As filed with the U.S. Securities and Exchange Commission on February 24, 2023

Registration No. 333-269488

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

AMENDMENT NO. 3
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Atlas Energy Solutions Inc.

(Exact name of registrant as specified in its charter)

Delaware	1400	88-0523830
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

5918 W. Courtyard Drive, Suite 500
Austin, Texas 78730
(512) 220-1200
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John Turner
President and Chief Financial Officer
5918 W. Courtyard Drive, Suite 500
Austin, Texas 78730
(512) 220-1200
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Douglas E. McWilliams **Thomas G. Zentner** **Vinson & Elkins L.L.P.** **200 West 6th Street, Suite 2500** **Austin, Texas 78701** **(512) 542-8400**	**David J. Miller** **Monica E. White** **Latham & Watkins LLP** **301 Congress Avenue, Suite 900** **Austin, Texas 78701** **(737) 910-7300**

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box: ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 7(a)(2)(B) of the Securities Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the U.S. Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell the securities described herein until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell such securities, and it is not soliciting an offer to buy such securities in any state or jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED , 2023

Shares

Atlas Energy Solutions Inc.

Class A Common Stock

This is the initial public offering of our Class A common stock. We are offering shares of our Class A common stock.

Prior to this offering, there has been no public market for our Class A common stock. It is currently anticipated that the initial public offering price for our Class A common stock will be between $ and $ per share. We have applied to list our Class A common stock on the New York Stock Exchange (the "NYSE") under the symbol "AESI."

We are an "emerging growth company" as the term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, are eligible for reduced reporting requirements. Please see the section titled "Risk Factors" and "Summary—Emerging Growth Company Status."

Because the Principal Stockholders (as defined herein) will hold approximately % of the voting power of our Class A common stock and Class B common stock on a combined basis upon the closing of this offering, we will be a "controlled company" under the corporate governance rules of the NYSE. See "Management—Status as a Controlled Company" for additional information.

Investing in our Class A common stock involves risks. See "Risk Factors" beginning on page 39 to read about factors you should consider before investing in our Class A common stock.

Neither the U.S. Securities and Exchange Commission ("SEC") nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price(1)	$	$
Underwriting discounts and commissions(2)	$	$
Proceeds, before expenses, to Atlas Energy Solutions Inc.	$	$

(1) The public offering price for the shares sold to the public was $ per share.
(2) See "Underwriting" for information relating to underwriting compensation, including certain expenses of the underwriters to be reimbursed by us.

The underwriters will have an option to purchase, exercisable within 30 days from the date of this prospectus, a maximum of additional shares of our Class A common stock from us, at the initial price to public less the underwriting discount and commissions.

The underwriters expect to deliver the shares of Class A common stock against payment in New York, New York on , 2023.

Goldman Sachs & Co. LLC **BofA Securities** **Piper Sandler**

RBC Capital Markets **Barclays** **Citigroup**

Raymond James **Johnson Rice & Company L.L.C.**

Stephens Inc.

Capital One Securities **Pickering Energy Partners**

Drexel Hamilton

Prospectus dated , 2023.

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Neither we nor the underwriters have authorized anyone to provide you with information different from that contained in this prospectus and any free writing prospectus we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell shares of Class A common stock and seeking offers to buy shares of Class A common stock only in jurisdictions where offers and sales are permitted. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of any sale of the Class A common stock. Our business, liquidity position, financial condition, prospects or results of operations may have changed since the date of this prospectus.

This prospectus contains forward-looking statements that are subject to a number of risks and uncertainties, many of which are beyond our control. See the sections titled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements."

BASIS OF PRESENTATION

Unless otherwise indicated, the historical financial information presented in this prospectus is that of Atlas Sand Company, LLC ("Atlas LLC"), our "Predecessor" for financial reporting purposes. Further, the financial information and certain other information presented in this prospectus have been rounded to the nearest whole number or the nearest decimal. Therefore, the sum of the numbers in a column may not conform exactly to the total figure given for that column in certain tables in this prospectus. In addition, certain percentages presented in this prospectus reflect calculations based upon the underlying information prior to rounding and, accordingly, may not conform exactly to the percentages that would be derived if the relevant calculations were based upon the rounded numbers or may not sum due to rounding.

