceeds $50.0 million, within five days thereof, the Company will make an offer (an "*Asset Sale Offer*") to all Holders of the Notes and all holders of other Indebtedness that is *pari passu* with the Notes containing provisions similar to those set forth in this Section 4.10 with respect to offers to purchase, prepay or redeem such Indebtedness with the proceeds of sales of assets to purchase, prepay or redeem, on a pro rata basis (based on the principal amount of Notes and *pari passu* Indebtedness or, in the case of *pari passu* Indebtedness issued with significant original issue discount, based on the accreted value thereof tendered), the maximum principal amount of Notes and such other *pari passu* Indebtedness (*plus* all accrued interest on the Indebtedness and the amount of all fees and expenses, including premiums, incurred in connection therewith) that may be purchased, prepaid or redeemed out of the Excess Proceeds. The offer price in any Asset Sale Offer will be equal to 100% of the principal amount of the Notes and other *pari passu* Indebtedness to be purchased (or the lesser amount required under the agreements governing such other *pari passu* Indebtdness), plus accrued and unpaid interest, if any, to the date of purchase, prepayment or redemption, subject to the rights of Holders of the Notes on the relevant record date to receive interest due on the relevant interest payment date, and will be payable in cash. If any Excess Proceeds remain after consummation of an Asset Sale Offer, the Company or any Restricted Subsidiary may use those Excess Proceeds for any purpose not otherwise prohibited by this Indenture. If the aggregate principal amount of Notes tendered in such Asset Sale Offer exceeds the amount of Excess Proceeds allocated to the purchase of Notes, the Trustee will select the Notes to be purchased on a *pro rata* basis (except that any Notes represented by a Note in global form will be selected by such method as DTC or its nominee or successor may require or, where such nominee or successor is the Trustee, a method that most nearly approximates *pro rata* selection as the Trustee deems fair and appropriate unless otherwise required by law), based on the amounts tendered (with such adjustments as may be deemed appropriate by the Company so that only Notes in minimum denominations of $2,000, or an integral multiple of $1,000 in excess thereof, will be purchased). Upon completion of each Asset Sale Offer, the amount of Excess Proceeds will be reset at zero. The Company may satisfy the foregoing obligations with respect to Excess Proceeds with respect to any series of Notes by making an Asset Sale Offer with respect to such series prior to the expiration of the relevant 365 day period or with respect to Excess Proceeds of $50.0 million or less.

The Company will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with each repurchase of Notes pursuant to an Asset Sale Offer. To the extent that the provisions of any securities laws or regulations conflict with Section 3.09 or this

Section 4.10, the Company will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under Section 3.09 or this Section 4.10 by virtue of such compliance.

Section 4.11 *Transactions with Affiliates*.

(a) The Company will not, and will not permit any of its Restricted Subsidiaries to, make any payment to, or sell, lease, transfer or otherwise dispose of any of its properties or assets to, or purchase any property or assets from, or enter into or make or amend any transaction, contract, agreement, understanding, loan, advance or Guarantee with, or for the benefit of, any Affiliate of the Company involving aggregate consideration in any single transaction or series of related transactions in excess of $25.0 million (each, an "*Affiliate Transaction*"), unless:

(1) the Affiliate Transaction is on terms that are no less favorable to the Company or the relevant Restricted Subsidiary than those that would have been obtained in a comparable transaction by the Company or such Restricted Subsidiary with an unrelated Person or, if in the good faith judgment of the Board of Directors of the Company, no comparable transaction is available with which to compare such Affiliate Transaction, such Affiliate Transaction is otherwise fair to the Company or the relevant Restricted Subsidiary from a financial point of view; and

(2) the Company delivers to the Trustee:

(A) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration more than $40.0 million, an Officers' Certificate certifying that such Affiliate Transaction or series of related Affiliate Transactions complies with this Section 4.11; and

(B) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of $75.0 million, a resolution of the Board of Directors of the Company set forth in an Officers' Certificate certifying that such Affiliate Transaction or series of related Affiliate Transactions complies with this Section 4.11 and that such Affiliate Transaction or series of related Affiliate Transactions has been approved by a majority of the disinterested members of the Board of Directors of the Company, if any.

(b) The following items will not be deemed to be Affiliate Transactions and, therefore, will not be subject to the provisions of Section 4.11(a) hereof:

(1) any employment or consulting agreement, employee benefit plan, officer or director indemnification, compensation or severance agreement or any similar arrangement entered into by the Company or any of its Restricted Subsidiaries or any direct or indirect parent of the Company in the ordinary course of business and payments pursuant thereto;

(2) transactions between or among the Company and/or its Restricted Subsidiaries;

(3) transactions with a Person (other than an Unrestricted Subsidiary of the Company) that is an Affiliate of the Company solely because the Company owns, directly or through a Restricted Subsidiary, an Equity Interest in, or controls, such Person;

(4) payment of reasonable and customary fees and reimbursements of expenses (pursuant to indemnity arrangements or otherwise) of officers, directors, employees or consultants of the Company or any of its Restricted Subsidiaries or any direct or indirect parent of the Company;

(5) any issuance of Equity Interests (other than Disqualified Stock) of the Company to Affiliates of the Company;

(6) Permitted Investments or Restricted Payments that do not violate the provisions of Section 4.07 hereof;

(7) [Reserved];

(8) transactions effected in accordance with the terms of the agreements of the Company or any Restricted Subsidiary described or otherwise included in the Company's filings with the SEC that are in effect on the date of this Indenture, and any amendment or replacement of any of such agreements so long as such amendment or replacement agreement is not materially less advantageous to the Company, taken as a whole, than the agreement so amended or replaced;

(9) advances to or reimbursements of expenses incurred by employees for moving, entertainment and travel expenses and similar expenditures in the ordinary course of business;

(10) transactions between the Company or any of its Restricted Subsidiaries and any other Person, a director of which is also on the Board of Directors of the Company or any direct or indirect parent company of the Company, and such common director is the sole cause for such other Person to be deemed an Affiliate of the Company or any of its Restricted Subsidiaries; *provided*, however, that such director abstains from voting as a member of the Board of Directors of the Company or any direct or indirect parent company of the Company, as the case may be, on any transaction with such other Person;

(11) [Reserved];

(12) in the case of contracts for exploring for, producing, marketing, storing, gathering, transporting or otherwise handling Hydrocarbons, or activities or services reasonably related or ancillary thereto, or other operational contracts, any such contracts entered into in the ordinary course of business and otherwise in compliance with the terms of this Indenture which are fair to the Company and its Restricted Subsidiaries, in the reasonable determination of the Board of Directors of the Company or the senior management thereof, or are on terms at least as favorable as might reasonably have been obtained at such time from an unaffiliated party;

(13) payments to Affiliates on or with respect to debt securities or other Indebtedness of the Issuer or any Subsidiary on a similar basis as payments are made or offered to holders of such debt securities or Indebtedness held by Persons other than Affiliates; and

(14) any transaction in which the Company or any of its Restricted Subsidiaries, as the case may be, delivers to the Trustee a letter from an accounting, appraisal or investment banking firm of national standing stating that such transaction is fair to the Company or such Restricted Subsidiary from a financial point of view or that such transaction meets the requirements of Section 4.11(a)(1).

Section 4.12 *Liens*.

The Company will not and will not permit any of its Restricted Subsidiaries to, create, incur, assume or otherwise cause or suffer to exist or become effective any Lien (an *"Initial Lien"*) of any kind (other than Permitted Liens) securing Indebtedness upon any of their property or assets, now owned or hereafter acquired, unless the Notes of each series or any Note Guarantee of each series of such Restricted Subsidiary, as applicable, are secured on an equal and ratable basis with the Indebtedness so secured until such time as such Indebtedness is no longer secured by a Lien. Any Lien created for the benefit of the Holders of the Notes of any series pursuant to this paragraph shall provide by its terms that such Lien shall be automatically and unconditionally released and discharged upon the release and discharge of the Initial Lien.

Section 4.13 *Limitation on Business Activities; Application of Covenants to Permanent Issuer prior to Completion Date*.

(a) Prior to the Completion Date, the Escrow Issuer shall not engage in any activity other than:

(1) issuing the Notes;

(2) issuing equity interests and receiving capital contributions;

(3) performing its obligations in respect of the Notes under this Indenture, the Escrow Agreements and the purchase agreement relating to the offer and sale of the Notes;

(4) consummating the Transactions and the Escrow Release;

(5) redeeming the Notes pursuant to Section 3.10, if applicable; and

(6) conducting such other activities as are related to the foregoing or are necessary, appropriate or desirable to effectuate the Transactions and the transactions related thereto.

(b) Prior to the Completion Date, the Escrow Issuer shall not own, hold or otherwise have any interest in any assets other than the Escrowed Property, cash and Cash Equivalents.

(c) The covenants in this Indenture will generally not apply to the Permanent Issuer and its Restricted Subsidiaries until the Completion Date. However, following the Completion

Date, all covenants set forth herein will be deemed to have been applicable to Permanent Issuer and its Restricted Subsidiaries beginning on the Issue Date and, to the extent that the Permanent Issuer and its Restricted Subsidiaries took any action or inaction after the Issue Date and prior to the Completion Date that would have been prohibited under this Indenture, the Issuer will be in default on such date. Without limiting the foregoing, if a Change of Control with respect to any series of Notes occurs prior to the Completion Date, such event will be deemed to have occurred on such date.

Section 4.14 *Organizational Existence*.

Subject to Article 5 and Section 10.04 hereof, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect:

(a) in the case of the Escrow Issuer, its limited liability company existence, and, in the case of the Permanent Issuer, its corporate existence, and the corporate, partnership or other existence of each of its Restricted Subsidiaries, in accordance with the respective organizational documents (as the same may be amended from time to time) of the Company or any such Restricted Subsidiary; and

(b) the rights (charter and statutory), licenses and franchises of the Company and its Restricted Subsidiaries; *provided, however,* that the Company shall not be required to preserve any such right, license or franchise, or the corporate, partnership or other existence of any of its Restricted Subsidiaries, if the Company shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company and its Restricted Subsidiaries, taken as a whole, and that the loss thereof is not adverse in any material respect to the Holders of the Notes.

Section 4.15 *Offer to Repurchase Upon Change of Control*.

(a) Upon the occurrence of a Change of Control with respect to any series of Notes, the Company will make an offer (a *"Change of Control Offer"*) to each Holder of Notes of such series to repurchase all or any part (equal to $2,000 or an integral multiple of $1,000 in excess thereof) of that Holder's Notes of such series at a purchase price in cash equal to 101% of the aggregate principal amount of Notes of such series repurchased, *plus* accrued and unpaid interest, if any, on the Notes repurchased to the date of purchase (the *"Change of Control Payment Date"*), subject to the rights of Holders of such Notes on the relevant record date to receive interest due on the relevant interest payment date (the *"Change of Control Payment"*). Within 30 days following any Change of Control with respect to any series of Notes, the Company will mail a notice to each Holder of Notes of such series describing the transaction or transactions that constitute the Change of Control and stating:

(1) that the Change of Control Offer is being made pursuant to this Section 4.15 and that all Notes of such series tendered will be accepted for payment;

(2) the purchase price and the expiration date of the Change of Control Offer, which shall be no earlier than 30 days and no later than 60 days from the date such notice is sent;

(3) that any Note not tendered will continue to accrue interest;

(4) that, unless the Company defaults in the payment of the Change of Control Payment, all Notes accepted for payment pursuant to the Change of Control Offer will cease to accrue interest after the Change of Control Payment Date;

(5) that Holders electing to have any Notes purchased pursuant to a Change of Control Offer will be required to surrender the Notes, with the form entitled "Option of Holder to Elect Purchase" attached to the Notes completed, or transfer by book-entry transfer, to the Paying Agent at the address specified in the notice prior to the close of business on the third Business Day preceding the Change of Control Payment Date;

(6) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the close of business on the second Business Day preceding the Change of Control Payment Date, a telegram, electronic image scan, facsimile transmission or letter setting forth the name of the Holder, the principal amount of Notes delivered for purchase, and a statement that such Holder is withdrawing his election to have the Notes purchased; and

(7) that Holders whose Notes are being purchased only in part will be issued new Notes of the same series equal in principal amount to the unpurchased portion of the Notes surrendered, which unpurchased portion must be equal to $2,000 in principal amount or an integral multiple of $1,000 in excess thereof.

The Company will comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the Notes as a result of a Change of Control. To the extent that the provisions of any securities laws or regulations conflict with the provisions of this Section 4.15, the Company will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under this Section 4.15 by virtue of such compliance.

(b) Promptly following the expiration of the Change of Control Offer, the Company will, to the extent lawful, accept for payment all Notes or portions of Notes properly tendered pursuant to the Change of Control Offer. Promptly after such acceptance, the Company will, on the Change of Control Payment Date:

(1) deposit with the Paying Agent an amount equal to the Change of Control Payment in respect of all Notes of the applicable series or portions of Notes of such series properly tendered; and

(2) deliver or cause to be delivered to the Trustee the Notes of such series properly accepted together with an Officers' Certificate stating the aggregate principal amount of Notes of such series or portions of Notes of such series being purchased by the Company.

The Paying Agent will promptly deliver (but in any case not later than five days after the Change of Control Payment Date) to each Holder of Notes of such series properly tendered the Change of Control Payment for such Notes of such series (or, if all the Notes of such series are then in global form, it will make such payment through the facilities of DTC), and the Issuer will

promptly issue a new Note of such series, and, upon receipt of an Authentication Order in accordance with Section 2.02, the Trustee, upon the written request of the Issuer, will promptly authenticate and mail (or cause to be transferred by book entry) to each Holder a new Note of such series equal in principal amount to any unpurchased portion of the Notes of such series surrendered, if any. The Company will announce to the Holders of the Notes of any series the results of the Change of Control Offer on or as soon as practicable after the Change of Control Payment Date with respect to such series.

(c) Notwithstanding anything to the contrary in this Section 4.15, the Company will not be required to make a Change of Control Offer with respect to the Notes of any series upon a Change of Control with respect to such series if (1) a third party makes the Change of Control Offer with respect to the Notes of any series in the manner, at the time and otherwise in compliance with the requirements set forth in this Section 4.15 and purchases all Notes of such series properly tendered and not withdrawn under the Change of Control Offer with respect to such series, (2) notice of redemption of all outstanding Notes of such series has been given pursuant to Section 3.03 hereof, unless and until there is a default in payment of the applicable redemption price, or (3) in connection with or in contemplation of any Change of Control with respect to the Notes of such series, the Company has made an offer to purchase (an "*Alternate Offer*") any and all Notes of such series validly tendered at a cash price equal to or higher than the Change of Control Payment applicable to such series and has purchased all Notes of such series properly tendered in accordance with the terms of the Alternate Offer.

(d) Notwithstanding anything to the contrary contained herein, a Change of Control Offer or Alternate Offer may be made in advance of a Change of Control with respect to the Notes of any series, conditioned upon the consummation of such Change of Control with respect to such series, if a definitive agreement is in place for the Change of Control with respect to such series at the time the Change of Control Offer or Alternate Offer with respect to such series is made. The settlement date of any such Change of Control Offer or Alternate Offer made in advance of a Change of Control with respect to any series may be changed to conform to the actual closing date of such Change of Control with respect to such series; *provided* that such settlement date is not earlier than 30 days nor later than 60 days from the date the Change of Control Offer notice is sent as described in Section 4.15(a).

(e) In the event that Holders of not less than 90% of the aggregate principal amount of the then-outstanding Notes of any series accept a Change of Control Offer or Alternate Offer with respect to such series and the Company (or a third party making the Change of Control Offer or Alternate Offer in lieu of the Company as described in paragraph (c) above) purchases all of the Notes of such series held by such Holders, the Issuer will have the right, upon not less than 30 nor more than 60 days' prior notice, given not more than 30 days following the purchase pursuant to the Change of Control Offer or Alternate Offer described above, to redeem all of the Notes of such series that remain outstanding following such purchase at a redemption price equal to the applicable Change of Control Payment *plus*, to the extent not included in the Change of Control Payment, accrued and unpaid interest, if any, on the Notes of such series that remain outstanding, to the date of redemption (subject to the rights of Holders on the relevant record date to receive interest due on an interest payment date that is on or prior to the redemption date).

Section 4.16 *Additional Note Guarantees*.

If any Restricted Subsidiary (including any acquired or newly created Restricted Subsidiary) Guarantees any Indebtedness under a Credit Facility or capital markets debt securities incurred or issued by the Company or any other Restricted Subsidiary or otherwise creates, incurs, issues, assumes or becomes directly or indirectly liable, contingently or otherwise, with respect to any Indebtedness under a Credit Facility or capital markets debt securities, in each case, other, than the Notes, then, in either case, such Restricted Subsidiary will become a Guarantor of the Notes of each series by executing a supplemental indenture in substantially the form of Exhibit D hereto and delivering an Officers' Certificate and an Opinion of Counsel to the Trustee within 30 days after the date that Restricted Subsidiary was acquired or created or on which it Guaranteed or otherwise created, incurred, issued, assumed or became directly or indirectly liable with respect to such Indebtedness.

Section 4.17 *Designation of Restricted and Unrestricted Subsidiaries*.

The Company may designate any Restricted Subsidiary of the Company to be an Unrestricted Subsidiary if that designation would not cause a Default. If a Restricted Subsidiary of the Company is designated as an Unrestricted Subsidiary, the aggregate Fair Market Value of all outstanding Investments owned by the Company and its Restricted Subsidiaries in the Subsidiary designated as an Unrestricted Subsidiary will be deemed to be either an Investment made as of the time of the designation that will reduce the amount available for Restricted Payments under Section 4.07 hereof or represent a Permitted Investment under one or more clauses of the definition of Permitted Investments, as determined by the Company. That designation will only be permitted if the Investment would be permitted at that time and if the Restricted Subsidiary otherwise meets the definition of an Unrestricted Subsidiary.

Any designation of a Subsidiary of the Company as an Unrestricted Subsidiary will be evidenced by filing with the Trustee a certified copy of a resolution of the Board of Directors giving effect to such designation and an Officers' Certificate certifying that such designation complied with the preceding conditions and was permitted by Section 4.07 hereof. If, at any time, any Unrestricted Subsidiary would fail to meet the preceding requirements as an Unrestricted Subsidiary, it will thereafter cease to be an Unrestricted Subsidiary for purposes of this Indenture and any Indebtedness of such Subsidiary will be deemed to be incurred by a Restricted Subsidiary of the Company as of such date and, if such Indebtedness is not permitted to be incurred as of such date under Section 4.09 hereof, the Company will be in default of such covenant.

The Board of Directors of the Company may at any time designate any Unrestricted Subsidiary to be a Restricted Subsidiary of the Company; *provided* that such designation will be deemed to be an incurrence of Indebtedness by a Restricted Subsidiary of the Company of any outstanding Indebtedness of such Unrestricted Subsidiary, and such designation will only be permitted if (1) such Indebtedness is permitted under Section 4.09 hereof, calculated on a pro forma basis as if such designation had occurred at the beginning of the applicable reference period; and (2) no Default or Event of Default would be in existence following such designation.

Section 4.18 *Covenant Termination*.

With respect to any series of Notes, notwithstanding any provision of this Indenture or of the Notes of such series to the contrary, if at any time following the Completion Date (a) the Notes of such series obtain at least two of any of the following three ratings: (i) Baa3 or better by Moody's, (ii) BBB- or better by S&P and (iii) BBB- or better from Fitch (or, if any of such entities ceases to rate the Notes of such series for reasons outside of the control of the Company, the equivalent investment grade credit rating from any other "nationally recognized statistical rating organization" within the meaning of Section 3(a)(62) of the Exchange Act selected by the Company as a replacement agency) and (b) no Default or Event of Default shall have occurred and is continuing under this Indenture with respect to such series, then upon delivery by the Company to the Trustee of an Officers' Certificate certifying to such events, Sections 4.07, 4.08, 4.09, 4.10, 4.11, 4.17 and 5.01(a)(4) of this Indenture will be terminated and the limitations in such covenants will cease to apply with respect to such series and no Default or Event of Default shall result from any failure to comply with any of the provisions of such Sections. The Trustee shall not have any obligation to monitor the ratings of the Notes.

ARTICLE 5
SUCCESSORS

Section 5.01 *Merger, Consolidation or Sale of Assets*.

(a) The Issuer may not, directly or indirectly: (1) consolidate or merge with or into another Person (whether or not the Issuer is the survivor) or (2) sell, assign, transfer, convey, lease or otherwise dispose of all or substantially all of its properties or assets, in one or more related transactions, to another Person, unless:

(1) either (a) the Issuer is the surviving Person; or (b) the Person formed by or surviving any such consolidation or merger (if other than the Issuer) or to which such sale, assignment, transfer, conveyance, lease or other disposition has been made is an entity organized or existing under the laws of the United States, any state of the United States or the District of Columbia;

(2) the Person formed by or surviving any such consolidation or merger (if other than the Issuer) or the Person to which such sale, assignment, transfer, conveyance, lease or other disposition has been made assumes all the obligations of the Issuer under the Notes and this Indenture pursuant to a supplemental indenture in a form reasonably satisfactory to the Trustee;

(3) immediately after giving effect to such transaction, no Default or Event of Default exists;

(4) in the case of a transaction involving the Company, immediately after giving effect to such transaction and any related financing transaction on a pro forma basis as if the same had occurred at the beginning of the applicable four-quarter period, either

(A) the Company or the Person formed by or surviving any such consolidation or merger (if other than the Company), or to which such sale,

assignment, transfer, conveyance, lease or other disposition has been made, would be permitted to incur at least $1.00 of additional Indebtedness pursuant to the Fixed Charge Coverage Ratio test set forth in Section 4.09(a); or

(B) the Fixed Charge Coverage Ratio of the Company or the Person formed by or surviving any such consolidation or merger (if other than the Company), or to which such sale, assignment, transfer, conveyance, lease or other disposition has been made, is equal to or greater than the Fixed Charge Coverage Ratio of the Company immediately prior to such transaction; and

(5) the Issuer has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger or disposition and such supplemental indenture, if any, comply with this Indenture.