INDUSTRY AND MARKET DATA

This prospectus includes industry data and forecasts that we obtained from a variety of sources, including independent publications, government publications and publicly available information, as well as our good faith estimates, which have been derived from management's knowledge and experience in the industry in which we operate. Although we believe that these third-party sources are reliable, we have not independently verified the data obtained from these sources and we cannot assure you of the accuracy or completeness of the data. Forecasts and other forward-looking information obtained from these sources are subject to the same qualifications and uncertainties as the other forward-looking statements in this prospectus.

The market data regarding supply and demand is difficult to quantify, as the proppant industry continues to evolve and many market participants are privately held, making accurate estimates of supply capacity and market demand difficult to qualify. While we are not aware of any misstatements regarding the market, industry or similar data presented herein, such data involves risks and uncertainties and are subject to change based on various factors, including those discussed in the sections titled "Cautionary Note Regarding Forward-Looking Statements" and "Risk Factors" in this prospectus. Please read the section titled "Industry" for additional information on the proppant industry.

TRADEMARKS AND TRADE NAMES

We own or have rights to various trademarks, service marks and trade names that we use in connection with the operation of our business. This prospectus may also contain trademarks, service marks and trade names of third parties, which are the property of their respective owners. Our use or display of third parties' trademarks, service marks, trade names or products in this prospectus is not intended to, and does not imply, a relationship with, or endorsement or sponsorship by, us. Solely for convenience, the trademarks, service marks and trade names referred to in this prospectus may appear without the ®, TM or SM symbols, but the omission of such references is not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable owner of these trademarks, service marks and trade names.

"Who We Are": A Discussion of Corporate Integrity and our Mission to Increase Access to Affordable Energy, Which Thereby Enhances Human Flourishing, Society and the Environment

Since the founding of our first enterprise in 1990, Brigham Exploration Company, our mission has been to improve human beings' access to the hydrocarbons that power our lives. It is by pursuing this mission that we fulfill our core responsibility to create value for our owners, the essence of our corporate integrity. We are proud of the role that we play in providing energy security throughout economic cycles and in bettering human lives, while also delivering differentiated social and environmental progress.

We have a long history of being good stewards of not only stockholder capital but also of the environments and communities in which we live and operate. Our core obligation is to our stockholders, and we recognize that maximizing value for our stockholders requires that we optimize the outcomes for our broader stakeholders, including our employees, as well as the communities and the environments in which we operate.

After leading Brigham Exploration Company, Brigham Resources Operating, LLC, and Brigham Minerals, Inc. through two successful initial public offerings and two substantial acquisition events, we recognized a compelling opportunity to capitalize on this track record and our experience by assembling the sand mining rights associated with approximately 38,000 acres in the Permian Basin—the most active basin in North America. So, we founded Atlas Sand Company, LLC ("Atlas Energy") in 2017, led by an experienced team of entrepreneurs from the oil and natural gas, transportation, industrial and proppant industries who have an established history of value creation and positive disruption in the energy industry. As a result, we designed and constructed our operations through the lens of an E&P operator benefitting from our history and roots in the energy industry, and we firmly believe that this orientation and mindset are reflected in our differentiated results. We have a relentless focus on the needs of our customers, and by creating value for them, we ultimately create value for our shareholders.

We are builders, innovators and, at times, constructive disruptors. Our success has stemmed from our ability to (i) generate leading-edge business ideas (leveraging our knowledge and experience), (ii) hire great people and (iii) provide them with a collaborative and entrepreneurial environment. This approach has repeatedly created value for our owners, rewarding experiences for our employees, and attractive outcomes for our stakeholders, all while improving human beings' access to the hydrocarbons that power our lives.

In order to attract, develop and retain top-tier talent and to optimize their innovation and productivity, we create an entrepreneurial and collaborative work environment and provide our employees with compensation incentives (including equity) that align their interests with our owners. This approach enables us to deliver industry-leading innovation that drives down costs while elevating performance and has created value for our owners, rewarding experiences for our employees and attractive outcomes for our stakeholders.