(b) [Reserved].

(c) This Section 5.01 will not apply to (1) any statutory conversion of the Company to a corporation or another form of entity or (2) any sale, assignment, transfer, conveyance, lease or other disposition of properties or assets between or among the Company and its Restricted Subsidiaries. Clauses (3) and (4) of Section 5.01(a) will not apply to (1) any merger or consolidation of the Company with or into one of its Restricted Subsidiaries for any purpose or (2) with or into an Affiliate solely for the purpose of reorganizing the Company in another jurisdiction.

Section 5.02 *Successor Issuer Substituted.*

Upon any consolidation or merger, or any sale, assignment, transfer, conveyance, lease or other disposition of all or substantially all of the properties or assets of the Issuer in accordance with Section 5.01 in which the Issuer is not the surviving entity, the successor Person formed by such consolidation or into or with which the Issuer is merged or to which such sale, assignment, transfer, lease, conveyance or other disposition is made shall succeed to, and be substituted for (so that from and after the date of such consolidation, merger, sale, assignment, transfer, lease, conveyance or other disposition, the provisions of this Indenture referring to the "Issuer" shall refer instead to the successor Person and not to the predecessor Issuer), and may exercise every right and power of the Issuer under this Indenture with the same effect as if such successor Person had been named as the predecessor Issuer herein, and thereafter (except in the case of a lease of all or substantially all of the Issuer's properties or assets), the predecessor Issuer will be relieved of all obligations and covenants under this Indenture and the Notes and, upon receipt of an Officers' Certificate and an Opinion of Counsel, the Trustee shall enter into a supplemental indenture to evidence the succession and substitution of such successor and such discharge and relief of such predecessor Issuer.

ARTICLE 6
DEFAULTS AND REMEDIES

Section 6.01 *Events of Default.*

Each of the following is an "*Event of Default*" with respect to the Notes of a series:

(a) default for 30 days in the payment when due of interest, if any, on the Notes of such series;

(b) default in the payment when due (at Stated Maturity, upon redemption or otherwise) of the principal of, or premium, if any, on, the Notes of such series;

(c) failure by the Company to comply with its obligations to offer to purchase or purchase the Notes of such series pursuant to Sections 4.10 or 4.15 hereof or failure by the Issuer to comply with the provisions of Section 5.01 hereof;

(d) failure by the Company for 180 days after notice (1) to the Company by the Trustee or (2) to the Company and the trustee by Holders of at least 25% in aggregate principal amount of the Notes of such series then outstanding to comply with Section 4.03 hereof;

(e) failure by the Issuer for 60 days after notice (1) to the Company by the Trustee or (2) to the Company and the trustee by Holders of at least 25% in aggregate principal amount of the Notes of such series then outstanding to comply with any of its other agreements in this Indenture;

(f) default under any mortgage, indenture or instrument under which there is issued or by which there is secured or evidenced any Indebtedness for money borrowed by the Company or any of its Restricted Subsidiaries (or the payment of which is guaranteed by the Company or any of its Restricted Subsidiaries), whether such Indebtedness or Guarantee now exists, or is created after the date of this Indenture, if that default:

(1) is caused by a failure to pay principal of, premium, if any, on, and interest, if any, on such Indebtedness prior to the expiration of the grace period provided in such Indebtedness on the date of such default (a "*Payment Default*"); or

(2) results in the acceleration of such Indebtedness prior to its express maturity, and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any other such Indebtedness under which there has been a Payment Default or the maturity of which has been so accelerated, aggregates $100.0 million or more; *provided*, *however*, that if, prior to any acceleration of the Notes, (i) any such Payment Default is cured or waived, (ii) any such acceleration is rescinded, or (iii) such Indebtedness is repaid during the 30 Business Day period commencing upon the end of any applicable grace period for such Payment Default or the occurrence of such acceleration, as the case may be, any Default or Event of Default (but not any acceleration of the Notes) caused by such Payment Default or acceleration shall be automatically rescinded, so long as such rescission does not conflict with any judgment, decree or applicable law;

(g) failure by the Company or any of its Restricted Subsidiaries to pay final judgments entered by a court or courts of competent jurisdiction aggregating in excess of $100.0 million (to the extent not covered by insurance by a reputable and creditworthy insurer as to which the insurer has not disclaimed coverage), which judgments are not paid, discharged or stayed, for a period of 60 days;

(h) the Company or any of the Company's Restricted Subsidiaries that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary pursuant to or within the meaning of Bankruptcy Law:

(1) commences a voluntary case,

(2) consents to the entry of an order for relief against it in an involuntary case,

(3) consents to the appointment of a custodian of it or for all or substantially all of its property,

(4) makes a general assignment for the benefit of its creditors, or

(5) announces publicly that it generally is not paying its debts as they become due;

(i) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

(1) is for relief against the Company or any of the Company's Restricted Subsidiaries that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary in an involuntary case;

(2) appoints a custodian of the Company or any of the Company's Restricted Subsidiaries that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary or for all or substantially all of the property of the Company or any of its Restricted Subsidiaries that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary; or

(3) orders the liquidation of the Company or any of the Company's Restricted Subsidiaries that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary;

and in each case the order or decree remains unstayed and in effect for 60 consecutive days; and

(j) except as permitted by this Indenture, any Note Guarantee with respect to the Notes of such series is held in any judicial proceeding to be unenforceable or invalid or ceases for any reason to be in full force and effect, or any Guarantor, or any Person acting on behalf of any Guarantor, denies or disaffirms its obligations under its Note Guarantee with respect to the Notes of such series.

Section 6.02 *Acceleration.*

In the case of an Event of Default with respect to any series specified in clause (h) or (i) of Section 6.01 hereof, with respect to the Company, any Restricted Subsidiary of the Company that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken

together, would constitute a Significant Subsidiary, the principal of, and accrued and unpaid interest, if any, on all outstanding Notes of such series will become due and payable immediately without further action or notice. If any other Event of Default with respect to the Notes of a series occurs and is continuing, the Trustee or the Holders of at least 25% in aggregate principal amount of the then outstanding Notes of such series may declare the principal of, and accrued and unpaid interest, if any, on all outstanding Notes of such series to be due and payable immediately.

The Holders of a majority in aggregate principal amount of the then outstanding Notes of any series by written notice to the Trustee may, on behalf of all of the Holders of all the Notes of such series, rescind an acceleration and its consequences hereunder, if the rescission would not conflict with any judgment or decree and if all existing Events of Default (except nonpayment of principal of, premium, if any, on, and interest, if any, on the Notes of such series that has become due solely because of the acceleration) have been cured or waived.

Any notice of Default, notice of acceleration or instruction to the Trustee to provide a notice of Default, notice of acceleration or take any other action (a "*Noteholder Direction*") provided by any one or more Holders of any series (each a "*Directing Holder*") must be accompanied by a written representation from each such Holder delivered to the Issuer and the Trustee that such Holder is not (or, in the case such Holder is DTC or its nominee, that such Holder is being instructed solely by beneficial owners that are not) Net Short (a "*Position Representation*"), which representation, in the case of a Noteholder Direction relating to the delivery of a notice of Default (a "*Default Direction*") shall be deemed a continuing representation until the resulting Event of Default with respect to such series of Notes is cured or otherwise ceases to exist or the Notes of such series are accelerated. In addition, each Directing Holder is deemed, at the time of providing a Noteholder Direction, to covenant to provide the Issuer with such other information as the Issuer may reasonably request from time to time in order to verify the accuracy of such Noteholder' s Position Representation within five Business Days of request therefor (a "*Verification Covenant*"). In any case in which the Holder is DTC or its nominee, any Position Representation or Verification Covenant required hereunder shall be provided by the beneficial owner of the Notes of such series in lieu of DTC or its nominee and DTC shall be entitled to conclusively rely on such Position Representation and Verification Covenant in delivering its direction to the Trustee.

If, following the delivery of a Noteholder Direction, but prior to acceleration of the Notes of such series, the Issuer determines in good faith that there is a reasonable basis to believe a Directing Holder was, at any relevant time, in breach of its Position Representation and provides to the Trustee an officer's certificate stating that the Issuer has initiated litigation in a court of competent jurisdiction seeking a determination that such Directing Holder was, at such time, in breach of its Position Representation, and seeking to invalidate any Default, Event of Default or acceleration (or notice thereof) with respect to such series that resulted from the applicable Noteholder Direction, the cure period with respect to such Default with respect to such series shall be automatically stayed and the cure period with respect to such Default or Event of Default with respect to such series shall be automatically reinstituted and any remedy stayed pending a final and non-appealable determination of a court of competent jurisdiction on such matter. If, following the delivery of a Noteholder Direction with respect to such series, but prior to acceleration of the Notes of such series, the Issuer provides to the Trustee an officer's certificate stating that a Directing Holder failed to satisfy its Verification Covenant, the cure period with respect to such Default with respect to such series shall be automatically stayed and the cure period with respect

to any Default or Event of Default with respect to such series that resulted from the applicable Noteholder Direction shall be automatically reinstituted and any remedy stayed pending satisfaction of such Verification Covenant. Any breach of the Position Representation shall result in such Holder's participation in such Noteholder Direction being disregarded; and, if, without the participation of such Holder, the percentage of Notes of such series held by the remaining Holders that provided such Noteholder Direction would have been insufficient to validly provide such Noteholder Direction, such Noteholder Direction shall be void ab initio with respect to such series, with the effect that such Default or Event of Default with respect to such series shall be deemed never to have occurred, acceleration with respect to such series voided and the Trustee shall be deemed not to have received such Noteholder Direction or any notice of such Default or Event of Default with respect to such series.

Notwithstanding anything in the preceding two paragraphs to the contrary, any Noteholder Direction delivered to the Trustee during the pendency of an Event of Default with respect to any series specified in clause (h) or (i) of Section 6.01 hereof, with respect to the Company, any Restricted Subsidiary of the Company that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary, shall not require compliance with the foregoing paragraph.

For the avoidance of doubt, the Trustee shall be entitled to conclusively rely on any Noteholder Direction delivered to it in accordance with the Indenture, shall have no duty to inquire as to or investigate the accuracy of any Position Representation, enforce compliance with any Verification Covenant, verify any statements in any Officer's Certificate delivered to it, or otherwise make calculations, investigations or determinations with respect to Derivative Instruments, Net Shorts, Long Derivative Instruments, Short Derivative Instruments or otherwise. The Trustee shall not have any liability to the Issuer, any holder or any other Person in acting in good faith on a Noteholder Direction.

Section 6.03 *Other Remedies*.

If an Event of Default with respect to any series occurs and is continuing, and is known to the Trustee, the Trustee may pursue any available remedy to collect the payment of principal of, premium, if any, on, and interest, if any, on, the Notes of such series or to enforce the performance of any provision of the Notes of such series or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Notes of such series or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Holder of a Note of any series in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default with respect to such series. All remedies are cumulative to the extent permitted by law.

Section 6.04 *Waiver of Past Defaults*.

The Holders of a majority in aggregate principal amount of the then outstanding Notes of any series by written notice to the Trustee may, on behalf of the Holders of all of the Notes of such series waive any existing Default or Event of Default with respect to such series and its consequences hereunder, except a continuing Default or Event of Default in the payment of

principal of, premium, if any, on, and interest, if any, on, the Notes of such series (including in connection with an offer to purchase); *provided, however*, that the Holders of a majority in aggregate principal amount of the then outstanding Notes of any series may rescind an acceleration with respect to such Notes and its consequences, including any related payment default that resulted from such acceleration. Upon any such waiver, such Default shall cease to exist, and any Event of Default with respect to such series arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default with respect to such series or impair any right consequent thereon.

Section 6.05 *Control by Majority*.

With respect to the Notes of a series, Holders of a majority in aggregate principal amount of the then outstanding Notes of such series may direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or exercising any trust or power conferred on it. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture that the Trustee determines may be unduly prejudicial to the rights of other Holders of Notes of such series or that may involve the Trustee in personal liability.

Section 6.06 *Limitation on Suits*.

No Holder of a Note of any series may pursue any remedy with respect to this Indenture or the Notes unless:

(a) such Holder has previously given to the Trustee written notice that an Event of Default with respect to such series is continuing;

(b) Holders of at least 25% in aggregate principal amount of the then outstanding Notes of such series make a written request to the Trustee to pursue the remedy;

(c) such Holder or Holders offer and, if requested, provide to the Trustee security or indemnity reasonably satisfactory to the Trustee against any loss, liability or expense;

(d) the Trustee does not comply with such request within 60 days after receipt of the request and the offer of security or indemnity; and

(e) during such 60-day period, Holders of a majority in aggregate principal amount of the then outstanding Notes of such series do not give the Trustee a direction inconsistent with such request.

A Holder of a Note of any series may not use this Indenture to prejudice the rights of another Holder of a Note of such series or to obtain a preference or priority over another Holder of a Note of such series.

Section 6.07 *Rights of Holders of Notes to Receive Payment*.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Note of any series to receive payment of principal of, premium, if any, on, and interest, if any, on, the Note, on or after the respective due dates expressed in the Note, or to bring suit for the enforcement of

any such payment on or after such respective dates, shall not be amended or waived in a manner adverse to such Holder without the consent of such Holder.

Section 6.08 *Collection Suit by Trustee*.

If an Event of Default specified in Section 6.01(a) or (b) hereof occurs with respect to any series and is continuing, the Trustee is authorized to recover judgment in its own name and as trustee of an express trust against the Issuer for the whole amount of principal of, premium, if any, on, and interest, if any, remaining unpaid on, the Notes of such series and interest on overdue principal and, to the extent lawful, interest and such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

Section 6.09 *Trustee May File Proofs of Claim*.

The Trustee is authorized to file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Holders of the Notes of any series allowed in any judicial proceedings relative to the Issuer (or any other obligor upon the Notes), its creditors or its property and shall be entitle d and empowered to collect, receive and distribute any money or other property payable or deliverable on any such claims and any custodian in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07 hereof. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07 hereof out of the estate in any such proceeding, shall be denied for any reason, payment of the same shall be secured by a Lien on, and shall be paid out of, any and all distributions, dividends, money, securities and other properties that the Holders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise. Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder of Notes of any series any plan of reorganization, arrangement, adjustment or composition affecting the Notes of such series or the rights of any Holder of Notes of such series, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

Section 6.10 *Priorities*.

If the Trustee collects any money pursuant to this Article 6, it shall pay out the money in the following order:

First: to the Trustee, its agents and attorneys for amounts due under Section 7.07 hereof, including payment of all compensation, expenses and liabilities incurred, and all advances made, by the Trustee and the costs and expenses of collection;

Second: to Holders of the Notes of each series for amounts due and unpaid on the Notes of each series for principal, premium, if any, and interest, if any, ratably, without preference or priority of any kind, according to the amounts due and payable on the Notes of each series for principal, premium, if any, and interest, if any, respectively; and

Third: to the Issuer or to such party as a court of competent jurisdiction shall direct.

The Trustee may fix a record date and payment date for any payment to Holders of the Notes pursuant to this Section 6.10.

Section 6.11 *Undertaking for Costs*.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as a Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section 6.11 does not apply to a suit by the Trustee, a suit by a Holder of a Note of any series pursuant to Section 6.07 hereof, or a suit by Holders of more than 10% in aggregate principal amount of the then outstanding Notes of any series.

ARTICLE 7
TRUSTEE

Section 7.01 *Duties of Trustee*.

(a) If an Event of Default with respect to any series has occurred and is continuing, the Trustee will exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in its exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(b) Except during the continuance of an Event of Default with respect to any series:

(1) the duties of the Trustee will be determined solely by the express provisions of this Indenture and the Trustee need perform only those duties that are specifically set forth in this Indenture and no others, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of gross negligence or willful misconduct on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. However, the Trustee will examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture.

(c) The Trustee may not be relieved from liabilities for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) this paragraph does not limit the effect of paragraph (b) of this Section 7.01;

(2) the Trustee will not be liable for any error of judgment made in good faith by a Responsible Officer, unless it is proved that the Trustee was negligent in ascertaining the pertinent facts; and

(3) the Trustee will not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 6.05 hereof.

(d) Whether or not therein expressly so provided, every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b), and (c) of this Section 7.01.

(e) No provision of this Indenture will require the Trustee to expend or risk its own funds or incur any liability. The Trustee will be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holders, unless such Holder has offered to the Trustee security and indemnity reasonably satisfactory to it against any loss, liability or expense.

(f) The Trustee will not be liable for interest on any money received by it except as the Trustee may agree in writing with the Issuer. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

Section 7.02 *Rights of Trustee*.

(a) The Trustee may conclusively rely on and shall be fully protected in acting or refraining from acting as a result of its reasonable belief that any resolution, certificate, statement, instrument, opinion, report, notice, request consent, order, direction, approval or other paper or any document believed by it to be genuine and to have been signed or presented by the proper Person. The Trustee need not investigate any fact or matter stated in the document.

(b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel or both. The Trustee will not be liable for any action it takes or omits to take in good faith in reliance on such Officers' Certificate or Opinion of Counsel. The Trustee may consult with counsel and the advice of such counsel or any Opinion of Counsel will be full and complete authorization and protection from liability in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon.

(c) The Trustee may act through its attorneys and agents and will not be responsible for the misconduct or negligence of any agent appointed with due care.

(d) The Trustee will not be liable for any action it takes or omits to take in good faith that it believes to be authorized or within the rights or powers conferred upon it by this Indenture.

(e) Unless otherwise specifically provided in this Indenture, any demand, request, direction or notice from the Issuer will be sufficient if signed by an Officer of the Company.

(f) The Trustee will be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders unless such Holders have offered to the Trustee indemnity or security satisfactory to it against the losses, liabilities and expenses that might be incurred by it in compliance with such request or direction.

(g) The Trustee shall not be deemed to have notice of a Default or an Event of Default unless a Responsible Officer of the Trustee has actual knowledge of such Default or Event of Default.

(h) In no event shall the Trustee be responsible or liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood or such loss or damage and regardless of the form of action.

(i) The rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and each agent, custodian and other Person employed to act hereunder.

(j) The Trustee shall not be required to give any bond or surety in respect of the performance of its powers and duties hereunder.

(k) The Trustee may request that the Company deliver a certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture.

Section 7.03 *Individual Rights of Trustee*.

The Trustee in its individual or any other capacity may become the owner or pledgee of Notes and may otherwise deal with the Issuer or any Affiliate of the Issuer with the same rights it would have if it were not Trustee. However, in the event that the Trustee acquires any conflicting interest (as defined in the TIA) after a Default has occurred and is continuing it must eliminate such conflict within 90 days, apply to the SEC for permission to continue as Trustee (if this Indenture has been qualified under the TIA) or resign. Any Agent may do the same with like rights and duties. The Trustee is also subject to Sections 7.10 and 7.11 hereof.

Section 7.04 *Trustee's Disclaimer*.

The Trustee will not be responsible for and makes no representation as to the validity or adequacy of this Indenture or the Notes, it shall not be accountable for the Issuer's use of the proceeds from the Notes or any money paid to the Issuer or upon the Issuer's direction under any provision of this Indenture, it will not be responsible for the use or application of any money received by any Paying Agent other than the Trustee, and it will not be responsible for any statement or recital herein or any statement in the Notes or any other document in connection with the sale of the Notes or pursuant to this Indenture other than its certificate of authentication.

Section 7.05 *Notice of Defaults*.

If a Default or Event of Default with respect to any series of Notes occurs and is continuing and if it is actually known to a Responsible Officer of the Trustee, the Trustee will mail to Holders of the Notes of such series a notice of the Default or Event of Default within 90 days after the Trustee becomes aware of any such Default or Event of Default. Except in the case of a Default or Event of Default with respect to any series in payment of principal of, premium, if any, on, and interest, if any, on, any Note of such series, the Trustee may withhold the notice if and so long as a committee of its Responsible Officers in good faith determines that withholding the notice is in the interests of the Holders of the Notes of such series.

Section 7.06 *[Reserved]*.

Section 7.07 *Compensation and Indemnity*.

(a) The Issuer will pay to the Trustee from time to time documented compensation for its acceptance of this Indenture and services hereunder. The Trustee's compensation will not be limited by any law on compensation of a trustee of an express trust. The Issuer will reimburse the Trustee promptly upon request for all documented disbursements, advances and expenses incurred or made by it in addition to the compensation for its services. Such expenses will include the documented compensation, disbursements and expenses of the Trustee's agents and counsel.

(b) The Issuer and the Guarantors will indemnify the Trustee against any and all losses, liabilities or expenses incurred by it arising out of or in connection with the acceptance or administration of its duties under this Indenture, including the costs and expenses of enforcing this Indenture against the Issuer and the Guarantors (including this Section 7.07) and defending itself against any claim (whether asserted by the Issuer, the Guarantors, any Holder or any other Person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, except to the extent any such loss, liability or expense may be attributable to its gross negligence or willful misconduct. The Trustee will notify the Issuer promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Issuer will not relieve the Issuer or any of the Guarantors of their obligations hereunder. The Issuer or such Guarantor will defend the claim and the Trustee will cooperate in the defense. The Trustee may have separate counsel and the Issuer will pay the documented fees and expenses of such counsel. None of the Issuer or any Guarantor need pay for any settlement made without its consent, which consent will not be unreasonably withheld.

(c) The obligations of the Issuer and the Guarantors under this Section 7.07 will survive the satisfaction and discharge of this Indenture and the resignation or removal of the Trustee.

(d) To secure the Issuer's and the Guarantors' payment obligations in this Section 7.07, the Trustee will have a Lien prior to the Notes on all money or property held or collected by the Trustee, except that held in trust to pay principal of, premium, if any, on, and interest, if any, on, particular Notes. Such Lien will survive the satisfaction and discharge of this Indenture.

(e) When the Trustee incurs expenses or renders services after an Event of Default specified in Section 6.01(h) or (i) hereof occurs, the expenses and the compensation for the services

(including the fees and expenses of its agents and counsel) are intended to constitute expenses of administration under any Bankruptcy Law.

Section 7.08 *Replacement of Trustee*.

(a) A resignation or removal of the Trustee and appointment of a successor Trustee will become effective only upon the successor Trustee's acceptance of appointment as provided in this Section 7.08.

(b) The Trustee may resign in writing at any time and be discharged from the trust hereby created by so notifying the Issuer. The Holders of a majority in aggregate principal amount of the then outstanding Notes may remove the Trustee by so notifying the Trustee and the Issuer in writing. The Issuer may remove the Trustee if:

(1) the Trustee fails to comply with Section 7.10 hereof;

(2) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;

(3) a custodian or public officer takes charge of the Trustee or its property; or

(4) the Trustee becomes incapable of acting.

(c) If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Issuer will promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Holders of a majority in aggregate principal amount of the then outstanding Notes may appoint a successor Trustee to replace the successor Trustee appointed by the Issuer.

(d) If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Issuer, or the Holders of at least 10% in aggregate principal amount of the then outstanding Notes may petition any court of competent jurisdiction for the appointment of a successor Trustee.

(e) If the Trustee, after written request by any Holder who has been a Holder for at least six months, fails to comply with Section 7.10 hereof, such Holder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

(f) A successor Trustee will deliver a written acceptance of its appointment to the retiring Trustee and to the Issuer. Thereupon, the resignation or removal of the retiring Trustee will become effective, and the successor Trustee will have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee will mail a notice of its succession to Holders. The retiring Trustee will promptly transfer all property held by it as Trustee to the successor Trustee; *provided* all sums owing to the Trustee hereunder have been paid and subject to the Lien provided for in Section 7.07 hereof. Notwithstanding replacement of the Trustee pursuant to this Section 7.08, the Issuer's obligations under Section 7.07 hereof will continue for the benefit of the retiring Trustee.

Section 7.09 *Successor Trustee by Merger, etc*.

If the Trustee consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act will be the successor Trustee.

Section 7.10 *Eligibility; Disqualification.*

There will at all times be a Trustee hereunder that is a corporation organized and doing business under the laws of the United States of America or of any state thereof that is authorized under such laws to exercise corporate trustee power, that is subject to supervision or examination by federal or state authorities and that has a combined capital and surplus of at least $100.0 million as set forth in its most recent published annual report of condition.

ARTICLE 8
LEGAL DEFEASANCE AND COVENANT DEFEASANCE

Section 8.01 *Option to Effect Legal Defeasance or Covenant Defeasance*.

With respect to any series of Notes, the Issuer may at any time, at the option of its Board of Directors evidenced by resolutions set forth in an Officers' Certificate, elect to have either Section 8.02 or 8.03 hereof be applied to all outstanding Notes of such series upon compliance with the conditions set forth below in this Article 8. To the extent the Issuer exercises its option to effect Legal Defeasance or Covenant Defeasance, such election may be made with respect to the 2026 Notes only, the 2029 Notes only, or any combination thereof.

Section 8.02 *Legal Defeasance and Discharge*.

Upon the Issuer's exercise under Section 8.01 hereof of the option applicable to this Section 8.02 with respect to any series of Notes, the Issuer and each of the Guarantors will, subject to the satisfaction of the conditions set forth in Section 8.04 hereof, be deemed to have been discharged from their obligations with respect to all outstanding Notes of such series (including the Note Guarantees with respect to such Notes of such series) on the date the conditions set forth below are satisfied (hereinafter, "*Legal Defeasance*") with respect to the Notes of such series. For this purpose, Legal Defeasance means that the Issuer and the Guarantors will be deemed to have paid and discharged the entire Indebtedness represented by the outstanding Notes of such series (including the Note Guarantees with respect to the Notes of such series), which will thereafter be deemed to be "outstanding" only for the purposes of Section 8.05 hereof and the other Sections of this Indenture referred to in clauses (a) and (b) below, and to have satisfied all their other obligations under such Notes of such series, the Note Guarantees with respect to the Notes of such series and this Indenture with respect to the Notes of such series (and the Trustee, on demand of and at the expense of the Issuer, shall execute proper instruments acknowledging the same), except for the following provisions which will survive until otherwise terminated or discharged hereunder:

(a) the rights of Holders of outstanding Notes of such series to receive payments in respect of the principal of, premium, if any, on, and interest, if any, on, such Notes of such series when such payments are due from the trust referred to in Section 8.04 hereof;

(b) the Issuer's obligations with respect to such Notes of such series under Sections 2.03, 2.04, 2.06, 2.07, 2.10, and 2.11 and Section 4.02 hereof;

(c) the rights, powers, trusts, duties and immunities of the Trustee hereunder and the Issuer's and the Guarantors' obligations in connection therewith; and

(d) this Article 8.

Subject to compliance with this Article 8, the Issuer may exercise its option under this Section 8.02 notwithstanding the prior exercise of its option under Section 8.03 hereof.

Section 8.03 *Covenant Defeasance*.

Upon the Issuer's exercise under Section 8.01 hereof of the option applicable to this Section 8.03 with respect to any series of Notes, the Issuer and each of the Guarantors will, subject to the satisfaction of the conditions set forth in Section 8.04 hereof, be released from each of their respective obligations under the covenants contained in Sections 4.03, 4.04, 4.05, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.14, 4.15, 4.16 and 4.17 hereof and clause (4) of Section 5.01(a) hereof with respect to the outstanding Notes of such series on and after the date the conditions set forth in Section 8.04 hereof are satisfied (hereinafter, "*Covenant Defeasance*") with respect to the Notes of such series, and the Notes of such series will thereafter be deemed not "outstanding" for the purposes of any direction, waiver, consent or declaration or act of Holders of the Notes of such series (and the consequences of any thereof) in connection with such covenants, but will continue to be deemed "outstanding" for all other purposes hereunder (it being understood that such Notes of such series will not be deemed outstanding for accounting purposes to the extent permitted by GAAP). For this purpose, Covenant Defeasance means that, with respect to the outstanding Notes of a series and Note Guarantees with respect to the Notes of such series, the Issuer and the Guarantors may omit to comply with and will have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply will not constitute a Default or an Event of Default with respect to the Notes of such series under Section 6.01 hereof, but, except as specified above, the remainder of this Indenture and such Notes of such series and Note Guarantees with respect to the Notes of such series will be unaffected thereby. In addition, upon the Issuer's exercise under Section 8.01 hereof with respect to any series of Notes of the option applicable to this Section 8.03, subject to the satisfaction of the conditions set forth in Section 8.04 hereof, Sections 6.01(c), (d), (e), (f), (g) and (j) hereof will not constitute Events of Default with respect to such series of Notes.

Section 8.04 *Conditions to Legal or Covenant Defeasance*.

In order to exercise either Legal Defeasance or Covenant Defeasance with respect to Notes of any series under either Section 8.02 or 8.03 hereof:

(a) the Issuer must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders of such series, cash in U.S. dollars, non-callable Government Securities, or a combination thereof, in such amounts as will be sufficient, in the opinion of an accounting, appraisal or investment banking firm of national standing, to pay the principal of, premium, if any, on, and

interest, if any, on, the outstanding Notes of such series on the stated date for payment thereof or on the applicable redemption date, as the case may be, and the Issuer must specify whether the Notes of such series are being defeased to such stated date for payment or to a particular redemption date (*provided* that if such redemption requires the payment of an Applicable Premium with respect to any series of Notes (x) the amount of cash in U.S. dollars, non-callable Government Securities, or a combination thereof, that must be irrevocably deposited will be determined using an assumed Applicable Premium calculated as of the date of such deposit and (y) the depositor must irrevocably deposit or cause to be deposited additional money in trust on the redemption date as necessary to pay such Applicable Premium as determined on such date);

(b) in the case of an election under Section 8.02 hereof, the Issuer must deliver to the Trustee an Opinion of Counsel reasonably acceptable to the Trustee confirming that:

(1) the Issuer has received from, or there has been published by, the Internal Revenue Service a ruling; or

(2) since the date of this Indenture, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel will confirm that, the beneficial owners of the Notes of such series for U.S. Federal income tax purposes of the outstanding Notes of such series will not recognize income, gain or loss for federal income tax purposes as a result of such Legal Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;

(c) in the case of an election under Section 8.03 hereof, the Issuer must deliver to the Trustee an Opinion of Counsel reasonably acceptable to the Trustee confirming that the beneficial owners of the Notes of such series for U.S. Federal income tax purposes of the outstanding Notes of such series will not recognize income, gain or loss for federal income tax purposes as a result of such Covenant Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;

(d) no Default or Event of Default with respect to the Notes of such series has occurred and is continuing on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit (and any similar concurrent deposit relating to other Indebtedness), and the granting of Liens to secure such borrowings);

(e) such Legal Defeasance or Covenant Defeasance will not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than this Indenture and the agreements governing any other Indebtedness being defeased, discharged or replaced) to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is bound;

(f) the Issuer must deliver to the Trustee an Officers' Certificate stating that the deposit was not made by the Issuer with the intent of preferring the Holders of the Notes of such series over the other creditors of the Issuer with the intent of defeating, hindering, delaying or defrauding any creditors of the Issuer or others; and

(g) the Issuer must deliver to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent relating to the Legal Defeasance or the Covenant Defeasance have been complied with.

Section 8.05 Deposited Money and Government Securities to be Held in Trust; Other Miscellaneous Provisions.

Subject to Section 8.06 hereof, all money and non-callable Government Securities (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 8.05, the "*Trustee*") pursuant to Section 8.04 hereof in respect of the outstanding Notes of a series will be held in trust and applied by the Trustee, in accordance with the provisions of such Notes of such series and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as Paying Agent) as the Trustee may determine, to the Holders of such Notes of such series of all sums due and to become due thereon in respect of principal, premium, if any, and interest, if any, but such money need not be segregated from other funds except to the extent required by law.

The Issuer will pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the cash or non-callable Government Securities deposited pursuant to Section 8.04 hereof or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of the outstanding Notes of any series.

Notwithstanding anything in this Article 8 to the contrary, the Trustee will deliver or pay to the Issuer from time to time upon the request of the Issuer any money or non-callable Government Securities held by it as provided in Section 8.04 hereof which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee (which may be the opinion delivered under Section 8.04(a) hereof), are in excess of the amount thereof that would then be required to be deposited to effect an equivalent Legal Defeasance or Covenant Defeasance.

Section 8.06 *Repayment to Issuer*.

Any money deposited with the Trustee or any Paying Agent, or then held by the Issuer, in trust for the payment of the principal of, premium, if any, on, and interest, if any, on, any Note of any series and remaining unclaimed for two years after such principal, premium, if any, or interest, if any, has become due and payable shall be paid to the Issuer on its request or (if then held by the Issuer) will be discharged from such trust; and the Holder of such Note of such series will thereafter be permitted to look only to the Issuer for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Issuer as trustee thereof, will thereupon cease; *provided*, *however*, that the Trustee or such Paying Agent, before being required to make any such repayment, may at the expense of the Issuer cause to be published once, in *The New York Times* and *The Wall Street Journal* (national edition), notice that such money remains unclaimed and that, after a date specified therein, which will not be less than 30 days from the date of such notification or publication, any unclaimed balance of such money then remaining will be repaid to the Issuer.

Section 8.07 *Reinstatement*.

If the Trustee or Paying Agent is unable to apply any U.S. dollars or non-callable Government Securities in accordance with Section 8.02 or 8.03 hereof, as the case may be, by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the Issuer's and the Guarantors' obligations under this Indenture and the Notes of the applicable series and the Note Guarantees with respect to the Notes of such series will be revived and reinstated as though no deposit had occurred pursuant to Section 8.02 or 8.03 hereof until such time as the Trustee or Paying Agent is permitted to apply all such money in accordance with Section 8.02 or 8.03 hereof, as the case may be; *provided, however*, that, if the Issuer makes any payment of principal of, premium, if any, on, or interest, if any, on, any Note of any series following the reinstatement of its obligations, the Issuer will be subrogate d to the rights of the Holders of such Notes to receive such payment from the money held by the Trustee or Paying Agent.

ARTICLE 9
AMENDMENT, SUPPLEMENT AND WAIVER

Section 9.01 *Without Consent of Holders of Notes*.

Notwithstanding Section 9.02 of this Indenture, without the consent of any Holder of Notes, the Issuer, the Guarantors and the Trustee may amend or supplement this Indenture, the Notes of any series, the Note Guarantees with respect to any series of Notes or the Escrow Agreement for any series of Notes:

(a) to cure any ambiguity, defect or inconsistency;

(b) to provide for uncertificated Notes in addition to or in place of certificated Notes;

(c) to provide for the assumption of the Issuer's or a Guarantor's obligations to Holders of the Notes of each series and Note Guarantees with respect to the Notes of each series in the case of a merger or consolidation or sale of all or substantially all of the Issuer's or such Guarantor's properties or assets, as applicable, including any assumption of the obligations of the Escrow Issuer by the Permanent issuer in accordance with the terms of this Indenture;

(d) to make any change that would provide any additional rights or benefits to the Holders of the Notes of such series or that does not adversely affect the legal rights under this Indenture of any Holder of such series of Notes, including to comply with requirements of the SEC or DTC in order to maintain the transferability of the Notes pursuant to Rule 144A or Regulation S;

(e) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the TIA;

(f) to conform the text of this Indenture, the Notes of any series or the Note Guarantees with respect to Notes of any series to any provision of the "Description of Notes" section of the Offering Circular;

(g) to provide for the issuance of Additional Notes of a series in accordance with the limitations set forth in this Indenture as of the date hereof;

(h) to secure the Notes of such series or the Note Guarantees with respect to such series of Notes pursuant to the requirements of Section 4.12 hereof;

(i) to add any additional Guarantee of the Notes of such series as provided in this Indenture or otherwise, or to evidence the release of any Guarantor from its Note Guarantee with respect to the Notes of any series as provided in this Indenture; or

(j) to evidence or provide for the acceptance of appointment under this Indenture of a successor Trustee.

Section 9.02 *With Consent of Holders of Notes*.

Except as provided below in this Section 9.02, the Issuer, the Guarantors and the Trustee may amend or supplement this Indenture (including Sections 3.09, 4.10 and 4.15 hereof) and the Notes of any series and the Note Guarantees with respect to any series of Notes or the Escrow Agreement for any series of Notes with the consent of the Holders of a majority in aggregate principal amount of the then outstanding Notes of each series affected thereby (including Additional Notes of such series, if any) voting as a single class (including consents obtained in connection with a tender offer or exchange offer for, or purchase of, the Notes of such series), and any existing Default or Event of Default with respect to any series of Notes or compliance with any provision of this Indenture or the Notes of any series or the Note Guarantees with respect to an series of Notes or the Escrow Agreement for any series of Notes may be waived with the consent of the Holders of a majority in aggregate principal amount of the then outstanding Notes of each series affected thereby (including Additional Notes of such series, if any) voting as a single class (including consents obtained in connection with a tender offer or exchange offer for, or purchase of, the Notes of such series). Section 2.08 hereof shall determine which Notes of any series are considered to be "outstanding" for purposes of this Section 9.02. However, without the consent of each Holder affected, an amendment, supplement or waiver under this Section 9.02 may not (with respect to any Notes of a series held by a non-consenting Holder):

(a) reduce the principal amount of Notes of such series whose Holders must consent to an amendment, supplement or waiver;

(b) reduce the principal of or change the fixed maturity of any Note of such series or alter or waive any of the provisions with respect to the redemption or repurchase of the Notes of such series (other than provisions under Sections 3.09, 4.10 or 4.15 or the minimum notice required with respect to any redemption of Notes pursuant to Article 3);

(c) reduce the rate of or change the time for payment of interest, including default interest, on any Note of such series;

(d) waive a Default or Event of Default in the payment of principal of, premium, if any, on, or interest, if any, on the Notes of such series (except a rescission of acceleration of the Notes of such series by the Holders of a majority in aggregate principal amount of the then outstanding Notes of such series and a waiver of the payment default that resulted from such acceleration);

(e) make any Note payable in money other than that stated in the Notes of such series;

(f) make any change in the provisions of this Indenture relating to waivers of past Defaults with respect to such series or the rights of Holders of the Notes of such series to receive payments of principal of, premium, if any, on, or interest, if any, on, the Notes of such series (other than as permitted in clause (g) below);

(g) waive a redemption or repurchase payment with respect to any Note of such series (other than a payment required by Section 3.09, 4.10 or 4.15);

(h) release any Guarantor from any of its obligations under its Note Guarantee with respect to the Notes of such series or this Indenture, except in accordance with the terms of this Indenture; or

(i) make any change in the preceding amendment, supplement and waiver provisions.

It is not necessary for the consent of the Holders of the Notes under this Section 9.02 to approve the particular form of any proposed amendment, supplement or waiver, but it is sufficient if such consent approves the substance thereof.

After an amendment, supplement or waiver under this Section 9.02 becomes effective, the Company will mail to the Holders of the Notes affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, will not, however, in any way impair or affect the validity of any such amended or supplemental indenture or waiver.

Section 9.03 *Revocation and Effect of Consents*.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Note is a continuing consent by the Holder of a Note and every subsequent Holder of a Note or portion of a Note that evidences the same debt as the consenting Holder's Note, even if notation of the consent is not made on any Note. However, any such Holder of a Note or subsequent Holder of a Note may revoke the consent as to its Note if the Trustee receives written notice of revocation before the date the amendment, supplement or waiver becomes effective. An amendment, supplement or waiver becomes effective in accordance with its terms and thereafter binds every Holder unless it makes a change described in any of clauses (a) through (i) of the first paragraph of Section 9.02, in which case, the amendment, supplement or waiver shall bind only each Holder of a Note who has consented to such amendment, supplement or waiver and every subsequent Holder of a Note or portion of a Note that evidences the same indebtedness as the consenting Holder's Note.

Section 9.04 *Notation on or Exchange of Notes*.

The Trustee may place an appropriate notation about an amendment, supplement or waiver on any Note thereafter authenticated. The Issuer in exchange for all Notes may issue and the Trustee shall, upon receipt of an Authentication Order, authenticate new Notes that reflect the amendment, supplement or waiver.

Failure to make the appropriate notation or issue a new Note will not affect the validity and effect of such amendment, supplement or waiver.

Section 9.05 *Trustee to Sign Amendments, etc.*

The Trustee will sign any amended or supplemental indenture authorized pursuant to this Article 9 if the amendment or supplement does not adversely affect the rights, duties, liabilities or immunities of the Trustee. In executing any amended or supplemental indenture, the Trustee shall receive and (subject to Section 7.01 hereof) will be fully protected in relying upon, in addition to the documents required by Section 13.04 hereof, an Officers' Certificate and an Opinion of Counsel stating that the execution of such amended or supplemental indenture is authorized or permitted by this Indenture and that such supplemental indenture is the legal, valid and binding obligation of the Issuer enforceable against it in accordance with its terms.

Section 9.06 *Effect of Supplemental Indentures.*

Upon the execution of any amended or supplemental indenture under this Article 9, this Indenture shall be modified in accordance therewith, and such amended or supplemental indenture shall form a part of this Indenture for all purposes and every Holder of Notes theretofore or thereafter authenticated and delivered hereunder shall be bound thereby, unless such amended or supplemental indenture makes a change described in any of clauses (a) through (i) of the first paragraph of Section 9.02, in which case, such amended or supplemental indenture shall bind only each Holder of a Note who has consented to such amended or supplemental indenture and every subsequent Holder of a Note or portion of a Note that evidences the same indebtedness as the consenting Holder's Note.

ARTICLE 10
NOTE GUARANTEES

Section 10.01 *Guarantee.*

(a) Subject to this Article 10, each of the Guarantors hereby, jointly and severally, unconditionally Guarantees to each Holder of a Note of each series authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, irrespective of the validity and enforceability of this Indenture, the Notes of any series or the obligations of the Issuer hereunder or thereunder, that:

(1) the principal of, premium, if any, on, and interest, if any, on, the Notes of each series will be promptly paid in full when due, whether at Stated Maturity, by acceleration, redemption or otherwise, and interest on the overdue principal of, premium, if any, on, and interest, if any, on, the Notes of each series, if lawful, and all other obligations of the Company to the Holders or the Trustee hereunder or thereunder will be promptly paid in full, all in accordance with the terms hereof and thereof; and

(2) in case of any extension of time of payment or renewal of any Notes of any series or any of such other obligations, that same will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, whether at Stated Maturity, by acceleration or otherwise.

Failing payment when due of any amount so Guaranteed or any performance so Guaranteed for whatever reason, the Guarantors will be jointly and severally obligated to pay the same immediately. Each Guarantor agrees that this is a Guarantee of payment and not a Guarantee of collection.

(b) The Guarantors hereby agree that their obligations hereunder are unconditional, irrespective of the validity, regularity or enforceability of the Notes of any series or this Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes of each series with respect to any provisions hereof or thereof, the recovery of any judgment against the Issuer, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor. Each Guarantor hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Issuer, any right to require a proceeding first against the Issuer, protest, notice and all demands whatsoever and covenant that this Note Guarantee will not be discharged except by complete payment of all amounts due under the Notes of each series and this Indenture.

(c) If any Holder or the Trustee is required by any court or otherwise to return to the Issuer, the Guarantors or any custodian, trustee, liquidator or other similar official acting in relation to either the Issuer or the Guarantors, any amount paid by any of them to the Trustee or such Holder, this Note Guarantee, to the extent theretofore discharged, will be reinstated in full force and effect.

(d) Each Guarantor agrees that it will not be entitled to any right of subrogation in relation to the Holders in respect of any obligations Guaranteed hereby until payment in full of all obligations Guaranteed hereby. Each Guarantor further agrees that, as between the Guarantors, on the one hand, and the Holders and the Trustee, on the other hand, (1) the maturity of the obligations Guaranteed hereby may be accelerated as provided in Article 6 hereof for the purposes of this Note Guarantee, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations Guaranteed hereby, and (2) in the event of any declaration of acceleration of such obligations as provided in Article 6 hereof, such obligations (whether or not due and payable) will forthwith become due and payable by the Guarantors for the purpose of this Note Guarantee. The Guarantors will have the right to seek contribution from any non-paying Guarantor so long as the exercise of such right does not impair the rights of the Holders under the Note Guarantee.