Our Atlas Energy team has driven innovation and has produced industry-leading environmental benefits by reducing energy consumption, emissions, and our aerial footprint. For example, our mining operations utilize an electrified dredging system, unique within the Permian Basin sand mining

industry, which significantly reduces our emissions[1] by replacing the use of certain diesel-powered heavy machinery and equipment characteristic of traditional mining operations in the Permian Basin. The reputation for environmental leadership that we have earned through such innovations is essential to our ability to attract and retain talent, customers and capital, thereby creating value for our owners.

Supportive and constructive communities are essential to our people and our success. For this reason, we are invested in our communities, and we are proud that these communities are invested in our enterprises. For example, we have built strong relationships with regional high schools and military bases, from which many of our valuable personnel were sourced.

We operate with robust governance standards; this is a responsibility we owe our owners and one that is foundational to our value creation. We recognize that deficiencies in governance elevate corporate risks while mitigating positive optionality for value creation.

We have “walked the walk” when it comes to environmental and social progress by recognizing from day one that our long-term profitability depends on being good stewards of the environment, treating our employees well, being active members of the communities in which we operate, and maintaining a high standard of governance and diligence. Though most of the stakeholders who have benefitted from these initiatives are not owners of our business, their flourishing plays a key role in our success.

This is the harmony of capitalism: companies innovating in free markets to create value for their owners, thereby benefitting all their stakeholders. There is no better empirical validation of property rights and capitalism than the unprecedented prosperity of the United States, and we also enjoy the safest air and water of any major country in the world.

At Atlas Energy, we hold ourselves out as an example of how strict adherence to our fiduciary obligation to our owners generates superior and sustainable outcomes for all our stakeholders. We are focused on enabling the production of energy more cleanly and efficiently, in addition to maximizing reliability and reducing cost, which drives our profitability. Providing energy to North America and to the world is critical; Atlas Energy is proud to facilitate domestic energy production and enhance domestic energy security. Further and importantly, the obvious benefit to mankind has been immense and unprecedented, and those benefits are unmatched by any other energy source.

Our core businesses are fundamentally aligned with a lower emissions economy. We believe that we are well-positioned to help address shortages of raw materials and labor leading to supply shortages of critical fossil fuels, which we believe will contribute to helping individuals access the energy they need to sustain or improve their quality of life, in each case, in a socially and environmentally responsible manner. Because our industry has generated abundant and low-cost fossil fuel supplies, we have accelerated unprecedented human flourishing and have improved lives and extended lifespans well beyond that experienced in human history. Despite that progress, there are still over 1 billion people globally suffering from energy poverty (and, thus, economic poverty) without access to low-cost, reliable energy. Therefore, undeveloped nations and the world’s most vulnerable need more scalable and reliable energy-dense fossil fuel energy, not less. We believe that Atlas Energy is well-positioned, as part of the U.S. oil and gas industry, to continue enabling the supply of efficient, responsibly produced, and low emission intensity oil and gas supplies globally.

Atlas Energy is and will continue to be an industry leader in reducing emissions, importantly with regard to air pollutants that are known to be harmful to humans. We are undertaking our Dune Express initiative, which can be characterized as “electrified sand delivery” via an automated conveyor system.

[1] The types of emissions reduced by our electrified dredging system consist of those typically emitted by diesel engines, which commonly include: carbon monoxide (CO), nitrogen oxides (NOx), water vapor (H2O), carbon dioxide (CO2), particulate matter (PM) and unburned hydrocarbons, among other pollutants.

We believe the Dune Express will represent a first-of-its-kind, transformational energy logistics platform which, in conjunction with the scale of our asset base, will provide the Permian oil and gas industry with increased efficiencies and reliability while substantially reducing emissions. In addition to the emissions benefits of taking thousands of trucks off the commercial roads, the Dune Express will save thousands of lives due to a reduction in traffic and a lower risk of accidents. We call this Sustainable Environmental Progress ("SEP").