Section 10.02 *Limitation on Guarantor Liability*.

Each Guarantor and, by its acceptance of Notes, each Holder, hereby confirms that it is the intention of all such parties that the Note Guarantee of such Guarantor not constitute a fraudulent transfer or conveyance for purposes of Bankruptcy Law, the Uniform Fraudulent Conveyance Act, the Uniform Fraudulent Transfer Act or any similar federal or state law to the extent applicable to any Note Guarantee. To effectuate the foregoing intention, the Trustee, the Holders and the Guarantors hereby irrevocably agree that the obligations of such Guarantor will be limited to the maximum amount that will, after giving effect to such maximum amount and all other contingent and fixed liabilities of such Guarantor that are relevant under such laws, and after giving effect to any collections from, rights to receive contribution from or payments made by or on behalf of any other Guarantor in respect of the obligations of such other Guarantor under this Article 10, result

in the obligations of such Guarantor under its Note Guarantee not constituting a fraudulent transfer or conveyance.

Section 10.03 *Execution and Delivery of Note Guarantee*.

The Note Guarantee of any Guarantor shall be evidenced solely by its execution and delivery of this Indenture (or, in the case of any Guarantor that is not party to this Indenture as of the date hereof, a supplemental indenture) and not by an endorsement on, or attachment to, any Note of any Note Guarantee or notation thereof. Each Guarantor hereby agrees that its Note Guarantee set forth in Section 10.01 shall be and remain in full force and effect notwithstanding any failure to endorse on any Note a notation of such Note Guarantee. The delivery of any Note by the Trustee, after the authentication thereof hereunder, shall constitute due delivery of the Note Guarantees set forth in this Indenture on behalf of each of the Guarantors.

Section 10.04 *Guarantors May Consolidate, etc., on Certain Terms*.

Except as otherwise provided in Section 10.05 hereof, no Guarantor may consolidate with or merge with or into (whether or not such Guarantor is the surviving Person) another Person, other than the Company or another Guarantor, unless:

(a) immediately after giving effect to such transaction or series of transactions, no Default or Event of Default exists; and

(b) either:

(1) subject to Section 10.05 hereof, the Person formed by or surviving any such consolidation or merger (if other than the Guarantor) unconditionally assumes all the obligations of that Guarantor under its Note Guarantee and this Indenture pursuant to a supplemental indenture in form reasonably satisfactory to the Trustee; or

(2) such transaction or series of transactions does not violate Section 4.10 hereof.

In case of any such consolidation or merger and upon the assumption by the successor Person, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the Note Guarantee of the Guarantor and the due and punctual performance of all of the covenants and conditions of this Indenture to be performed by the Guarantor, such successor Person will succeed to and be substituted for the Guarantor with the same effect as if it had been named herein as a Guarantor. All the Note Guarantees relating to Notes issuable hereunder which theretofore shall not have been signed by the Issuer and delivered to the Trustee will in all respects have the same legal rank and benefit under this Indenture as the Note Guarantees theretofore and thereafter issued in accordance with the terms of this Indenture as though all of such Note Guarantees had been issued at the date of the execution hereof.

Except as set forth in Articles 4 and 5 hereof, and notwithstanding clauses (b)(1) and (2) above, nothing contained in this Indenture or in any of the Notes will prevent any consolidation or merger of a Guarantor with or into the Company or another Guarantor, or will prevent any sale or

other disposition of the properties or assets of a Guarantor as an entirety or substantially as an entirety to the Company or another Guarantor.

Section 10.05 *Releases*.

Notwithstanding Section 10.04, the Note Guarantee of a Guarantor with respect to a series of Notes shall be released:

(a) in connection with any sale or other disposition of all or substantially all of the properties or assets of that Guarantor, by way of merger, consolidation or otherwise, to a Person that is not (either before or after giving effect to such transaction) the Company or a Restricted Subsidiary of the Company, if the sale or other disposition does not violate Section 4.10 hereof;

(b) in connection with any sale or other disposition of Capital Stock of that Guarantor to a Person that is not (either before or after giving effect to such transaction) the Company or a Restricted Subsidiary of the Company, if the sale or other disposition does not violate Section 4.10 hereof and such Guarantor ceases to be a Restricted Subsidiary of the Company as a result of the sale or other disposition;

(c) upon designation of such Guarantor as an Unrestricted Subsidiary in accordance with the terms of this Indenture; or

(d) at such time as such Guarantor does not Guarantee any Indebtedness under a Credit Facility or capital markets debt securities incurred or issued by the Company or any other Restricted Subsidiary and has not created, incurred, issued or assumed or is directly or indirectly liable, contingently or otherwise, with respect to any Indebtedness under a Credit Facility or capital markets debt securities, in each case, other than the Notes.

In addition, the Note Guarantees of all Guarantors of a series of Notes will be released, with respect to any series of Notes, upon Legal Defeasance or Covenant Defeasance with respect to such series in accordance with Article 8 hereof or satisfaction and discharge of this Indenture in accordance with Article 11 hereof.

Any release pursuant to the foregoing shall be deemed to occur automatically, without further action by the Trustee or Holders of Notes of any series, upon delivery by the Company of an Officers' Certificate stating that the conditions to such release have been satisfied. Any Guarantor not released from its obligations under its Note Guarantee with respect to any series of Notes as provided in this Section 10.05 will remain liable for the full amount of principal of, premium, if any, on, and interest, if any, on, the Notes of such series and for the other obligations of any Guarantor under this Indenture as provided in this Article 10.

ARTICLE 11
SATISFACTION AND DISCHARGE

Section 11.01 *Satisfaction and Discharge*.

This Indenture will be satisfied and discharged and will cease to be of further effect as to all Notes of a series issued hereunder (except as to surviving rights of registration of transfer or

exchange of the Notes of such series and as otherwise specified in this Article 11), and the Trustee, at the expense of the Issuer, shall execute proper instruments acknowledging such satisfaction and discharge of this Indenture, when:

(a) either:

(1) all Notes of such series that have been authenticated, except lost, stolen or destroyed Notes of such series that have been replaced or paid and Notes of such series for whose payment money has been deposited in trust and thereafter repaid to the Issuer, have been delivered to the Trustee for cancellation; or

(2) all Notes of such series that have not been delivered to the Trustee for cancellation have become due and payable or will become due and payable within one year by reason of the mailing of a notice of redemption or otherwise and either the Issuer or any Guarantor has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust solely for the benefit of the Holders of the Notes of such series, cash in U.S. dollars, non-callable Government Securities, or a combination thereof, in such amounts as will be sufficient, without consideration of any reinvestment of interest, to pay and discharge the entire Indebtedness on the Notes of such series not delivered to the Trustee for cancellation for principal, premium, if any, and interest, if any, to the date of Stated Maturity or redemption (*provided* that if such redemption requires the payment of any Applicable Premium with respect to any series of Notes, (x) the amount of cash in U.S. dollars, non-callable Government Securities, or a combination thereof, that must be irrevocably deposited will be determined using an assumed Applicable Premium calculated as of the date of such deposit and (y) the depositor must irrevocably deposit or cause to be deposited additional money in trust on the redemption date as necessary to pay such Applicable Premium as determined by such date);

(b) the Issuer has paid or caused to be paid all other sums payable by the Issuer under this Indenture with respect to such series of Notes; and

(c) the Issuer has delivered irrevocable instructions to the Trustee to apply the deposited money toward the payment of the Notes of such series at Stated Maturity or on the redemption date, as the case may be.

In addition, the Issuer must deliver an Officers' Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge have been satisfied.

Notwithstanding the satisfaction and discharge of this Indenture, if money has been deposited with the Trustee pursuant to subclause (2) of clause (a) of this Section 11.01, the provisions of Sections 11.02 and 8.06 hereof will survive. In addition, nothing in this Section 11.01 will be deemed to discharge those provisions of Section 7.07 hereof, that, by their terms, survive the satisfaction and discharge of this Indenture.

Section 11.02 *Application of Trust Money*.

Subject to the provisions of Section 8.06 hereof, all money deposited with the Trustee pursuant to Section 11.01 hereof shall be held in trust and applied by it, in accordance with the

provisions of the Notes of the applicable series and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal, premium, if any, interest, if any, for whose payment such money has been deposited with the Trustee; but such money need not be segregated from other funds except to the extent required by law.

If the Trustee or Paying Agent is unable to apply any money or Government Securities in accordance with Section 11.01 hereof by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the Issuer's and any Guarantor's obligations under this Indenture and the Notes of the applicable series shall be revived and reinstated as though no deposit had occurred pursuant to Section 11.01 hereof; *provided* that if the Issuer has made any payment of principal of, premium, if any, on, and interest, if any, on, any Notes of any series because of the reinstatement of their obligations, the Issuer shall be subrogated to the rights of the Holders of such Notes to receive such payment from the money or Government Securities held by the Trustee or Paying Agent.

Notwithstanding the above, the Trustee shall pay to the Company from time to time upon its request any money or Government Securities held by the Trustee as provided in this Section 11.02 which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification delivered to the Trustee, are in excess of the amount thereof that would then be required to be deposited to effect satisfaction and discharge under this Article 11.

Any money or Government Securities deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of, premium or interest on any Note of any series and remaining unclaimed for two years after such principal, and premium, if any, or interest has become due and payable shall be paid to the Company on its request or (if then held by the Company) shall be discharged from such trust; and the Holder of such Note of such series shall thereafter look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; *provided*, *however*, that the Trustee or such Paying Agent, before being required to make any such repayment, may, at the expense of the Company, cause to be published once, in *The New York Times* or *The Wall Street Journal* (national edition), notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such notification or publication, any unclaimed balance of such money then remaining shall be repaid to the Company.

ARTICLE 12
ESCROW MATTERS

Section 12.01 *Escrow Account*.

(a) On the Issue Date, the Issuer, the Escrow Agents and the Trustee will enter into the Escrow Agreements, and on the Issue Date, the Issuer will deposit (or cause to be deposited) into the applicable Escrow Account for each series of Notes an amount equal to the gross proceeds of the offering of the Notes of such series sold on the Issue Date (together with any additional amounts (as determined solely by the Escrow Issuer) as may be necessary to fund the redemption

of all the Notes of such series at the Special Mandatory Redemption Price for such series on the Special Mandatory Redemption Date for such series based on the Escrow Outside Date). The Company will only be entitled to cause the applicable Escrow Agent to release Escrowed Property under each Escrow Agreement (in which case the Escrowed Property will be paid to or as directed by the Company) upon delivery to the applicable Escrow Agent and the Trustee, on or prior to the Escrow Outside Date, of the Escrow Release Officer's Certificate under the applicable Escrow Agreement, certifying that the Escrow Conditions have been, or substantially concurrently with the release of the Escrowed Property, will be, satisfied. By its acceptance of the Note of any series, each Holder shall be deemed to have authorized and directed the Trustee to execute, deliver and perform its obligations under the Escrow Agreement for such series.

(b) The Escrow Issuer will not be required to make a Special Mandatory Redemption following the Escrow Release.

Section 12.02 *Special Mandatory Redemption*.

If a Special Mandatory Redemption of the Notes of any series is to occur pursuant to Section 3.10 hereof, the Escrow Agreement with respect to such series of Notes provides that the Escrow Agent under such Escrow Agreement will cause the liquidation of all Escrowed Property then held by it under such Escrow Agreement and cause the release of the proceeds of such liquidated Escrowed Property to the Trustee in accordance with the terms of such Escrow Agreement. The Trustee shall apply such proceeds to the payment of the Special Mandatory Redemption Price for such series of Notes, as set forth in Section 3.10 hereof.

Section 12.03 *Release of Escrowed Property*.

With respect to the Notes of each series, upon the satisfaction of the Escrow Conditions and the receipt by the Trustee and the Escrow Agent under the Escrow Agreement for such series of the Escrow Release Officer's Certificate, the Escrow Agreement for such series provides that the Escrow Agent under such Escrow Agreement will cause the liquidation of all Escrowed Property under such Escrow Agreement then held by it and cause the release of the proceeds of such liquidated Escrowed Property to or on the order of the Company on the Completion Date in accordance with the terms of such Escrow Agreement.

Section 12.04 *Permanent Issuer Assumption*.

Notwithstanding anything to the contrary in this Indenture, on the Completion Date,

(a) the Escrow Issuer shall merge with and into the Permanent Issuer, with the Permanent Issuer as the surviving corporation, and the Permanent Issuer shall assume all obligations of the Escrow Issuer in respect of the Notes of each series and this Indenture on the Completion Date upon satisfaction of the Escrow Conditions, as if the Permanent Issuer had itself issued such Notes:

(b) the Permanent Issuer and each Initial Guarantor shall execute and deliver to the Trustee a supplemental indenture in the form of Exhibit E hereto pursuant to which (i) the Permanent Issuer will become a party to this Indenture and expressly assume the Escrow Issuer's obligations under the Notes and this Indenture, the Permanent Issuer will be substituted for, and

may exercise every right and power of, the Issuer under this Indenture and the Escrow Issuer will be released from all obligations hereunder and (ii) each Initial Guarantor will become a Guarantor under this Indenture;

(c) the Permanent Issuer and each of the Initial Guarantors shall execute and deliver to the Initial Purchasers a joinder to the Purchase Agreement in the form attached as Annex 1 thereto; and

(d) the Escrow Issuer shall have delivered the Escrow Release Officer's Certificate required under Section 3(b)(i) of each Escrow Agreement as to satisfaction of all Escrow Conditions under each Escrow Agreement.

ARTICLE 13
MISCELLANEOUS

Section 13.01 *[Reserved]*.

Section 13.02 *Notices*.

Any notice or communication by the Issuer, any Guarantor or the Trustee to the others is duly given if in writing in the English language and delivered in Person or by first class mail (registered or certified, return receipt requested), electronic image scan, facsimile transmission or overnight air courier guaranteeing next day delivery, to the others' address:

If to the Issuer and the Guarantors:

Chesapeake Energy Corporation
610 North Western Avenue, Oklahoma City
Oklahoma 73118
Email Address: jim.webb@chk.com
Attention: General Counsel

If to the Trustee:

Deutsche Bank Trust Company Americas
Trust and Agency Services
60 Wall Street, 24th Floor
Mail Stop: NYC60-2405
New York, New York 10005
USA
Attn: Corporates Team, Chesapeake Energy, Deal ID SF4180
Facsimile: (732) 578-4635
Email Address: chris.niesz@db.com

The Issuer, any Guarantor or the Trustee, by notice to the others, may designate additional or different addresses for subsequent notices or communications. Notices given by publication will be deemed given on the first date on which publication is made.

All notices and communications (other than those sent to Holders) will be deemed to have been duly given: at the time delivered by hand, if personally delivered; five Business Days after being deposited in the mail, postage prepaid, if mailed; when receipt acknowledged, if transmitted by electronic image scan or facsimile; and the next Business Day after timely delivery to the courier, if sent by overnight air courier guaranteeing next day delivery.

Any notice or communication to a Holder will be mailed by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next day delivery to its address shown on the register kept by the Registrar, except that all notices and communications to the Depositary as a Holder shall be given in the manner it prescribes, notwithstanding anything to the contrary indication herein. Failure to send a notice or communication to a Holder or any defect in it will not affect its sufficiency with respect to other Holders.

If a notice or communication is given in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Issuer sends a notice or communication to Holders, it will send a copy to the Trustee and each Agent at the same time.

In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.

Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by the Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

Section 13.03 *[Reserved]*.

Section 13.04 *Certificate and Opinion as to Conditions Precedent.*

Upon any request or application by the Issuer to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:

(a) an Officers' Certificate in form and substance reasonably satisfactory to the Trustee (which must include the statements set forth in Section 13.05 hereof) stating that, in the opinion of the signers, all conditions precedent and covenants, if any, provided for in this Indenture relating to the proposed action have been satisfied; and

(b) an Opinion of Counsel in form and substance reasonably satisfactory to the Trustee (which must include the statements set forth in Section 13.05 hereof) stating that, in the opinion of such counsel, all such conditions precedent and covenants have been satisfied.

Section 13.05 *Statements Required in Certificate or Opinion.*

Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture must include:

(a) a statement that the person making such certificate or opinion has read such covenant or condition;

(b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(c) a statement that, in the opinion of such person, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been satisfied; and

(d) a statement as to whether or not, in the opinion of such person, such condition or covenant has been satisfied.

In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an Officer with respect to any Person may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by, counsel, unless such Officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such certificate or opinion of, or representation by, counsel may be based, insofar as it relates to factual matters, upon certificates of public officials or upon a certificate or opinion of, or representations by, an Officer or Officers with respect to any Person stating that the information with respect to such factual matters is in the possession of such Person (or, if such Person is a limited partnership, such Person's general partner) unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

Section 13.06 *Rules by Trustee and Agents*.

The Trustee may make reasonable rules for action by or at a meeting of Holders. The Registrar or Paying Agent may make reasonable rules and set reasonable requirements for its functions.

Section 13.07 *No Personal Liability of Directors, Managers, Officers, Employees and Members*.

No director, manager, officer, member, partner, employee, incorporator or other owner of Capital Stock of the Issuer or any Guarantor, as such, will have any liability for any obligations of the Issuer or the Guarantors under the Notes, this Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

Section 13.08 *Governing Law*.

THE LAW OF THE STATE OF NEW YORK WILL GOVERN AND BE USED TO CONSTRUE THIS INDENTURE, THE NOTES AND THE NOTE GUARANTEES.

Section 13.09 *No Adverse Interpretation of Other Agreements*.

This Indenture may not be used to interpret any other indenture, loan or debt agreement of the Company or its Subsidiaries or of any other Person. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

Section 13.10 *Successors*.

All agreements of the Issuer in this Indenture and the Notes will bind its successors, except as provided in Section 5.02. All agreements of the Trustee in this Indenture will bind its successors. All agreements of each Guarantor in this Indenture will bind its successors, except as otherwise provided in Section 10.05 hereof.

Section 13.11 *Severability*.

In case any provision in this Indenture or in the Notes is invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions will not in any way be affected or impaired thereby.

Section 13.12 *Counterpart Originals*.

The parties may sign any number of copies of this Indenture, and each party hereto may sign any number of separate copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes. Facsimile, documents executed, scanned and transmitted electronically and electronic signatures, including those created or transmitted through a software platform or application, shall be deemed original signatures for purposes of this Indenture and all matters and agreements related thereto, with such facsimile, scanned and electronic signatures having the same legal effect as original signatures. The parties agree that this Indenture or any instrument, agreement or document necessary for the consummation of the transactions

contemplated by this Indenture or related hereto or thereto (including, without limitation, addendums, amendments, notices, instructions, communications with respect to the delivery of securities or the wire transfer of funds or other communications) ("Executed Documentation") may be accepted, executed or agreed to through the use of an electronic signature in accordance with applicable laws, rules and regulations in effect from time to time applicable to the effectiveness and enforceability of electronic signatures. Any Executed Documentation accepted, executed or agreed to in conformity with such laws, rules and regulations will be binding on all parties hereto to the same extent as if it were physically executed and each party hereby consents to the use of any third party electronic signature capture service providers as may be reasonably chosen by a signatory hereto or thereto. When the Trustee acts on any Executed Documentation sent by electronic transmission, the Trustee will not be responsible or liable for any losses, costs or expenses arising directly or indirectly from its reliance upon and compliance with such Executed Documentation, notwithstanding that such Executed Documentation (a) may not be an authorized or authentic communication of the party involved or in the form such party sent or intended to send (whether due to fraud, distortion or otherwise) or (b) may conflict with, or be inconsistent with, a subsequent written instruction or communication; it being understood and agreed that the Trustee shall conclusively presume that Executed Documentation that purports to have been sent by an authorized officer of a Person has been sent by an authorized officer of such Person. The party providing Executed Documentation through electronic transmission or otherwise with electronic signatures agrees to assume all risks arising out of such electronic methods, including, without limitation, the risk of the Trustee acting on unauthorized instructions and the risk of interception and misuse by third parties

Section 13.13 *Table of Contents, Headings, etc.*

The Table of Contents, Cross-Reference Table and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part of this Indenture and will in no way modify or restrict any of the terms or provisions hereof.

Section 13.14 *Payment Date Other Than a Business Day.*

If any payment with respect to any principal of, premium, if any, on, or interest, if any, on any Note (including any payment to be made on any date fixed for redemption or purchase of any Note) is due on a day which is not a Business Day, then the payment need not be made on such date, but may be made on the next Business Day with the same force and effect as if made on such date, and no interest will accrue for the intervening period.

Section 13.15 *Evidence of Action by Holders.*

(a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given, made or taken by the Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agents duly appointed in writing, and may be given, made or taken in connection with a purchase of, or tender offer or exchange offer for, outstanding Notes; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein

sometimes referred to as the "Act" of the Holders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and conclusive in favor of the Trustee and the Company if made in the manner provided in this Section 13.15.

Without limiting the generality of this Section 13.15, unless otherwise provided in or pursuant to this Indenture, (i) a Holder, including a Depositary or its nominee that is a Holder of a Global Note, may give, make or take, by an agent or agents duly appointed in writing, any request, demand, authorization, direction, notice, consent, waiver or other Act provided in or pursuant to this Indenture to be given, made or taken by the Holders, and a Depositary or its nominee that is a Holder of a Global Note may duly appoint in writing as its agent or agents members of, or participants in, such Depositary holding interests in such Global Note in the records of such Depositary; and (ii) with respect to any Global Note the Depositary for which is DTC, any consent or other action given, made or taken by an "agent member" of DTC by electronic means in accordance with the Automated Tender Offer Procedures system or other customary procedures of, and pursuant to authorization by, DTC shall be deemed to constitute the "Act" of the Holder of such Global Note, and such Act shall be deemed to have been delivered to the Company and the Trustee upon the delivery by DTC of an "agent's message" or other notice of such consent or other action having been so given, made or taken in accordance with the customary procedures of DTC.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to such witness, notary or officer the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other manner which the Trustee deems sufficient.