In terms of societal (the "S" in ESG), we hire 100% based on merit, seeking individuals who further our mission described above. As Dr. Martin Luther King Jr. stated, people should "not be judged by the color of their skin, but by the content of their character." In hiring based on merit, we seek individuals with excellent character, appropriate, diverse and complementary skills, backgrounds and perspectives that add value to our operating performance and culture as we work to achieve our mission. We call this Sustainable Social Progress ("SSP").

We believe property rights are sacred, that creating value for our owners is virtuous, and that doing so creates positive outcomes for all our stakeholders. This is the essence of our corporate integrity. By delivering on our fiduciary responsibility to our owners we deliver long term profitability, making our business sustainable. Again, this is the harmony of capitalism. We are compounding value not only for our shareholders, but also for our other legitimate stakeholders. We are proud of the fact that our approach to innovation in the hydrocarbon industry while operating in an environmentally responsible manner creates immense value. The hydrocarbons we help produce enhance many aspects of human life due to hydrocarbon-based energy and products, including machines, medicines and vaccines, and we are therefore having a very positive impact on human flourishing.

All of our officers, our board of directors and our employees are committed to this mission and our principles.

Yours sincerely,

Ben M. "Bud" Brigham

SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information that you should consider before investing in our Class A common stock. You should read the entire prospectus carefully, including the information under the sections titled "Risk Factors," "Cautionary Note Regarding Forward-Looking Statements" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the financial statements and the notes thereto appearing elsewhere in this prospectus. The information presented in this prospectus assumes (i) an initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and, unless otherwise indicated, (ii) that the underwriters do not exercise their option to purchase additional shares of our Class A common stock.

Unless we state otherwise or the context otherwise requires, the terms "Company," "Atlas," "we," "us" or "our" refer, prior to the corporate reorganization described in this prospectus, to Atlas LLC and its consolidated subsidiaries, and following the corporate reorganization described in this prospectus, to Atlas Energy Solutions Inc. and its consolidated subsidiaries. We have provided definitions for some of the terms we use to describe our business and industry and other terms used in this prospectus in the "Glossary of Certain Industry Terms" beginning on page A-1 of this prospectus.

The information appearing in this prospectus concerning estimates of our mineral reserves is based on the report of John T. Boyd Company, our independent mining engineers and geologists, as of December 31, 2021, and as updated for December 31, 2022. A summary of John T. Boyd Company's report is included as an exhibit to the registration statement of which this prospectus forms a part.

Atlas Energy Solutions Inc.

Overview

We are a leading provider of proppant and logistics services to the oil and natural gas industry within the Permian Basin of West Texas and New Mexico, the most active oil and natural gas basin in North America. Our core mission is to maximize value for our stockholders by generating strong cash flow and allocating our capital resources efficiently, including providing a regular and durable return of capital to our investors through industry cycles. In our pursuit of this mission, we deploy innovative techniques and technologies to develop our high-quality resource base and efficiently deliver our products to customers through leading-edge logistics solutions. We believe that our uniquely-positioned asset base and our differentiated approach are distinct competitive advantages that make us a more reliable supplier than our competitors. We believe we have developed a strong brand recognition for reliability and strong customer service that has enabled us to increase the volume of proppant sold every year since the founding of the Company in 2017.

Our unique assets and market positioning, along with our innovation and demonstrated reliability, enables us to expand our business beyond proppant sales. We are launching a transformational logistics offering that we believe will bring a step change in efficiency, safety and sustainability benefits to the Permian Basin. This will include the "Dune Express," an overland conveyor infrastructure solution, which, coupled with our fleet of fit-for-purpose trucks and trailers, we anticipate will remove a significant number of trucks from public roadways within the Permian Basin.

The Dune Express will be the first long-haul overland conveyor system to deliver proppant. We have secured the contiguous right-of-way for our initial system, which is expected to follow a 42-mile-long route from our facilities into the heart of the prolific Northern Delaware Basin. The Dune Express

will significantly shorten the distance that proppant needs to travel by truck, which is expected to provide meaningful productivity gains while decreasing emissions. We expect the Dune Express to make public roadways safer by removing trucks from public roadways, thus reducing traffic, accidents and fatalities on public roadways in the region.

Our supplying partners are currently manufacturing fit-for-purpose equipment for our trucking fleet to be used in our existing logistics business. We have designed our trucking operations and delivery processes to significantly expand the daily payload capacity per truck compared to traditional assets. We believe these fit-for-purpose assets with expanded payload capacity are already driving productivity gains since their deployment in January 2023, and will continue to do so as we build our fleet. Our long-term goal is to bring autonomous wellsite delivery to the Permian Basin, which we expect to drive further productivity gains as the technology is developed over the next several years.

Each of these solutions independently represents a significant leap forward in the logistics space. Combined, we believe that our logistics offering will bring substantial benefits to our customers, investors and the local community in the Permian Basin. The relocation of commercial traffic from public roads to private roads creates a dynamic closed-loop system that is well suited for the rapid deployment and advancement of our trucking fleet, while also increasing the mobility and safety of the public roadways for the residents of the region.

According to Lium Research, Permian Basin proppant demand currently exceeds in-basin production capacity and third-party research indicates that this supply shortage has the potential to grow significantly. In 2022, while Permian operators accelerated completions, they also maintained a healthy drilled uncompleted (“DUC”) well inventory at approximately 94% of the 2018–2022 average. Furthermore, Lium Research estimated that Permian operators would spend approximately $42.8 billion in 2022 with spending levels estimated to be approximately 50% higher in 2024, signaling for a significant and continued increase in completions activity. In response to this supply shortage, we are in the process of adding a facility capable of 5.0 million tons of annual production capacity at our location in Kermit, Texas, and we anticipate that construction will be completed by the end of 2023. Due to the robust levels of industry demand for our product, our existing facilities are currently sold out, our contracted volumes continue to grow, and we are both extending term and adding logistics contracts to our portfolio. The modular design of our existing facilities and the size of our resource base provide us with the ability to further expand our production footprint to meet future market demand, should we determine that the potential investment enhances our long-term profitability and free cash flow profile.

Our Company

We were founded in 2017 by Ben (“Bud”) Brigham, our Executive Chairman and Chief Executive Officer, and are led by an entrepreneurial team with a history of constructive disruption bringing significant and complementary experience to this enterprise, including the perspective of longtime exploration and production (“E&P”) operators, which provides for an elevated understanding of the end users of our products and services. We believe this experience and our associated knowledge base differentiates us from our competitors and facilitates our ability to identify and execute as an early mover on critical value drivers, enabling us to maximize the full potential of our business and outcomes for our stockholders and stakeholders alike.

Our executive management team has a proven track record and over 90 years of combined industry experience with a history of generating positive returns and value creation, exemplified by Bud Brigham’s significant experience leading several companies through a successful initial public offering (“IPO”), or an acquisition event:

- In 2011, Brigham Exploration Company (“Brigham Exploration”), a pioneer in the use of 3-D seismic and horizontal drilling and completions techniques within the oil-rich Bakken Shale was acquired by Statoil ASA (“Statoil”) for $4.7 billion. Brigham Exploration completed an IPO in 1997.

- In 2017, Brigham Resources Operating, LLC ("Brigham Resources"), an innovator in Delaware Basin drilling and completions techniques (as an early adopter of e-frac technology and tested proppant loadings in excess of 5,000 pounds per foot) was acquired by Diamondback Energy, Inc. ("Diamondback") for $2.6 billion.
- In 2022, Brigham Minerals, Inc. ("Brigham Minerals"), a technically sophisticated oil and gas minerals company, combined with Sitio Royalties Corp. ("Sitio Royalties") in an all-stock merger with a combined enterprise value of $4.8 billion (representing a $2.2 billion value to Brigham Minerals, or a 108% total return since its IPO, with total return calculated as cumulative dividends plus stock price appreciation).

Our experience as E&P operators was instrumental to our understanding of the opportunity created by in-basin sand production and supply in the Permian Basin, which we view as North America's premier shale resource and which we believe will remain relatively more active through economic cycles. Though the industry has always been focused on increasing efficiencies in resource development, mission critical proppant production and related logistics were historically chaotic and inefficient, particularly given the long and inefficient legacy midwestern supply chain.