(c) Notwithstanding anything to the contrary contained in this Section 13.15 or elsewhere in this Indenture, the principal amount and serial numbers of Notes held by any Holder, and the date of holding the same, shall be proved by the register of the Notes maintained by the Registrar as provided in Section 2.03.

(d) If the Company shall solicit from the Holders of the Notes any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, fix in advance a record date for the determination of the Holders entitled to give, make or take such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. Such record date shall be the record date specified in or pursuant to such resolution, which shall be a date not earlier than the date 30 days prior to the first solicitation of the Holders generally in connection therewith or the date of the most recent list of the Holders forwarded to the Trustee prior to such solicitation pursuant to Section 2.05 and not later than the date such solicitation is completed. If such a record date is fixed, then notwithstanding the second sentence of Section 9.03, any instrument embodying and evidencing such request, demand, authorization, direction, notice, consent, waiver or other Act may be executed before or after such record date, but only the Holders of record at the close of business on such record date (whether or not such Persons were Holders before, or continue to be Holders

after, such record date) shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of the then outstanding Notes have given, made or taken such request, demand, authorization, direction, notice, consent, waiver or other Act, and for that purpose the then outstanding Notes shall be computed as of such record date; *provided* that no such Act by the Holders of record on any record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than eleven months after such record date.

(e) Subject to Section 9.03, any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Note shall bind every future Holder of the same Note and the Holder of every Note issued upon the registration or transfer thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Issuer in reliance thereon, whether or not notation of such action is made upon such Note.

(f) Without limiting the foregoing, a Holder entitled hereunder to give, make or take any action hereunder with regard to any particular Note may do so itself with regard to all or any part of the principal amount of such Note or by one or more duly appointed agents each of which may do so pursuant to such appointment with regard to all or any part of such principal amount.

Section 13.16 *Benefit of Indenture*.

Nothing in this Indenture or in the Notes, express or implied, shall give to any Person, other than the parties hereto, any Paying Agent, any Registrar and their successors hereunder, and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 13.17 *Language of Notices, Etc*.

Any request, demand, authorization, direction, notice, consent, waiver or Act required or permitted under this Indenture shall be in the English language, except that any published notice may be in an official language of the country of publication.

Section 13.1*8* *U.S.A. Patriot Act*.

The parties hereto acknowledge that in accordance with Section 326 of the U.S.A. Patriot Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify and record information that identities each person or legal entity that establishes a relationship or opens an account with the Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the U.S.A. Patriot Act.

Section 13.19 *Force Majeure*.

In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, pandemic, epidemic, wide spread health crisis, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the

Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

[Signatures on following page]

SIGNATURES

CHESAPEAKE ESCROW ISSUER LLC

By: /s/ Domenic J. Dell'Osso, Jr.

Name: Domenic J. Dell'Osso, Jr.

Title: Sole Manager

[Signature Page to Indenture]

DEUTSCHE BANK TRUST COMPANY AMERICAS,
as Trustee

By: /s/ Bridgett Casanovas
Bridgett Casanovas
Vice President

By: /s/ Robert Peschler
Robert Peschler
Vice President

[Signature Page to Indenture]

EXHIBIT A-I

[Face of Note]

[Insert the Global Note Legend, if applicable pursuant to the provisions of the Indenture]

[Insert the Private Placement Legend, if applicable pursuant to the provisions of the Indenture]

[Insert Regulation S Temporary Legend, if applicable pursuant to the provisions of the Indenture]

No. _____

$ _____

CUSIP [165167 DF1][2]/[U16450 BA2][3]

5.500% Senior Notes due 2026

[CHESAPEAKE ESCROW ISSUER LLC][4]

promises to pay to or registered assigns, the principal sum of DOLLARS [or such greater or lesser amount as may be indicated on the attached Schedule of Exchanges of Interests in the Global Note] on February 1, 2026.

Interest Payment Dates: February 1 and August 1

Record Dates: January 15 and July 15

Dated: _____

[2] Use for 144A Notes.

[3] Use for Reg S Notes.

[4] To be used before the Completion Date.

[5]

[CHESAPEAKE ESCROW ISSUER LLC]

By: _____
Name:
Title:

This is one of the 2026 Notes referred to in the within-mentioned Indenture:

Deutsche Bank Trust Company Americas,
as Trustee

By: _____

[5] To be used before the Completion Date.

[BACK OF NOTE]

5.500% SENIOR NOTES DUE 2026

Capitalized terms used herein have the meanings assigned to them in the Indenture referred to below unless otherwise indicated.

(1) *INTEREST*. [Chesapeake Escrow Issuer LLC, a Delaware limited liability company][6] (the "*Company*" or the "*Issuer*") promises to pay interest on the unpaid principal amount of this 2026 Note at 5.500% per annum. The Issuer will pay interest, if any, semi-annually in arrears on February 1 and August 1 of each year, beginning August 1, 2021 (each, an "*Interest Payment Date*"). Interest on the 2026 Notes will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from the date of issuance; *provided* that, if there is no existing Default in the payment of interest, and if this 2026 Note is authenticated between a record date referred to on the face hereof and the next succeeding Interest Payment Date, interest shall accrue from such next succeeding Interest Payment Date. The Issuer will pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue principal and premium, if any, from time to time on demand at a rate that is equal to the then applicable interest rate on the 2026 Notes to the extent lawful; the Issuer will pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue installments of interest, if any (without regard to any applicable grace period), from time to time on demand at the same rate to the extent lawful.

Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. If any payment with respect to any principal of, premium, if any, on, or interest, if any, on any 2026 Note (including any payment to be made on any date fixed for redemption or purchase of any 2026 Note) is due on a day which is not a Business Day, then the payment need not be made on such date, but may be made on the next Business Day with the same force and effect as if made on such date, and no interest will accrue for the intervening period.

(2) *METHOD OF PAYMENT*. The Issuer will pay interest on the 2026 Notes (except defaulted interest), if any, to the Persons who are registered Holders of 2026 Notes at the close of business on the January 15 and July 15 next preceding each Interest Payment Date, even if such 2026 Notes are canceled after such record date and on or before such Interest Payment Date, except as provided in Section 2.12 of the Indenture with respect to defaulted interest. The 2026 Notes will be payable as to principal, premium, if any, and interest, if any, at the office or agency of the Issuer maintained for such purpose or, at the option of the Issuer, payment of interest, if any, may be made by check mailed to the Holders at their addresses set forth in the register of Holders; *provided* that payment by wire transfer of immediately available funds will be required with respect to principal of, premium, if any, on, and interest, if any, on, all Global Notes and all other 2026 Notes the Holders of which will have provided wire transfer instructions to the Company or the Paying Agent. Such payment will be in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts.

[6] To be used before the Completion Date.

(3) *PAYING AGENT AND REGISTRAR*. Initially, Deutsche Bank Trust Company Americas, the Trustee under the Indenture, will act as Paying Agent and Registrar. The Issuer may change the Paying Agent or Registrar without notice to any Holder. The Company or any of its Subsidiaries may act as Paying Agent or Registrar.

(4) *INDENTURE*. The Issuer issued the 2026 Notes under an Indenture dated as of February 5, 2021 (the "*Indenture*"), among the Issuer, the Guarantors party thereto from time to time and the Trustee. The 2026 Notes are subject to all such terms, and Holders are referred to the Indenture and such Act for a statement of such terms. To the extent any provision of this 2026 Note conflicts with the express provisions of the Indenture, the provisions of the Indenture shall govern and be controlling. [The 2026 Notes are unsecured obligations of the Issuer.][7] The Indenture does not limit the aggregate principal amount of 2026 Notes that may be issued thereunder.

(5) *OPTIONAL REDEMPTION*.

(a) At any time prior to February 5, 2023, the Issuer may on any one or more occasions redeem up to 35% of the aggregate principal amount of 2026 Notes issued under the Indenture, upon notice as provided in the Indenture, at a redemption price equal to 105.500% of the principal amount of the 2026 Notes redeemed, plus accrued and unpaid interest, if any, to the date of redemption (subject to the rights of Holders on the relevant record date to receive interest on the relevant Interest Payment Date), with an amount of cash not greater than the net cash proceeds of an Equity Offering, *provided* that:

(A) at least 65% of the aggregate principal amount of 2026 Notes originally issued on the date of the Indenture (excluding 2026 Notes held by the Company and its Subsidiaries) remains outstanding immediately after the occurrence of such redemption; and

(B) the redemption occurs within 180 days after the date of the closing of such Equity Offering.

(b) At any time prior to February 5, 2023, the Issuer may on any one or more occasions redeem all or a part of the 2026 Notes, upon notice as provided in the Indenture, at a redemption price equal to 100% of the principal amount of the 2026 Notes redeemed, plus the 2026 Applicable Premium as of the redemption date, plus accrued and unpaid interest, if any, to the date of redemption, subject to the rights of Holders on the relevant record date to receive interest due on the relevant Interest Payment Date.

(c) In connection with any tender offer for the 2026 Notes that is a Change of Control Offer or Asset Sale Offer, if Holders of not less than 90% in aggregate principal amount of the then-outstanding 2026 Notes validly tender and do not validly withdraw such 2026 Notes in such tender offer and the Company, or any third party making such tender offer in lieu of the Company, purchases all of the 2026 Notes validly tendered and not validly withdrawn by such Holders, the Company or such third party will have the right upon not less than 10 nor more than 60 days' prior notice, given not more than 30 days

[7] To be used after, but not before, the Completion Date.

following such purchase date, to redeem all 2026 Notes that remain outstanding following such purchase at a redemption price equal to the price offered to each other Holder of 2026 Notes (excluding any early tender or incentive fee) in such tender offer plus, to the extent not included in the tender offer payment, accrued and unpaid interest, if any, thereon, to, but excluding, the date of such redemption.

(d) The Issuer may redeem 2026 Notes when permitted by, and pursuant to the conditions in, Section 4.15(e) of the Indenture.

(e) Except pursuant to the preceding paragraphs, the 2026 Notes will not be redeemable at the Issuer's option prior to February 5, 2023.

(f) On and after February 5, 2023, the Issuer may on any one or more occasions redeem all or a part of the 2026 Notes, upon notice as provided in the Indenture, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, on the 2026 Notes redeemed, to the applicable redemption date, if redeemed during the twelve-month period beginning on February 5 of the years indicated below, subject to the rights of Holders on the relevant record date to receive interest on the relevant Interest Payment Date:

Year	Percentage
2023	102.750%
2024	101.375%
2025 and thereafter	100.000%

Unless the Issuer defaults in the payment of the redemption price, interest will cease to accrue on the 2026 Notes or portions thereof called for redemption on the applicable redemption date.

(6) *MANDATORY REDEMPTION*. [Except as provided in Section 9,][8] the Issuer is not required to make mandatory redemption or sinking fund payments with respect to the 2026 Notes.

(7) *REPURCHASE AT THE OPTION OF HOLDER*.

(a) If there is a Change of Control with respect to the 2026 Notes, except as provided in the Indenture, the Company will be required to make an offer (a "*Change of Control Offer*") to each Holder of 2026 Notes to repurchase all or any part (equal to $2,000 or an integral multiple of $1,000 in excess thereof) of each Holder's 2026 Notes at a purchase price in cash equal to 101% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, thereon to the date of purchase, subject to the rights of Holders on the relevant record date to receive interest due on the relevant Interest Payment Date (the "*Change of Control Payment*"). Within 30 days following any Change of Control with respect to the 2026 Notes, the Company will mail a notice to each Holder setting forth the procedures governing the Change of Control Offer as required by the Indenture.

(b) If the Company or a Restricted Subsidiary of the Company consummates any Asset Sales, within five days of each date on which the aggregate amount of Excess

[8] To be used before the Completion Date.

Proceeds exceeds $50.0 million, the Company may be required to make an Asset Sale Offer to all Holders of 2026 Notes and all holders of other Indebtedness that is *pari passu* with the 2026 Notes containing provisions similar to those set forth in the Indenture with respect to offers to purchase, prepay or redeem with the proceeds of sales of assets. The offer price in any Asset Sale Offer will be equal to 100% of the principal amount, plus accrued and unpaid interest, if any, to the date of purchase, prepayment or redemption, subject to the rights of Holders of 2026 Notes on the relevant record date to receive interest due on the relevant Interest Payment Date, and will be payable in cash. Holders of Definitive Notes that are the subject of an offer to purchase will receive an Asset Sale Offer from the Company prior to any related purchase date and may elect to have such 2026 Notes purchased by completing the form entitled "*Option of Holder to Elect Purchase*" attached to the 2026 Notes.

(8) *NOTICE OF REDEMPTION*. At least 10 days but not more than 60 days before a redemption date, the Issuer will mail or cause to be mailed by first class mail (or sent electronically if DTC is the recipient), a notice of redemption to each Holder whose 2026 Notes are to be redeemed at its registered address, except that redemption notices may be mailed more than 60 days prior to a redemption date if the notice is issued in connection with a defeasance of the 2026 Notes or a satisfaction and discharge of the Indenture pursuant to Article 8 or 11 thereof. Notices of redemption may be subject to conditions precedent as set forth in the Indenture. 2026 Notes and portions of 2026 Notes selected will be in amounts of $2,000 or whole multiples of $1,000 in excess thereof; except that if all of the 2026 Notes of a Holder are to be redeemed, the entire outstanding amount of 2026 Notes held by such Holder shall be redeemed.

(9) [SPECIAL MANDATORY REDEMPTION[9].

(a) In the event that the Company informs the Escrow Agent (2026 Notes) in writing prior to 5:00 p.m. (New York City time) on the Escrow Outside Date that, in the reasonable good faith judgment of the Company, the Effective Date will not occur on or prior to the Escrow Outside Date (the date of any such event being the "*Special Termination Date*"), the Issuer shall redeem the 2026 Notes (the "*Special Mandatory Redemption*") at a price (the "*Special Mandatory Redemption Price*") equal to 100% of the principal amount of the 2026 Notes, plus accrued and unpaid interest on the 2026 Notes, if any, from the Issue Date to, but excluding, the Special Mandatory Redemption Date, subject to the right of Holders of record of the 2026 Notes on the relevant record date to receive interest due on the relevant interest payment date.

(b) Subject to Section 9(c) hereof, notice of the Special Mandatory Redemption will be delivered by the Company no later than one Business Day following the Special Termination Date, to the Trustee, the Escrow Agent (2026 Notes) and the Holders of the 2026 Notes substantially in the form attached as Exhibit F to the Indenture (the "*Special Mandatory Redemption Notice*"), which will provide that the 2026 Notes shall be redeemed on a date that is no later than the third Business Day after such notice is given by the Company in accordance with the terms of the Escrow Agreement (2026 Notes) and the Indenture (the "*Special Mandatory Redemption Date*") or otherwise in accordance with the applicable procedures of DTC.

[9] To be used before the Completion Date.

(c) If, at or prior to 5:00 p.m. (New York City time) on the Escrow Outside Date, the Escrow Agent (2026 Notes) shall not have received any of (1) an Escrow Release Officer's Certificate pursuant to Section 3(b)(i) of the Escrow Agreement (2026 Notes), (2) an Acceleration Notice (as defined in the Escrow Agreement (2026 Notes)) or (3) a Special Mandatory Redemption Notice pursuant to Section 3(b)(ii) of the Escrow Agreement (2026 Notes) or pursuant to Section 3.10(b) of the Indenture, then (x) the Issuer shall redeem the 2026 Notes in accordance with Section 9(a) hereof and (y) the Trustee shall, on the Escrow Outside Date, (i) send electronically, mail or cause to be mailed by first-class mail, postage prepaid, a Special Mandatory Redemption Notice to each Holder of 2026 Notes, substantially in the form attached as Exhibit F to the Indenture and (ii) deliver a Special Mandatory Redemption Notice for all 2026 Notes pursuant to Section 3(b)(ii) of the Escrow Agreement (2026 Notes) with respect to the 2026 Notes prior to 5:00 p.m. (New York City time) on the Escrow Outside Date.

(d) On the Special Mandatory Redemption Date, the Escrow Agent (2026 Notes) shall pay to the Paying Agent for payment to each Holder of 2026 Notes the Special Mandatory Redemption Price for such Holder's 2026 Notes and, concurrently with the payment to such Holders and after deduction for any unpaid fees and expenses of the Trustee and Escrow Agent, deliver any excess Escrowed Property (if any) to the Company. In the event that the Escrowed Property (2026 Notes) is insufficient to pay the Special Mandatory Redemption Price on the Special Mandatory Redemption Date, plus fees and expenses of the Trustee and Escrow Agent (2026 Notes), the Issuer shall deposit any shortfall with the Paying Agent on or prior to the Special Mandatory Redemption Date.

(10) *DENOMINATIONS, TRANSFER, EXCHANGE*. The 2026 Notes are in registered form in minimum denominations of $2,000 and integral multiples of $1,000 in excess thereof. The transfer of 2026 Notes may be registered and 2026 Notes may be exchanged as provided in the Indenture. The Registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and the Issuer may require a Holder to pay any taxes and fees required by law or permitted by the Indenture. The Issuer need not exchange or register the transfer of any 2026 Note or portion of a 2026 Note selected for redemption, except for the unredeemed portion of any 2026 Note being redeemed in part. Also, the Issuer need not exchange or register the transfer of any 2026 Notes for a period of 15 days before a selection of 2026 Notes to be redeemed or during the period between a record date and the next succeeding Interest Payment Date.

(11) *PERSONS DEEMED OWNERS*. The registered Holder of a 2026 Note may be treated as the owner of it for all purposes. Only registered Holders have rights under the Indenture.

(12) *AMENDMENT, SUPPLEMENT AND WAIVER*. Subject to certain exceptions, the Indenture, the Notes, the Escrow Agreement for any series of Notes or the Note Guarantees may be amended or supplemented with the consent of the Holders of a majority in aggregate principal amount of the then outstanding Notes of each series affected thereby including Additional Notes of such series, if any, voting as a single class, and any existing Default or Event of Default with respect to any series of Notes or compliance with any provision of the Indenture or the Notes of any series or the Note Guarantees with respect to any series of Notes or the Escrow Agreement for any series of Notes may be waived with the consent of the Holders of a majority in aggregate principal amount of the then outstanding

Notes of each series affected thereby including Additional Notes of such series, if any, voting as a single class. Without the consent of any Holder of Notes, the Indenture, the Notes of any series or the Note Guarantees with respect to any series of Notes or the Escrow Agreement for any series of Notes may be amended or supplemented for certain purposes set forth in the Indenture.

(12) *DEFAULTS AND REMEDIES*. In the case of an Event of Default arising from certain events of bankruptcy or insolvency with respect to the Company, any Restricted Subsidiary of the Company that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary, the principal of, and accrued and unpaid interest, if any, on, all outstanding 2026 Notes will become due and payable immediately without further action or notice. If any other Event of Default with respect to the 2026 Notes occurs and is continuing, the Trustee or the Holders of at least 25% in aggregate principal amount of the then-outstanding 2026 Notes may declare the principal of, and accrued and unpaid interest, if any, on, all outstanding 2026 Notes to be due and payable immediately. Holders may not enforce the Indenture or the 2026 Notes except as provided in the Indenture. Subject to certain limitations, Holders of a majority in aggregate principal amount of the then-outstanding 2026 Notes may direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or exercising any trust or power conferred on it. The Trustee may withhold from Holders of the 2026 Notes notice of any continuing Default or Event of Default (except a Default or Event of Default relating to the payment of principal, premium, if any, on, and interest, if any, on the 2026 Notes) if it determines that withholding notice is in their interest. The Holders of a majority in aggregate principal amount of the then-outstanding 2026 Notes by notice to the Trustee may, on behalf of all the Holders, rescind an acceleration and its consequences under the Indenture except a continuing Default or Event of Default in the payment of principal of, premium, if any, on, or interest, if any, on, the 2026 Notes (including in connection with an offer to purchase any 2026 Notes). The Issuer is required to deliver to the Trustee annually an Officers' Certificate regarding compliance with the Indenture, and the Issuer is required, upon becoming aware of any Default or Event of Default, to deliver to the Trustee a written statement specifying such Default or Event of Default.

(13) *TRUSTEE DEALINGS WITH COMPANY*. The Trustee, in its individual or any other capacity, may make loans to, accept deposits from, and perform services for the Company or its Affiliates, and may otherwise deal with the Company or its Affiliates, as if it were not the Trustee.

(14) *NO RECOURSE AGAINST OTHERS*. No director, manager, officer, member, partner, employee, incorporator or other owner of Capital Stock of the Issuer or any Guarantor, as such, will have any liability for any obligations of the Issuer or the Guarantors under the 2026 Notes, the Indenture, the Note Guarantees with respect to the 2026 Notes or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of 2026 Notes by accepting a 2026 Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the 2026 Notes.

(15) *AUTHENTICATION*. This 2026 Note will not be valid until authenticated by the manual or electronic signature of the Trustee or an authenticating agent.

(16) *ABBREVIATIONS*. Customary abbreviations may be used in the name of a Holder or an assignee, such as: TEN COM (= tenants in common), TEN ENT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

(17) *CUSIP NUMBERS*. Pursuant to a recommendation promulgated by the Committee on Uniform Security Identification Procedures, the Company has caused CUSIP numbers to be printed on the 2026 Notes, and the Trustee may use CUSIP numbers in notices of redemption as a convenience to Holders. No representation is made as to the accuracy of such numbers either as printed on the 2026 Notes or as contained in any notice of redemption, and reliance may be placed only on the other identification numbers placed thereon.

(18) *GOVERNING LAW*. THE LAW OF THE STATE OF NEW YORK WILL GOVERN AND BE USED TO CONSTRUE THE INDENTURE, THIS 2026 NOTE AND THE NOTE GUARANTEES WITH RESPECT TO THIS 2026 NOTE.

The Company will furnish to any Holder upon written request and without charge a copy of the Indenture. Requests may be made to:

Chesapeake Energy Corporation
6100 North Western Avenue
Oklahoma, Oklahoma 73118
73154-0496

ASSIGNMENT FORM

To assign this Note, fill in the form below:

(I) or (we) assign and transfer this Note to: _____

_____

(Insert assignee's soc. sec. or tax I.D. no.)

_____

_____

_____

_____

(Print or type assignee's name, address and zip code)

and irrevocably appoint _____

to transfer this Security on the books of the Issuer. The agent may substitute another to act for him.

Date: _____

Your signature: _____

(Sign exactly as your name appears on the face of this Note)

Tax Identification No.: _____

Signature Guarantee*: _____

* Participant in a recognized Signature Guarantee Medallion Program (or other signature guarantor acceptable to the Trustee).

OPTION OF HOLDER TO ELECT PURCHASE

If you want to elect to have this 2026 Note purchased by the Company pursuant to Section 4.10 or 4.15 of the Indenture, check the appropriate box below:

☐ Section 4.10 ☐ Section 4.15

If you want to elect to have only part of the 2026 Note purchased by the Company pursuant to Section 4.10 or Section 4.15 of the Indenture, state the amount you elect to have purchased:

$ _____

Date: _____

Your signature: _____

(Sign exactly as your name appears on the face of this Note)

Tax Identification No.: _____

Signature Guarantee*: _____

* Participant in a recognized Signature Guarantee Medallion Program (or other signature guarantor acceptable to the Trustee).

SCHEDULE OF EXCHANGES OF INTERESTS IN THE GLOBAL NOTE *

The following exchanges of a part of this Global Note for an interest in another Global Note or for a Definitive Note, or exchanges of a part of another Global Note or Definitive Note for an interest in this Global Note, have been made:

Date of Exchange	Amount of decrease in Principal Amount of this Global Note	Amount of increase in Principal Amount of this Global Note	Principal Amount of this Global Note following such decrease (or increase)	Signature of authorized officer of Trustee or Custodian

* This schedule should be included only if the Note is issued in global form.

EXHIBIT A-II

[Face of Note]

[Insert the Global Note Legend, if applicable pursuant to the provisions of the Indenture]

[Insert the Private Placement Legend, if applicable pursuant to the provisions of the Indenture]

[Insert Regulation S Temporary Legend, if applicable pursuant to the provisions of the Indenture]

No. _____

$ _____

CUSIP [165167 DG9][10]/[U16450 BB0][11]

5.875% Senior Notes due 2029

[CHESAPEAKE ESCROW ISSUER LLC][12]

promises to pay to or registered assigns, the principal sum of DOLLARS [or such greater or lesser amount as may be indicated on the attached Schedule of Exchanges of Interests in the Global Note] on February 1, 2029.

Interest Payment Dates: February 1 and August 1

Record Dates: January 15 and July 15

Dated: _____

[10] Use for 144A Notes.

[11] Use for Reg S Notes.

[12] To be used before the Completion Date.

[13]

[CHESAPEAKE ESCROW ISSUER LLC]

By: _____
Name:
Title:

This is one of the 2029 Notes referred to in the within-mentioned Indenture:

Deutsche Bank Trust Company Americas,
as Trustee

By: _____

[13] To be used before the Completion Date.

[BACK OF NOTE]

5.875% SENIOR NOTES DUE 2029

Capitalized terms used herein have the meanings assigned to them in the Indenture referred to below unless otherwise indicated.

(1) *INTEREST*. [Chesapeake Escrow Issuer LLC, a Delaware limited liability company][14] (the "*Company*" or the "*Issuer*") promises to pay interest on the unpaid principal amount of this 2029 Note at 5.875% per annum. The Issuer will pay interest, if any, semi-annually in arrears on February 1 and August 1 of each year, beginning August 1, 2021 (each, an "*Interest Payment Date*"). Interest on the 2029 Notes will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from the date of issuance; *provided* that, if there is no existing Default in the payment of interest, and if this 2029 Note is authenticated between a record date referred to on the face hereof and the next succeeding Interest Payment Date, interest shall accrue from such next succeeding Interest Payment Date. The Issuer will pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue principal and premium, if any, from time to time on demand at a rate that is equal to the then applicable interest rate on the 2029 Notes to the extent lawful; the Issuer will pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on overdue installments of interest, if any (without regard to any applicable grace period), from time to time on demand at the same rate to the extent lawful.

Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. If any payment with respect to any principal of, premium, if any, on, or interest, if any, on any 2029 Note (including any payment to be made on any date fixed for redemption or purchase of any 2029 Note) is due on a day which is not a Business Day, then the payment need not be made on such date, but may be made on the next Business Day with the same force and effect as if made on such date, and no interest will accrue for the intervening period.

(2) *METHOD OF PAYMENT*. The Issuer will pay interest on the 2029 Notes (except defaulted interest), if any, to the Persons who are registered Holders of 2029 Notes at the close of business on the January 15 and July 15 next preceding each Interest Payment Date, even if such 2029 Notes are canceled after such record date and on or before such Interest Payment Date, except as provided in Section 2.12 of the Indenture with respect to defaulted interest. The 2029 Notes will be payable as to principal, premium, if any, and interest, if any, at the office or agency of the Issuer maintained for such purpose or, at the option of the Issuer, payment of interest, if any, may be made by check mailed to the Holders at their addresses set forth in the register of Holders; *provided* that payment by wire transfer of immediately available funds will be required with respect to principal of, premium, if any, on, and interest, if any, on, all Global Notes and all other 2029 Notes the Holders of which will have provided wire transfer instructions to the Company or the Paying Agent. Such payment will be in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts.

[14] To be used before the Completion Date.

(3) *PAYING AGENT AND REGISTRAR*. Initially, Deutsche Bank Trust Company Americas, the Trustee under the Indenture, will act as Paying Agent and Registrar. The Issuer may change the Paying Agent or Registrar without notice to any Holder. The Company or any of its Subsidiaries may act as Paying Agent or Registrar.

(4) *INDENTURE*. The Issuer issued the 2029 Notes under an Indenture dated as of February 5, 2021 (the "*Indenture*"), among the Issuer, the Guarantors party thereto from time to time and the Trustee. The 2029 Notes are subject to all such terms, and Holders are referred to the Indenture and such Act for a statement of such terms. To the extent any provision of this 2029 Note conflicts with the express provisions of the Indenture, the provisions of the Indenture shall govern and be controlling. [The 2029 Notes are unsecured obligations of the Issuer.][15] The Indenture does not limit the aggregate principal amount of 2029 Notes that may be issued thereunder.

(5) *OPTIONAL REDEMPTION*.

(a) At any time prior to February 5, 2024, the Issuer may on any one or more occasions redeem up to 35% of the aggregate principal amount of 2029 Notes issued under the Indenture, upon notice as provided in the Indenture, at a redemption price equal to 105.875% of the principal amount of the 2029 Notes redeemed, plus accrued and unpaid interest, if any, to the date of redemption (subject to the rights of Holders on the relevant record date to receive interest on the relevant Interest Payment Date), with an amount of cash not greater than the net cash proceeds of an Equity Offering, *provided* that:

(A) at least 65% of the aggregate principal amount of 2029 Notes originally issued on the date of the Indenture (excluding 2029 Notes held by the Company and its Subsidiaries) remains outstanding immediately after the occurrence of such redemption; and

(B) the redemption occurs within 180 days after the date of the closing of such Equity Offering.

(b) At any time prior to February 5, 2024, the Issuer may on any one or more occasions redeem all or a part of the 2029 Notes, upon notice as provided in the Indenture, at a redemption price equal to 100% of the principal amount of the 2029 Notes redeemed, plus the 2029 Applicable Premium as of the redemption date, plus accrued and unpaid interest, if any, to the date of redemption, subject to the rights of Holders on the relevant record date to receive interest due on the relevant Interest Payment Date.

(c) In connection with any tender offer for the 2029 Notes that is a Change of Control Offer or Asset Sale Offer, if Holders of not less than 90% in aggregate principal amount of the then-outstanding 2029 Notes validly tender and do not validly withdraw such 2029 Notes in such tender offer and the Company, or any third party making such tender offer in lieu of the Company, purchases all of the 2029 Notes validly tendered and not validly withdrawn by such Holders, the Company or such third party will have the right upon not less than 10 nor more than 60 days' prior notice, given not more than 30 days

[15] To be used after, but not before, the Completion Date.

following such purchase date, to redeem all 2029 Notes that remain outstanding following such purchase at a redemption price equal to the price offered to each other Holder of 2029 Notes (excluding any early tender or incentive fee) in such tender offer plus, to the extent not included in the tender offer payment, accrued and unpaid interest, if any, thereon, to, but excluding, the date of such redemption.

(d) The Issuer may redeem 2029 Notes when permitted by, and pursuant to the conditions in, Section 4.15(e) of the Indenture.

(e) Except pursuant to the preceding paragraphs, the 2029 Notes will not be redeemable at the Issuer's option prior to February 5, 2024.

(f) On and after February 5, 2024, the Issuer may on any one or more occasions redeem all or a part of the 2029 Notes, upon notice as provided in the Indenture, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, on the 2029 Notes redeemed, to the applicable redemption date, if redeemed during the twelve-month period beginning on February 5 of the years indicated below, subject to the rights of Holders on the relevant record date to receive interest on the relevant Interest Payment Date:

Year	Percentage
2024	102.938%
2025	101.469%
2026 and thereafter	100.000%

Unless the Issuer defaults in the payment of the redemption price, interest will cease to accrue on the 2029 Notes or portions thereof called for redemption on the applicable redemption date.

(6) *MANDATORY REDEMPTION*. [Except as provided in Section 9,][16] the Issuer is not required to make mandatory redemption or sinking fund payments with respect to the 2029 Notes.

(7) *REPURCHASE AT THE OPTION OF HOLDER*.

(a) If there is a Change of Control with respect to the 2029 Notes, except as provided in the Indenture, the Company will be required to make an offer (a "*Change of Control Offer*") to each Holder of 2029 Notes to repurchase all or any part (equal to $2,000 or an integral multiple of $1,000 in excess thereof) of each Holder's 2029 Notes at a purchase price in cash equal to 101% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, thereon to the date of purchase, subject to the rights of Holders on the relevant record date to receive interest due on the relevant Interest Payment Date (the "*Change of Control Payment*"). Within 30 days following any Change of Control with respect to the 2029 Notes, the Company will mail a notice to each Holder setting forth the procedures governing the Change of Control Offer as required by the Indenture.

(b) If the Company or a Restricted Subsidiary of the Company consummates any Asset Sales, within five days of each date on which the aggregate amount of Excess

[16] To be used before the Completion Date.

Proceeds exceeds $50.0 million, the Company may be required to make an Asset Sale Offer to all Holders of 2029 Notes and all holders of other Indebtedness that is *pari passu* with the 2029 Notes containing provisions similar to those set forth in the Indenture with respect to offers to purchase, prepay or redeem with the proceeds of sales of assets. The offer price in any Asset Sale Offer will be equal to 100% of the principal amount, plus accrued and unpaid interest, if any, to the date of purchase, prepayment or redemption, subject to the rights of Holders of 2029 Notes on the relevant record date to receive interest due on the relevant Interest Payment Date, and will be payable in cash. Holders of Definitive Notes that are the subject of an offer to purchase will receive an Asset Sale Offer from the Company prior to any related purchase date and may elect to have such 2029 Notes purchased by completing the form entitled "*Option of Holder to Elect Purchase*" attached to the 2029 Notes.

(8) *NOTICE OF REDEMPTION*. At least 10 days but not more than 60 days before a redemption date, the Issuer will mail or cause to be mailed by first class mail (or sent electronically if DTC is the recipient), a notice of redemption to each Holder whose 2029 Notes are to be redeemed at its registered address, except that redemption notices may be mailed more than 60 days prior to a redemption date if the notice is issued in connection with a defeasance of the 2029 Notes or a satisfaction and discharge of the Indenture pursuant to Article 8 or 11 thereof. Notices of redemption may be subject to conditions precedent as set forth in the Indenture. 2029 Notes and portions of 2029 Notes selected will be in amounts of $2,000 or whole multiples of $1,000 in excess thereof; except that if all of the 2029 Notes of a Holder are to be redeemed, the entire outstanding amount of 2029 Notes held by such Holder shall be redeemed.

(9) [SPECIAL MANDATORY REDEMPTION[17].

(a) In the event that the Company informs the Escrow Agent (2029 Notes) in writing prior to 5:00 p.m. (New York City time) on the Escrow Outside Date that, in the reasonable good faith judgment of the Company, the Effective Date will not occur on or prior to the Escrow Outside Date (the date of any such event being the "*Special Termination Date*"), the Issuer shall redeem the 2029 Notes (the "*Special Mandatory Redemption*") at a price (the "*Special Mandatory Redemption Price*") equal to 100% of the principal amount of the 2029 Notes, plus accrued and unpaid interest on the 2029 Notes, if any, from the Issue Date to, but excluding, the Special Mandatory Redemption Date, subject to the right of Holders of record of the 2029 Notes on the relevant record date to receive interest due on the relevant interest payment date.

(b) Subject to Section 9(c) hereof, notice of the Special Mandatory Redemption will be delivered by the Company no later than one Business Day following the Special Termination Date, to the Trustee, the Escrow Agent (2029 Notes) and the Holders of the 2029 Notes substantially in the form attached as Exhibit F to the Indenture (the "*Special Mandatory Redemption Notice*"), which will provide that the 2029 Notes shall be redeemed on a date that is no later than the third Business Day after such notice is given by the Company in accordance with the terms of the Escrow Agreement (2029 Notes) and the Indenture (the "*Special Mandatory Redemption Date*") or otherwise in accordance with the applicable procedures of DTC.

[17] To be used before the Completion Date.

(c) If, at or prior to 5:00 p.m. (New York City time) on the Escrow Outside Date, the Escrow Agent (2029 Notes) shall not have received any of (1) an Escrow Release Officer's Certificate pursuant to Section 3(b)(i) of the Escrow Agreement (2029 Notes), (2) an Acceleration Notice (as defined in the Escrow Agreement (2029 Notes)) or (3) a Special Mandatory Redemption Notice pursuant to Section 3(b)(ii) of the Escrow Agreement (2029 Notes) or pursuant to Section 3.10(b) of the Indenture, then (x) the Issuer shall redeem the 2029 Notes in accordance with Section 9(a) hereof and (y) the Trustee shall, on the Escrow Outside Date, (i) send electronically, mail or cause to be mailed by first-class mail, postage prepaid, a Special Mandatory Redemption Notice to each Holder of 2029 Notes, substantially in the form attached as Exhibit F to the Indenture and (ii) deliver a Special Mandatory Redemption Notice for all 2029 Notes pursuant to Section 3(b)(ii) of the Escrow Agreement (2029 Notes) with respect to the 2029 Notes prior to 5:00 p.m. (New York City time) on the Escrow Outside Date.

(d) On the Special Mandatory Redemption Date, the Escrow Agent (2029 Notes) shall pay to the Paying Agent for payment to each Holder of 2029 Notes the Special Mandatory Redemption Price for such Holder's 2029 Notes and, concurrently with the payment to such Holders and after deduction for any unpaid fees and expenses of the Trustee and Escrow Agent, deliver any excess Escrowed Property (if any) to the Company. In the event that the Escrowed Property (2029 Notes) is insufficient to pay the Special Mandatory Redemption Price on the Special Mandatory Redemption Date, plus fees and expenses of the Trustee and Escrow Agent (2029 Notes), the Issuer shall deposit any shortfall with the Paying Agent on or prior to the Special Mandatory Redemption Date.

(10) *DENOMINATIONS, TRANSFER, EXCHANGE*. The 2029 Notes are in registered form in minimum denominations of $2,000 and integral multiples of $1,000 in excess thereof. The transfer of 2029 Notes may be registered and 2029 Notes may be exchanged as provided in the Indenture. The Registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and the Issuer may require a Holder to pay any taxes and fees required by law or permitted by the Indenture. The Issuer need not exchange or register the transfer of any 2029 Note or portion of a 2029 Note selected for redemption, except for the unredeemed portion of any 2029 Note being redeemed in part. Also, the Issuer need not exchange or register the transfer of any 2029 Notes for a period of 15 days before a selection of 2029 Notes to be redeemed or during the period between a record date and the next succeeding Interest Payment Date.

(11) *PERSONS DEEMED OWNERS*. The registered Holder of a 2029 Note may be treated as the owner of it for all purposes. Only registered Holders have rights under the Indenture.

(12) *AMENDMENT, SUPPLEMENT AND WAIVER*. Subject to certain exceptions, the Indenture, the Notes, the Escrow Agreement for any series of Notes or the Note Guarantees may be amended or supplemented with the consent of the Holders of a majority in aggregate principal amount of the then outstanding Notes of each series affected thereby including Additional Notes of such series, if any, voting as a single class, and any existing Default or Event of Default with respect to any series of Notes or compliance with any provision of the Indenture or the Notes of any series or the Note Guarantees with respect to any series of Notes or the Escrow Agreement for any series of Notes may be waived with the consent of the Holders of a majority in aggregate principal amount of the then outstanding Notes of each series affected thereby including Additional

Notes of such series, if any, voting as a single class. Without the consent of any Holder of Notes, the Indenture, the Notes of any series or the Note Guarantees with respect to any series of Notes or the Escrow Agreement for any series of Notes may be amended or supplemented for certain purposes set forth in the Indenture.

(12) *DEFAULTS AND REMEDIES*. In the case of an Event of Default arising from certain events of bankruptcy or insolvency with respect to the Company, any Restricted Subsidiary of the Company that is a Significant Subsidiary or any group of Restricted Subsidiaries of the Company that, taken together, would constitute a Significant Subsidiary, the principal of, and accrued and unpaid interest, if any, on, all outstanding 2029 Notes will become due and payable immediately without further action or notice. If any other Event of Default with respect to the 2029 Notes occurs and is continuing, the Trustee or the Holders of at least 25% in aggregate principal amount of the then-outstanding 2029 Notes may declare the principal of, and accrued and unpaid interest, if any, on, all outstanding 2029 Notes to be due and payable immediately. Holders may not enforce the Indenture or the 2029 Notes except as provided in the Indenture. Subject to certain limitations, Holders of a majority in aggregate principal amount of the then-outstanding 2029 Notes may direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or exercising any trust or power conferred on it. The Trustee may withhold from Holders of the 2029 Notes notice of any continuing Default or Event of Default (except a Default or Event of Default relating to the payment of principal, premium, if any, on, and interest, if any, on the 2029 Notes) if it determines that withholding notice is in their interest. The Holders of a majority in aggregate principal amount of the then-outstanding 2029 Notes by notice to the Trustee may, on behalf of all the Holders, rescind an acceleration and its consequences under the Indenture except a continuing Default or Event of Default in the payment of principal of, premium, if any, on, or interest, if any, on, the 2029 Notes (including in connection with an offer to purchase any 2029 Notes). The Issuer is required to deliver to the Trustee annually an Officers' Certificate regarding compliance with the Indenture, and the Issuer is required, upon becoming aware of any Default or Event of Default, to deliver to the Trustee a written statement specifying such Default or Event of Default.

(13) *TRUSTEE DEALINGS WITH COMPANY*. The Trustee, in its individual or any other capacity, may make loans to, accept deposits from, and perform services for the Company or its Affiliates, and may otherwise deal with the Company or its Affiliates, as if it were not the Trustee.

(14) *NO RECOURSE AGAINST OTHERS*. No director, manager, officer, member, partner, employee, incorporator or other owner of Capital Stock of the Issuer or any Guarantor, as such, will have any liability for any obligations of the Issuer or the Guarantors under the 2029 Notes, the Indenture, the Note Guarantees with respect to the 2029 Notes or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of 2029 Notes by accepting a 2029 Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the 2029 Notes.

(15) *AUTHENTICATION*. This 2029 Note will not be valid until authenticated by the manual or electronic signature of the Trustee or an authenticating agent.

(16) *ABBREVIATIONS*. Customary abbreviations may be used in the name of a Holder or an assignee, such as: TEN COM (= tenants in common), TEN ENT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

(17) *CUSIP NUMBERS*. Pursuant to a recommendation promulgated by the Committee on Uniform Security Identification Procedures, the Company has caused CUSIP numbers to be printed on the 2029 Notes, and the Trustee may use CUSIP numbers in notices of redemption as a convenience to Holders. No representation is made as to the accuracy of such numbers either as printed on the 2029 Notes or as contained in any notice of redemption, and reliance may be placed only on the other identification numbers placed thereon.

(18) *GOVERNING LAW*. THE LAW OF THE STATE OF NEW YORK WILL GOVERN AND BE USED TO CONSTRUE THE INDENTURE, THIS 2026 NOTE AND THE NOTE GUARANTEES WITH RESPECT TO THIS 2029 NOTE.

The Company will furnish to any Holder upon written request and without charge a copy of the Indenture. Requests may be made to:

Chesapeake Energy Corporation
6100 North Western Avenue
Oklahoma, Oklahoma 73118
73154-0496

ASSIGNMENT FORM

To assign this Note, fill in the form below:

(I) or (we) assign and transfer this Note to: _____

_____

(Insert assignee's soc. sec. or tax I.D. no.)

_____

_____

_____

_____

(Print or type assignee's name, address and zip code)

and irrevocably appoint _____

to transfer this Security on the books of the Issuer. The agent may substitute another to act for him.

Date: _____

Your signature: _____

(Sign exactly as your name appears on the face of this Note)

Tax Identification No.: _____

Signature Guarantee*: _____

* Participant in a recognized Signature Guarantee Medallion Program (or other signature guarantor acceptable to the Trustee).

OPTION OF HOLDER TO ELECT PURCHASE

If you want to elect to have this 2029 Note purchased by the Company pursuant to Section 4.10 or 4.15 of the Indenture, check the appropriate box below:

☐ Section 4.10 ☐ Section 4.15

If you want to elect to have only part of the 2029 Note purchased by the Company pursuant to Section 4.10 or Section 4.15 of the Indenture, state the amount you elect to have purchased:

$ _____

Date: _____

Your signature: _____

(Sign exactly as your name appears on the face of this Note)

Tax Identification No.: _____

Signature Guarantee*: _____

* Participant in a recognized Signature Guarantee Medallion Program (or other signature guarantor acceptable to the Trustee).

SCHEDULE OF EXCHANGES OF INTERESTS IN THE GLOBAL NOTE *

The following exchanges of a part of this Global Note for an interest in another Global Note or for a Definitive Note, or exchanges of a part of another Global Note or Definitive Note for an interest in this Global Note, have been made:

Date of Exchange	Amount of decrease in Principal Amount of this Global Note	Amount of increase in Principal Amount of this Global Note	Principal Amount of this Global Note following such decrease (or increase)	Signature of authorized officer of Trustee or Custodian

* This schedule should be included only if the Note is issued in global form.

EXHIBIT B

FORM OF CERTIFICATE OF TRANSFER

[Chesapeake Escrow Issuer LLC][18]
6100 North Western Avenue
Oklahoma, Oklahoma 73118
73154-0496

Deutsche Bank Trust Company Americas
Transfer Unit – Operations
Deutsche Bank Trust Company Americas
c/o DB Services Americas, Inc.
5022 Gate Parkway, Suite 200
Jacksonville, FL 32256
Attn: Transfer Department

Re: [5.500% Senior Notes due 2026/5.875% Senior Notes due 2029]

Reference is hereby made to the Indenture, dated as of February 5, 2021 (the "*Indenture*"), among [Chesapeake Escrow Issuer LLC, a Delaware limited liability company (the "*Company*" or the "*Issuer*"),][19] the Guarantors party thereto, and Deutsche Bank Trust Company Americas, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

[●], (the "*Transferor*") owns and proposes to transfer the Note[s] or interest in such Note[s] specified in Annex A hereto, in the principal amount of $ [●] in such Note[s] or interests (the "*Transfer*"), to [●] (the "*Transferee*"), as further specified in Annex A hereto. In connection with the Transfer, the Transferor hereby certifies that:

[CHECK ALL THAT APPLY]

1. ☐ **Check if Transferee will take delivery of a beneficial interest in the 144A Global Note or a Restricted Definitive Note pursuant to Rule 144A**. The Transfer is being effected pursuant to and in accordance with Rule 144A under the Securities Act of 1933, as amended (the "*Securities Act*"), and, accordingly, the Transferor hereby further certifies that the beneficial interest or Definitive Note is being transferred to a Person that the Transferor reasonably believes is purchasing the beneficial interest or Definitive Note for its own account, or for one or more accounts with respect to which such Person exercises sole investment discretion, and such Person and each such account is a "qualified institutional buyer" within the meaning of Rule 144A in a transaction meeting the requirements of Rule 144A, and such Transfer is in compliance with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Definitive Note will be subject to the restrictions on transfer enumerated in the Private

[1] To be used before the Completion Date.
[2] To be used before the Completion Date.

Placement Legend printed on the 144A Global Note and/or the Restricted Definitive Note and in the Indenture and the Securities Act.

2. ☐ **Check if Transferee will take delivery of a beneficial interest in the Regulation S Temporary Global Note, the Regulation S Permanent Global Note or a Restricted Definitive Note pursuant to Regulation S**. The Transfer is being effected pursuant to and in accordance with Rule 903 or Rule 904 under the Securities Act and, accordingly, the Transferor hereby further certifies that (i) the Transfer is not being made to a Person in the United States and (x) at the time the buy order was originated, the Transferee was outside the United States or such Transferor and any Person acting on its behalf reasonably believed and believes that the Transferee was outside the United States or (y) the transaction was executed in, on or through the facilities of a designated offshore securities market and neither such Transferor nor any Person acting on its behalf knows that the transaction was prearranged with a buyer in the United States, (ii) no directed selling efforts have been made in contravention of the requirements of Rule 903(b) or Rule 904(b) of Regulation S under the Securities Act, (iii) the transaction is not part of a plan or scheme to evade the registration requirements of the Securities Act and (iv) if the proposed transfer is being made prior to the expiration of the Restricted Period, the transfer is not being made to a U.S. Person or for the account or benefit of a U.S. Person (other than an Initial Purchaser). Upon consummation of the proposed transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Definitive Note will be subject to the restrictions on Transfer enumerated in the Private Placement Legend printed on the Regulation S Permanent Global Note, the Regulation S Temporary Global Note and/or the Restricted Definitive Note and in the Indenture and the Securities Act.

3. ☐ **Check and complete if Transferee will take delivery of a beneficial interest in a Restricted Definitive Note pursuant to any provision of the Securities Act other than Rule 144A or Regulation S**. The Transfer is being effected in compliance with the transfer restrictions applicable to beneficial interests in Restricted Global Notes and Restricted Definitive Notes and pursuant to and in accordance with the Securities Act and any applicable blue sky securities laws of any state of the United States, and accordingly the Transferor hereby further certifies that (check one):

(a) ☐ such Transfer is being effected pursuant to and in accordance with Rule 144 under the Securities Act;

OR

(b) ☐ such Transfer is being effected to the Company or a subsidiary thereof;

OR

(c) ☐ such Transfer is being effected pursuant to an effective registration statement under the Securities Act and in compliance with the prospectus delivery requirements of the Securities Act.

4. ☐ **Check if Transferee will take delivery of a beneficial interest in an Unrestricted Global Note or of an Unrestricted Definitive Note**.

(a) ☐ **Check if Transfer is pursuant to Rule 144**. (i) The Transfer is being effected pursuant to and in accordance with Rule 144 under the Securities Act and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any state of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Definitive Note will no longer be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes, on Restricted Definitive Notes and in the Indenture.

(b) ☐ **Check if Transfer is Pursuant to Regulation S**. (i) The Transfer is being effected pursuant to and in accordance with Rule 903 or Rule 904 under the Securities Act and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any state of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Definitive Note will no longer be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes, on Restricted Definitive Notes and in the Indenture.

(c) ☐ **Check if Transfer is Pursuant to Other Exemption**. (i) The Transfer is being effected pursuant to and in compliance with an exemption from the registration requirements of the Securities Act other than Rule 144, Rule 903 or Rule 904 and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any State of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Definitive Note will not be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes or Restricted Definitive Notes and in the Indenture.

This certificate and the statements contained herein are made for your benefit.

_____

[Insert Name of Transferor]

By: _____

Name:

Title:

Dated: _____

ANNEX A TO CERTIFICATE OF TRANSFE**R**

1. The Transferor owns and proposes to transfer the following:

[CHECK (a) OR (b)]

(a) [I a beneficial interest in the [CHECK (i), (ii) OR (iii)]:

(i) [I 144A Global Note (CUSIP [•]),

(ii) [I Regulation S Temporary Global Note (CUSIP [•]), or

(iii) [I Regulation S Permanent Global Note (CUSIP [•]); or

(b) [I a Restricted Definitive Note.

2. After the Transfer the Transferee will hold:

[CHECK (a), (b) OR (c)]

(a) [I a beneficial interest in the [CHECK (i), (ii) OR (iii)]:

(i) [I 144A Global Note (CUSIP [•]), or

(ii) [I Regulation S Global Note (CUSIP [•]), or

(iii) [I Unrestricted Global Note (CUSIP [•]) or

(b) [I a Restricted Definitive Note; or

(c) [I an Unrestricted Definitive Note,

in accordance with the terms of the Indenture.

EXHIBIT C

FORM OF CERTIFICATE OF EXCHANGE

[Chesapeake Escrow Issuer LLC][20]
6100 North Western Avenue
Oklahoma, Oklahoma 73118
73154-0496

Deutsche Bank Trust Company Americas
Transfer Unit – Operations
Deutsche Bank Trust Company Americas
c/o DB Services Americas, Inc.
5022 Gate Parkway, Suite 200
Jacksonville, FL 32256
Attn: Transfer Department

Re: [5.500% Senior Notes due 2026/5.875% Senior Notes due 2029]

(CUSIP [●])

Reference is hereby made to the Indenture, dated as of February 5, 2021 (the "*Indenture*"), among [Chesapeake Escrow Issuer LLC, a Delaware limited liability company] (the "*Company*" or the "*Issuer*"), the Guarantors party thereto, and Deutsche Bank Trust Company Americas, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

[●], (the "*Owner*") owns and proposes to exchange the Note[s] or interest in such Note[s] specified herein, in the principal amount of $ [●] in such Note[s] or interests (the "*Exchange*"). In connection with the Exchange, the Owner hereby certifies that:

1. **Exchange of Restricted Definitive Notes or Beneficial Interests in a Restricted Global Note for Unrestricted Definitive Notes or Beneficial Interests in an Unrestricted Global Note**

(a) ☐ **Check if Exchange is from beneficial interest in a Restricted Global Note to beneficial interest in an Unrestricted Global Note**. In connection with the Exchange of the Owner's beneficial interest in a Restricted Global Note for a beneficial interest in an Unrestricted Global Note in an equal principal amount, the Owner hereby certifies (i) the beneficial interest is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Global Notes and pursuant to and in accordance with the Securities Act of 1933, as amended (the "*Securities Act*"), (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the beneficial interest in an Unrestricted

[20] To be used before the Completion Date.

Global Note is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(b) ☐ **Check if Exchange is from beneficial interest in a Restricted Global Note to Unrestricted Definitive Note**. In connection with the Exchange of the Owner's beneficial interest in a Restricted Global Note for an Unrestricted Definitive Note, the Owner hereby certifies (i) the Definitive Note is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Restricted Global Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the Definitive Note is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(c) ☐ **Check if Exchange is from Restricted Definitive Note to beneficial interest in an Unrestricted Global Note**. In connection with the Owner's Exchange of a Restricted Definitive Note for a beneficial interest in an Unrestricted Global Note, the Owner hereby certifies (i) the beneficial interest is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to Restricted Definitive Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the beneficial interest is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(d) ☐ **Check if Exchange is from Restricted Definitive Note to Unrestricted Definitive Note**. In connection with the Owner's Exchange of a Restricted Definitive Note for an Unrestricted Definitive Note, the Owner hereby certifies (i) the Unrestricted Definitive Note is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to Restricted Definitive Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the Unrestricted Definitive Note is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

2. **Exchange of Restricted Definitive Notes or Beneficial Interests in Restricted Global Notes for Restricted Definitive Notes or Beneficial Interests in Restricted Global Notes**

(a) ☐ **Check if Exchange is from beneficial interest in a Restricted Global Note to Restricted Definitive Note.** In connection with the Exchange of the Owner's beneficial interest in a Restricted Global Note for a Restricted Definitive Note with an equal principal amount, the Owner hereby certifies that the Restricted Definitive Note is being acquired for the Owner's own account without transfer. Upon consummation of the proposed Exchange in accordance with the terms of the Indenture, the Restricted Definitive Note issued will continue to be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Definitive Note and in the Indenture and the Securities Act.

(b) ☐ **Check if Exchange is from Restricted Definitive Note to beneficial inte re s t in a Restricted Global Note**. In connection with the Exchange of the Owner's Restricted Definitive Note for a beneficial interest in the [CHECK ONE] ☐ 144A Global Note, Eli Regulation S Global Note with an equal principal amount, the Owner hereby certifies (i) the beneficial interest is being acquired for the Owner's own account without transfer and (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Restricted Global Notes and pursuant to and in accordance with the Securities Act, and in compliance with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed Exchange in accordance with the terms of the Indenture, the beneficial interest issued will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the relevant Restricted Global Note and in the Indenture and the Securities Act.

This certificate and the statements contained herein are made for your benefit.

_____

[Insert Name of Transferor]

By: _____

Name:

Title:

Dated: _____

EXHIBIT D

[FORM OF SUPPLEMENTAL INDENTURE
TO BE DELIVERED BY SUBSEQUENT GUARANTORS]

SUPPLEMENTAL INDENTURE (this "*Supplemental Indenture*"), dated as of among (the "*Guaranteeing Subsidiary*"), a subsidiary of Chesapeake Energy Corporation, an Oklahoma corporation (the "*Company*" or the "*Issuer*"), the Company, the other Guarantors (as defined in the Indenture referred to herein) and Deutsche Bank Trust Company Americas, as trustee under the Indenture referred to below (the "*Trustee*").

W I T N E S S E T H

WHEREAS, the Issuer has heretofore executed and delivered to the Trustee an indenture (the "*Indenture*"), dated as of February 5, 2021, providing for the issuance of 5.500% Senior Notes due February 1, 2026 (the "*2026 Notes*" and of 5.875% Senior Notes due February 1, 2029 (the "2029 *Notes*" and, together with the 2026 Notes, the "*Notes*");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiary shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiary shall unconditionally Guarantee all of the Issuer's Obligations under the Notes and the Indenture on the terms and conditions set forth herein (the "*Note Guarantee*"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture without the consent of Holders of the Notes;.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiary, the other Guarantors, the Issuer and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes of each series as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. The Guaranteeing Subsidiary hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Note Guarantee for each series of Notes and in the Indenture including but not limited to Article 10 thereof.

3. NO RECOURSE AGAINST OTHERS. No director, manager, officer, member, partner, employee, incorporator or unitholder or other owner of Capital Stock of the Issuer or any Guarantor, as such, will have any liability for any obligations of the Issuer or the Guarantors under the Notes, the Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

5. NEW YORK LAW TO GOVERN. THE LAW OF THE STATE OF NEW YORK SHALL GOVERN AND BE USED TO CONSTRUE THIS SUPPLEMENTAL INDENTURE.

6. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture, and each party hereto may sign any number of separate copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

7. EFFECT OF HEADINGS. The headings of the Sections of this Supplemental Indenture have been inserted for convenience of reference only, are not to be considered a part of this Supplemental Indenture and will in no way modify or restrict any of the terms or provisions hereof.

8. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiary, the other Guarantors and the Issuer.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed and attested, all as of the date first above written.

Dated: _____

[GUARANTEEING SUBSIDIARY]

By: _____
Name:
Title:

CHESAPEAKE ENERGY CORPORATION

By: _____
Name:
Title:

[EXISTING GUARANTORS]

By: _____
Name:
Title:

DEUTSCHE BANK TRUST COMPANY AMERICAS,
As Trustee

By: _____

Name:

Title:

By: _____

Name:

Title:

EXHIBIT E

[FORM OF FIRST SUPPLEMENTAL
INDENTURE
TO BE DELIVERED BY THE PERMANENT
ISSUER AND THE GUARANTORS ON THE
COMPLETION DATE]

First Supplemental Indenture (this "*First Supplemental Indenture*"), dated as of February [_], 2021 among Chesapeake Energy Corporation, an Oklahoma corporation (the "*Company*" or the "*Permanent Issuer*"), the parties that are signatories hereto as Guarantors (each, a "*Guaranteeing Subsidiary*") and Deutsche Bank Trust Company Americas, as trustee (in such capacity, the "*Trustee*").

W I T N E S S E T H:

WHEREAS, Chesapeake Escrow Issuer LLC (the "*Escrow Issuer*") has heretofore executed and delivered to the Trustee an indenture (the "*Indenture*"), dated as of February 5, 2021, providing for the issuance of 5.500% Senior Notes due February 1, 2029 (the "*2026 Notes*" and of 5.875% Senior Notes due February 1, 2029 (the "2029 *Notes*" and, together with the 2026 Notes, the "*Notes*");

WHEREAS, on the date hereof, the Escrow Issuer has merged with and into the Permanent Issuer, with the Permanent Issuer as the surviving corporation;

WHEREAS, the parties hereto desire to enter into this First Supplemental Indenture to evidence the assumption by the Permanent Issuer of all the payment and other obligations of the Escrow Issuer under the Notes and the Indenture on the Completion Date;

WHEREAS, the Indenture provides that upon the Completion Date each of the Permanent Issuer and each Guaranteeing Subsidiary shall execute and deliver to the Trustee a supplemental indenture and become parties to the Indenture and pursuant to which the Permanent Issuer shall assume all of the obligations of the Escrow Issuer under the Notes and the Indenture, as applicable, and each Guaranteeing Subsidiary shall unconditionally guarantee, on a joint and several basis with the other Guaranteeing Subsidiaries, all of the Permanent Issuer's Obligations under the Notes and the Indenture on the terms and conditions set forth herein and under the Indenture (the "*Guarantee*");

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee, the Permanent Issuer and the Guarantors are authorized to execute and deliver this First Supplemental Indenture without the consent of Holders of the Notes;

WHEREAS, each of the Permanent Issuer and the Guarantors has been duly authorized to enter into this First Supplemental Indenture; and

WHEREAS, all acts, conditions, proceedings and requirements necessary to make this First Supplemental Indenture a valid, binding and legal agreement enforceable in accordance with its terms for the purposes expressed herein, in accordance with its terms, have been duly done and performed.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes of each series as follows:

ARTICLE I
DEFINITIONS

Section 1.1. *Defined Terms*. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture. The words "herein," "hereof" and "hereby" and other words of similar import used in this First Supplemental Indenture refer to this First Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE II
ASSUMPTION AND AGREEMENTS

Section 2.1. *Assumption of Obligations*. The Permanent Issuer hereby agrees, as of the date hereof, to assume, to be bound by and to be liable, as a primary obligor and not as a guarantor or surety, with respect to, any and all payment obligations under the Indenture and the Notes on the terms and subject to the conditions set forth in the Indenture and all other obligations of the Permanent Issuer under the Indenture.

ARTICLE III
AGREEMENT TO BE BOUND, GUARANTEE

Section 3.1. *Agreement to be Bound*. Each Guaranteeing Subsidiary hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture.

Section 3.2. *Guarantee*. Each Guaranteeing Subsidiary hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Note Guarantee for each series of Notes and in the Indenture including but not limited to Article 10 thereof.

ARTICLE IV
MISCELLANEOUS

Section 4.1. *Notices*. All notices and other communications to the Permanent Issuer and the Guarantors shall be given as provided in the Indenture to the Permanent Issuer and the Guarantors.

Section 4.2. *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, firm or corporation, other than the Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this First Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 4.3. *Severability*. In case any provision in this First Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 4.4. *Execution and Delivery*. (a) The Permanent Issuer agrees that its assumption of all of the payment obligations under the Notes and the Indenture shall remain in full force and effect notwithstanding the absence of the endorsement of any notation of such assumption of all of the payment obligations under the Notes and the Indenture on the Notes.

(b) Each Guaranteeing Subsidiary agrees that the Guarantee shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of any such Guarantee.

Section 4.5. *No Recourse Against Others*. No director, manager, officer, member, partner, employee, incorporator or unitholder or other owner of Capital Stock of the Permanent Issuer or any Guarantor, as such, will have any liability for any obligations of the Permanent Issuer or the Guarantors under the Notes, the Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

Section 4.6. *Governing Law*. THE LAW OF THE STATE OF NEW YORK SHALL GOVERN AND BE USED TO CONSTRUE THIS FIRST SUPPLEMENTAL INDENTURE.

Section 4.7. *Counterparts*. The parties may sign any number of copies of this Supplemental Indenture, and each party hereto may sign any number of separate copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 4.8. *Headings*. The headings of the Sections of this First Supplemental Indenture have been inserted for convenience of reference only, are not to be considered a part of this First Supplemental Indenture and will in no way modify or restrict any of the terms or provisions hereof.

Section 4.9. *The Trustee*. The Trustee makes no representation or warranty as to the validity or sufficiency of this First Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 4.10. *Benefits Acknowledged*. (a) The Permanent Issuer’s assumption of all of the payment obligations under the Notes and the Indenture is subject to the terms and conditions set forth in the Indenture. The Permanent Issuer acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Indenture and this First Supplemental Indenture and that its assumption of all of the payment obligations under the Notes and the Indenture and the waivers made by them pursuant to this First Supplemental Indenture are knowingly made in contemplation of such benefits.

(b) Each Guaranteeing Subsidiary's Guarantee is subject to the terms and conditions set forth in the Indenture. Each Guaranteeing Subsidiary acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Indenture and this First Supplemental Indenture and that the guarantee and waivers made by it pursuant to this Guarantee are knowingly made in contemplation of such benefits.

Section 4.11. *Successors*. All agreements of the Permanent Issuer and the Guarantors in this First Supplemental Indenture shall bind their Successors, except as otherwise provided in this First Supplemental Indenture. All agreements of the Trustee in this First Supplemental Indenture shall bind its successors.

Section 4.12. *Ratification of Indenture; Supplemental Indentures Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This First Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder heretofore or hereafter authenticated and delivered shall be bound hereby.

IN WITNESS WHEREOF, the parties hereto have caused this First Supplemental Indenture to be duly executed, all as of the date first above written.

Chesapeake Energy Corporation as Permanent Issuer

By: _____

Name:

Title:

[GUARANTOR], as a Guarantor

By: _____

Name:

Title:

DEUTSCHE BANK TRUST COMPANY AMERICAS,
As Trustee

By: _____

Name:

Title:

By: _____

Name:

Title:

EXHIBIT F

Form of Special Mandatory Redemption Notice

NOTICE OF SPECIAL MANDATORY REDEMPTION
TO THE HOLDERS OF
[5.500% SENIOR NOTES DUE 2026/5.875% SENIOR NOTES DUE 2029]

CHESAPEAKE ESCROW ISSUER LLC
(CUSIP No. [_])

NOTICE IS HEREBY GIVEN that Chesapeake Escrow Issuer LLC, a Delaware limited liability company (the "*Issuer*"), pursuant to the Indenture, dated as of February 5, 2021, providing for the issuance of 5.500% Senior Notes due February 1, 2026 (the "*2026 Notes*" and of 5.875% Senior Notes due February 1, 2029 (the "2029 *Notes*"), shall redeem all of its outstanding [2026 Notes/2029 Notes] on [ ], 202[ ] (the "*Special Mandatory Redemption Date*") pursuant to Section 3.10 of the Indenture. The redemption price for each Note will be $1,000 per $1,000 principal amount thereof, plus accrued and unpaid interest thereon from the Issue Date to, but excluding, the Special Mandatory Redemption Date (the "*Special Mandatory Redemption Price*"). Capitalized terms used herein (but otherwise not defined) shall have such meanings as set forth in the Indenture.

The Indenture provides that upon the deposit of funds sufficient to pay the Special Mandatory Redemption Price in respect of the Notes to be redeemed on the Special Mandatory Redemption Date with the Trustee prior to 11:00 a.m. New York City time on such date, interest will cease to accrue on the Notes.

In order to receive the redemption payment, the Notes called for redemption must be surrendered for payment at the following location of Wilmington Trust, National Association, the Trustee and Paying Agent. Notes to be redeemed must be surrendered for payment: (a) in book-entry form by transferring the Notes to be redeemed to the Trustee's account at The Depository Trust Company ("DTC") in accordance with DTC's procedures; or (b) by delivering the Notes to be redeemed to the Trustee at:

Deutsche Bank Trust Company Americas
Trust and Agency Services
60 Wall Street, 24th Floor
Mail Stop: NYC60-2405
New York, New York 10005
USA
Attn: Corporates Team, Chesapeake Energy, Deal ID SF4180
Facsimile: (732) 578-4635
Email Address: chris.niesz@db.com

The method of delivery of the Notes is at the election and risk of the Holder. If delivered by mail, certified or registered mail, properly insured, is recommended.

No representation is being made as to the correctness of the CUSIP numbers either as printed on the Notes or as contained in this notice. Holders should rely only on the other identification numbers printed on the Notes.

IMPORTANT NOTICE

For Holders of Notes who have not established an exemption, payments made upon the redemption of the Notes may be subject to U.S. federal withholding of 24 % of the payments to be made, as and to the extent required by the provisions of the U.S. Internal Revenue Code. To establish an exemption from such withholding, Holders of Notes should submit a completed and signed Internal Revenue Service Form W-9 (or applicable Form W-8) when surrendering their Notes for payment.

Date: [ ], 2021

By: [CHESAPEAKE ESCROW ISSUER LLC/DEUTSCHE BANK TRUST COMPANY AMERICAS]

Exhibit 10.12

JOINDER AGREEMENT

Chesapeake Energy Corporation

and the Guarantors party hereto

$500,000,000 of 5.500% Senior Notes due 2026

$500,000,000 of 5.875% Senior Notes due 2029

February 9, 2021

Goldman Sachs & Co. LLC,
RBC Capital Markets, LLC
As representatives of the several Purchasers
named in Schedule I hereto,

c/o Goldman Sachs & Co. LLC
200 West Street
New York, New York 10282

c/o RBC Capital Markets, LLC
Brookfield Place
200 Vesey Street, 8th Floor
New York, New York 10281

Reference is hereby made to that certain purchase agreement (the "Purchase Agreement") dated as of February 2, 2021, among Chesapeake Escrow Issuer LLC, a Delaware limited liability company(the "Escrow Issuer") and Goldman Sachs & Co. LLC and RBC Capital Markets, LLC as representatives of each of the other Purchasers named in Schedule I thereto (collectively, the "Purchasers") relating to the issuance and sale to the Purchasers of $500,000,000 aggregate principal amount of Escrow Issuer's 5.500% Senior Notes due 2026 and $500,000,000 aggregate principal amount of the Escrow Issuer's 5.875% Senior Notes due 2029 (the "Securities"). Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase Agreement.

Chesapeake Energy Corporation, an Oklahoma corporation, has assumed the rights and obligations of the Escrow Issuer with respect to the Securities under the Indenture pursuant to, and in accordance with, the provisions of the Indenture and (ii) the Guarantors that were originally not a party thereto have agreed to join in the Purchase Agreement pursuant to this agreement (this "Joinder Agreement") on the Completion Date pursuant to, and in accordance with, the provisions of the Indenture.

1. **Joinder**. Each of the undersigned hereby acknowledges that it has received a copy of the Purchase Agreement and acknowledges and agrees with the Purchasers that by its execution and delivery hereof it shall (i) join and become a party to the Purchase Agreement; (ii) be bound by all covenants,

agreements, representations, warranties and acknowledgements applicable to such party as set forth in and in accordance with the terms of the Purchase Agreement; and (iii) perform all obligations and duties as required of it in accordance with the Purchase Agreement.

2. **Counterparts**. This Joinder Agreement may be signed in one or more counterparts (which may be delivered in original form or via facsimile or other electronic transmission), each of which shall constitute an original when so executed and all of which together shall constitute one and the same agreement.

3. **Amendments**. No amendment or waiver of any provision of this Joinder Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties thereto.

4. **Headings**. The section headings used herein are for convenience only and shall not affect the construction hereof.

5. **GOVERNING LAW**. THIS JOINDER AGREEMENT, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS JOINDER AGREEMENT, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

[*Remainder of Page Intentionally Blank*]

IN WITNESS WHEREOF, each of the undersigned has caused this Joinder Agreement to be duly executed and delivered, by its proper and duly authorized officer as of the date set forth above.

CHESAPEAKE ENERGY CORPORATION

By: /s/ Domenic J. Dell'Osso, Jr.
Name: Domenic J. Dell'Osso, Jr.
Title: Executive Vice President - Chief Financial Officer

GUARANTORS

By: /s/ Domenic J. Dell'Osso, Jr.
Name: Domenic J. Dell'Osso, Jr.

Sole Director of the Corporate Subsidiary Guarantors listed below:

BRAZOS VALLEY LONGHORN FINANCE CORPORATION
CHESAPEAKE NG VENTURES CORPORATION
CHK ENERGY HOLDINGS, INC.
SPARKS DRIVE SWD, INC.
WINTER MOON ENERGY CORPORATION

Officer of the Managers of the Limited Liability Company Subsidiary Guarantors listed below:

BURLESON SAND LLC
CHESAPEAKE AEZ EXPLORATION, L.L.C.
CHESAPEAKE APPALACHIA, L.L.C.
CHESAPEAKE E&P HOLDING, L.L.C.
CHESAPEAKE ENERGY LOUISIANA, LLC
CHESAPEAKE ENERGY MARKETING, L.L.C.
CHESAPEAKE EXPLORATION, L.L.C.
CHESAPEAKE LAND DEVELOPMENT COMPANY, L.L.C.
CHESAPEAKE MIDSTREAM DEVELOPMENT, L.L.C.
CHESAPEAKE PLAINS, LLC
CHESAPEAKE ROYALTY, L.L.C.
CHESAPEAKE VRT, L.L.C.

CHESAPEAKE-CLEMENTS ACQUISITION, L.L.C.
CHK NGV LEASING COMPANY, L.L.C.
COMPASS MANUFACTURING, L.L.C.
EMPRESS, L.L.C.
ESQUISTO RESOURCES II, LLC
GSF, L.L.C.
MC LOUISIANA MINERALS, L.L.C.
MC MINERAL COMPANY, L.L.C.
MIDCON COMPRESSION, L.L.C.
NOMAC SERVICES, L.L.C.
WHE ACQCO., LLC
WHR EAGLE FORD LLC
WILDHORSE RESOURCES II, LLC
WILDHORSE RESOURCES MANAGEMENT COMPANY, LLC

CHESAPEAKE OPERATING, L.L.C.
On behalf of itself and as general partner of the following limited partnership:

CHESAPEAKE LOUISIANA, L.P.

EMLP, L.L.C.
On behalf of itself and as a general partner of the following limited partnership:

EMPRESS LOUISIANA PROPERTIES, L.P.

Officer of the Managing Members of the Limited Liability Company Subsidiary Guarantors listed below:

BRAZOS VALLEY LONGHORN, L.L.C.
BURLESON WATER RESOURCES, LLC
CHK UTICA, L.L.C.
NORTHERN MICHIGAN EXPLORATION COMPANY, L.L.C.
PETROMAX E&P BURLESON, LLC

Exhibit 10.13

FIRST SUPPLEMENTAL INDENTURE

First Supplemental Indenture (this "*First Supplemental Indenture*"), dated as of February 9, 2021 among Chesapeake Energy Corporation, an Oklahoma corporation (the "*Company*" or the "*Permanent Issuer*"), the parties that are signatories hereto as Guarantors (each, a "*Guaranteeing Subsidiary*") and Deutsche Bank Trust Company Americas, as trustee (in such capacity, the "*Trustee*").

W I T N E S S E T H:

WHEREAS, Chesapeake Escrow Issuer LLC (the "*Escrow Issuer*") has heretofore executed and delivered to the Trustee an indenture (the "*Indenture*"), dated as of February 5, 2021, providing for the issuance of 5.500% Senior Notes due February 1, 2029 (the "*2026 Notes*" and of 5.875% Senior Notes due February 1, 2029 (the "2029 *Notes*" and, together with the 2026 Notes, the "*Notes*");

WHEREAS, on the date hereof, the Escrow Issuer has merged with and into the Permanent Issuer, with the Permanent Issuer as the surviving corporation;

WHEREAS, the parties hereto desire to enter into this First Supplemental Indenture to evidence the assumption by the Permanent Issuer of all the payment and other obligations of the Escrow Issuer under the Notes and the Indenture on the Completion Date;

WHEREAS, the Indenture provides that upon the Completion Date each of the Permanent Issuer and each Guaranteeing Subsidiary shall execute and deliver to the Trustee a supplemental indenture and become parties to the Indenture and pursuant to which the Permanent Issuer shall assume all of the obligations of the Escrow Issuer under the Notes and the Indenture, as applicable, and each Guaranteeing Subsidiary shall unconditionally guarantee, on a joint and several basis with the other Guaranteeing Subsidiaries, all of the Permanent Issuer's Obligations under the Notes and the Indenture on the terms and conditions set forth herein and under the Indenture (the "*Guarantee*");

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee, the Permanent Issuer and the Guarantors are authorized to execute and deliver this First Supplemental Indenture without the consent of Holders of the Notes;

WHEREAS, each of the Permanent Issuer and the Guarantors has been duly authorized to enter into this First Supplemental Indenture; and

WHEREAS, all acts, conditions, proceedings and requirements necessary to make this First Supplemental Indenture a valid, binding and legal agreement enforceable in accordance with its terms for the purposes expressed herein, in accordance with its terms, have been duly done and performed.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes of each series as follows:

ARTICLE I
DEFINITIONS

Section 1.1 *Defined Terms*. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture. The words "herein," "hereof" and "hereby" and other words

of similar import used in this First Supplemental Indenture refer to this First Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE II
ASSUMPTION AND AGREEMENTS

Section 2.1 *Assumption of Obligations*. The Permanent Issuer hereby agrees, as of the date hereof, to assume, to be bound by and to be liable, as a primary obligor and not as a guarantor or surety, with respect to, any and all payment obligations under the Indenture and the Notes on the terms and subject to the conditions set forth in the Indenture and all other obligations of the Permanent Issuer under the Indenture.

ARTICLE III
AGREEMENT TO BE BOUND, GUARANTEE

Section 3.1 *Agreement to be Bound*. Each Guaranteeing Subsidiary hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture.

Section 3.2 *Guarantee*. Each Guaranteeing Subsidiary hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Note Guarantee for each series of Notes and in the Indenture including but not limited to Article 10 thereof.

ARTICLE IV
MISCELLANEOUS

Section 4.1 *Notices*. All notices and other communications to the Permanent Issuer and the Guarantors shall be given as provided in the Indenture to the Permanent Issuer and the Guarantors.

Section 4.2 *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, firm or corporation, other than the Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this First Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 4.3 *Severability*. In case any provision in this First Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 4.4 *Execution and Delivery*. (a) The Permanent Issuer agrees that its assumption of all of the payment obligations under the Notes and the Indenture shall remain in full force and effect notwithstanding the absence of the endorsement of any notation of such assumption of all of the payment obligations under the Notes and the Indenture on the Notes.

(b) Each Guaranteeing Subsidiary agrees that the Guarantee shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of any such Guarantee.

Section 4.5 *No Recourse Against Others*. No director, manager, officer, member, partner, employee, incorporator or unitholder or other owner of Capital Stock of the Permanent Issuer or any Guarantor, as such, will have any liability for any obligations of the Permanent Issuer or the Guarantors

under the Notes, the Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes.

Section 4.6 *Governing Law*. THE LAW OF THE STATE OF NEW YORK SHALL GOVERN AND BE USED TO CONSTRUE THIS FIRST SUPPLEMENTAL INDENTURE.

Section 4.7 *Counterparts*. The parties may sign any number of copies of this Supplemental Indenture, and each party hereto may sign any number of separate copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 4.8 *Headings*. The headings of the Sections of this First Supplemental Indenture have been inserted for convenience of reference only, are not to be considered a part of this First Supplemental Indenture and will in no way modify or restrict any of the terms or provisions hereof.

Section 4.9 *The Trustee*. The Trustee makes no representation or warranty as to the validity or sufficiency of this First Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 4.10 *Benefits Acknowledged*. (a) The Permanent Issuer's assumption of all of the payment obligations under the Notes and the Indenture is subject to the terms and conditions set forth in the Indenture. The Permanent Issuer acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Indenture and this First Supplemental Indenture and that its assumption of all of the payment obligations under the Notes and the Indenture and the waivers made by them pursuant to this First Supplemental Indenture are knowingly made in contemplation of such benefits.

(b) Each Guaranteeing Subsidiary's Guarantee is subject to the terms and conditions set forth in the Indenture. Each Guaranteeing Subsidiary acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Indenture and this First Supplemental Indenture and that the guarantee and waivers made by it pursuant to this Guarantee are knowingly made in contemplation of such benefits.

Section 4.11 *Successors*. All agreements of the Permanent Issuer and the Guarantors in this First Supplemental Indenture shall bind their Successors, except as otherwise provided in this First Supplemental Indenture. All agreements of the Trustee in this First Supplemental Indenture shall bind its successors.

Section 4.12 *Ratification of Indenture; Supplemental Indentures Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This First Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder heretofore or hereafter authenticated and delivered shall be bound hereby.

IN WITNESS WHEREOF, the parties hereto have caused this First Supplemental Indenture to be duly executed, all as of the date first above written.

CHESAPEAKE ENERGY CORPORATION,
as Permanent Issuer

By: /s/ Domenic J. Dell'Osso, Jr.
Name: Domenic J. Dell'Osso, Jr.
Title: Executive Vice President - Chief Financial Officer

GUARANTORS

By: /s/ Domenic J. Dell'Osso, Jr.
Name: Domenic J. Dell'Osso, Jr.

Sole Director of the Corporate Subsidiary Guarantors listed below:

BRAZOS VALLEY LONGHORN FINANCE CORPORATION
CHESAPEAKE NG VENTURES CORPORATION
CHK ENERGY HOLDINGS, INC.
SPARKS DRIVE SWD, INC.
WINTER MOON ENERGY CORPORATION

Officer of the Managers of the Limited Liability Company Subsidiary Guarantors listed below:

BURLESON SAND LLC
CHESAPEAKE AEZ EXPLORATION, L.L.C.
CHESAPEAKE APPALACHIA, L.L.C.
CHESAPEAKE E&P HOLDING, L.L.C.
CHESAPEAKE ENERGY LOUISIANA, LLC
CHESAPEAKE ENERGY MARKETING, L.L.C.
CHESAPEAKE EXPLORATION, L.L.C.
CHESAPEAKE LAND DEVELOPMENT COMPANY, L.L.C.
CHESAPEAKE MIDSTREAM DEVELOPMENT, L.L.C.

CHESAPEAKE PLAINS, LLC
CHESAPEAKE ROYALTY, L.L.C.
CHESAPEAKE VRT, L.L.C.
CHESAPEAKE-CLEMENTS ACQUISITION, L.L.C.
CHK NGV LEASING COMPANY, L.L.C.
COMPASS MANUFACTURING, L.L.C.
EMPRESS, L.L.C.
ESQUISTO RESOURCES II, LLC
GSF, L.L.C.
MC LOUISIANA MINERALS, L.L.C.
MC MINERAL COMPANY, L.L.C.
MIDCON COMPRESSION, L.L.C.
NOMAC SERVICES, L.L.C.
WHE ACQCO., LLC
WHR EAGLE FORD LLC
WILDHORSE RESOURCES II, LLC
WILDHORSE RESOURCES MANAGEMENT COMPANY, LLC

CHESAPEAKE OPERATING, L.L.C.
On behalf of itself and as general partner of the following limited partnership:

CHESAPEAKE LOUISIANA, L.P.

EMLP, L.L.C.
On behalf of itself and as a general partner of the following limited partnership:

EMPRESS LOUISIANA PROPERTIES, L.P.

Officer of the Managing Members of the Limited Liability Company Subsidiary Guarantors listed below:

BRAZOS VALLEY LONGHORN, L.L.C.
BURLESON WATER RESOURCES, LLC
CHK UTICA, L.L.C.
NORTHERN MICHIGAN EXPLORATION COMPANY, L.L.C.
PETROMAX E&P BURLESON, LLC

DEUTSCHE BANK TRUST COMPANY AMERICAS,
As Trustee

By: /s/ Chris Niesz

Name: Chris Niesz
Title: Vice President

By: /s/ Kathryn Fischer

Name: Kathryn Fischer
Title: Vice President

[Signature Page to First Supplemental Indenture]

CHESAPEAKE ENERGY CORPORATION
an Oklahoma Corporation

SIGNIFICANT SUBSIDIARIES*

Limited Liability Companies	State of Organization
Brazos Valley Longhorn, L.L.C.	Delaware
Chesapeake Appalachia, L.L.C.	Oklahoma
Chesapeake Energy Marketing, L.L.C.	Oklahoma
Chesapeake Exploration, L.L.C.	Oklahoma
Chesapeake Land Development Company, L.L.C.	Oklahoma
Chesapeake Operating, L.L.C.	Oklahoma
WHR Eagle Ford LLC	Delaware

Partnerships	State of Organization
Chesapeake Louisiana, L.P.	Oklahoma

* In accordance with Regulation S-K Item 601(b)(21), the names of particular subsidiaries that, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary (as that term is defined in Rule 1-02(w) of Regulation S-X) as of the end of the year covered by this report have been omitted.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-253340) of Chesapeake Energy Corporation of our report dated March 1, 2021 relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Oklahoma City, Oklahoma
March 1, 2021

Exhibit 23.2

CONSENT OF LAROCHE PETROLEUM CONSULTANTS, LTD.

We consent to the incorporation by reference in the Registration Statement on Form S-8 (File No. 333-253340) of Chesapeake Energy Corporation of our report for the Company and the references to our firm and said report, in the context in which it appears, in this Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (this "Form 10-K"), which report is included as an exhibit to this Form 10-K.

LaRoche Petroleum Consultants, Ltd.
By: LPC, Inc., as General Partner

By: /s/ William M. Kazmann
William M. Kazmann
President

March 1, 2021

Exhibit 31.1

CERTIFICATION

I, Robert D. Lawler, certify that:

1. I have reviewed this Annual Report on Form 10-K of Chesapeake Energy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 1, 2021

By: /s/ ROBERT D. LAWLER
Robert D. Lawler
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Domenic J. Dell'Osso, Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K of Chesapeake Energy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 1, 2021

By: /s/ DOMENIC J. DELL'OSSO, JR.
Domenic J. Dell'Osso, Jr.
Executive Vice President and Chief Financial Officer

Exhibit 32.1

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

In connection with the Annual Report of Chesapeake Energy Corporation (the "Company") on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert D. Lawler, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 1, 2021

By: /s/ ROBERT D. LAWLER
Robert D. Lawler
President and Chief Executive Officer

Exhibit 32.2

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

In connection with the Annual Report of Chesapeake Energy Corporation (the "Company") on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Domenic J. Dell'Osso, Jr., Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 1, 2021

By: /s/ DOMENIC J. DELL'OSSO, JR.
Domenic J. Dell'Osso, Jr.
Executive Vice President and Chief Financial Officer

Exhibit 95.1

Mine Safety Disclosures

Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act") and Item 104 of Regulation S-K (17 CFR 229.104) require certain disclosures by companies required to file periodic reports under the Securities Exchange Act of 1934, as amended, that operate mines regulated under the Federal Mine Safety and Health Act of 1977 (as amended by the Mine Improvement and New Emergency Response Act of 2006, the "Mine Act").

Burleson Sand LLC ("Burleson Sand") is a wholly owned subsidiary of Brazos Valley Longhorn, L.L.C. (successor in interest to WildHorse Resource Development Corporation) ("WildHorse"), which is a wholly owned subsidiary of Chesapeake Energy Corporation. On January 4, 2018, Burleson Sand acquired surface and sand rights on approximately 727 acres in Burleson County, Texas to construct and operate an in-field sand mine to support WildHorse's exploration and development operations. Burleson Sand began operations in September 2018 and is subject to regulation by the federal Mine Safety and Health Administration ("MSHA") under the Mine Act. The MSHA inspects mining facilities on a regular basis and issues citations and orders when it believes a violation has occurred under the Mine Act.

The MSHA, upon determination that a violation of the Mine Act has occurred, may issue a citation or an order which generally proposes civil penalties or fines upon the mine operator. Citations and orders may be appealed with the potential of reduced or dismissed penalties.

The table below reflects citations, orders, violations and proposed assessments issued to Burleson Sand by MSHA during the three-month period ended December 31, 2020. Due to timing and other factors, the data may not agree with the mine data retrieval systems maintained by MSHA at www.MSHA.gov.

	Burleson Sand Mine 41-05369
Section 104 significant and substantial citations	—
Section 104(b) orders	—
Section 104(d) citations and orders	—
Section 110(b)(2) violations	—
Section 107(a) orders	—
Total dollar value of MSHA assessments proposed[(a)]	$ 679
Total number of mining related fatalities	—
Received notice of pattern of violations under section 104(e)	No
Received notice of potential to have pattern under section 104(e)	No
Legal actions pending as of last day of period[(b)]	1
Legal actions initiated during period[(b)]	1
Legal actions resolved during period	None

---

a) Represents the total dollar value of all proposed or outstanding assessments, regardless of classification, received from MSHA on or before December 31, 2020, regardless of whether the assessment has been challenged or appealed.

b) In October 2020, the Company contested a civil penalty proposed by MSHA. This contest remains pending.