We identified the two giant open dunes of the Winkler Sand Trend as the premier sand resource in the region due to their differentiated geologic characteristics, advantaged water access and their large scale/long resource life. As the reserves of these large open dunes have not been subjected to the same degree of soil development, organics and impurities as buried sand deposits, they tend to produce higher and more consistent mining yields relative to buried sand deposits, making the large open dunes economically superior deposits. The giant open dunes' advantaged access to water stems from the nature of the perched aquifers that have been found to form within these deposits. It is the nature of this water table that has enabled Atlas to become the first and, to our knowledge, the only proppant producer in the Permian Basin to mine by electric dredge, and we expect to transition more of our mining to electric dredging over the next twelve to twenty-four months. We control over 14,500 acres on the giant open dunes, which represents more than 70% of the total giant open dune acreage available for mining. Based on our current total annual production capacity of approximately 10.0 million tons, as of December 31, 2022, our properties have an aggregate expected reserve life of approximately 36 years based on the currently defined mineral reserves, with a potential extension of our reserve life to approximately 200 years based on our total mineral resources.

We believe we are the leader in meeting the evolving proppant needs of an increasingly efficiency-focused oil and natural gas industry. From our inception, our disruptive approach has met the needs of the just-in-time supply model we believed would become the best fit for the industry's increasingly efficiency-driven focus, and we engineered our facilities to fit this model. Our plants include substantial investments in redundant equipment that aim to maximize our uptime and utilization rates. We believe these are key differentiating factors from some other proppant producers serving the Permian Basin.

The shift to in-basin sand proved to be a disruptive event for the proppant industry, but not sufficient to provide all participants a meaningful advantage. While many companies have attempted to capture the efficiency gains promised by this relocation of the proppant-production hub from the midwestern United States to an in-basin model, few have been able to optimize their efficiency with geologically superior acreage positions and properly designed facilities. It is this combination of geology, water availability and plant design that significantly differentiates our proppant production facilities and we believe makes us more reliable than our competition.

Logistics Solutions

We plan to bring meaningful efficiency, safety and sustainability benefits to the Permian Basin through our expanding logistics solutions. We believe that the Permian Basin remains in a multi-year transformation period that began when the innovations that enabled the development of shale resources led to better definition of geologic targets, increased systemization of processes and ultimately resulted in more predictable production outcomes. While enhanced logistics, infrastructure and technology have driven economic gains, they have also increased the technical complexity of execution in the oil and natural gas industry and precipitated a premium on scale, innovation and efficiency. Just as investments in pipeline infrastructure have reduced emissions and improved efficiency and safety by converting a truck-oriented delivery process to an infrastructure-oriented delivery process, our investments into infrastructure and technological improvements to the delivery of proppant aim to harvest similar productivity gains and generate positive community and environmental impacts. These technology and infrastructure investments are integral to and representative of our industry's long-standing initiatives to reduce the footprint of our operations for the benefit of the local communities we operate within.

The Dune Express Electric Conveyor System: The Dune Express, which will originate at our Kermit facility and stretch into the middle of the Northern Delaware Basin, will be the first long-haul proppant conveyor system in the world. While this is the first application of conveyor infrastructure to long-haul proppant, conveyors are widely used in the proppant industry for short movements of product and are a preferred method of transporting bulk materials in many other industries due to the low transportation cost and increased safety of the accompanying decrease in truck traffic.

Upon completion, we expect the Dune Express to be 42 miles in length, capable of transporting 13 million tons of proppant annually and is designed to have more than 84,000 tons of dry storage within the system. We view the Dune Express as the premier method of moving proppant across the basin and the industry's best analog to the pipeline infrastructure that moves oil, natural gas, and water around the major producing basins in the U.S. We have secured the contiguous right-of-way, substantially completed the requisite federal and state permitting necessary for construction of the Dune Express and have signed sand supply and logistics contracts with major oil companies for the delivery of proppant by means of the Dune Express. This conveyor system will be strategically located to deliver proppant to the core of the most prolific producing region of the Delaware Basin with flexible loadout capabilities, including both permanent and mobile loadouts.

The Dune Express has the potential to take hundreds of thousands of truckloads off public roads annually, which should reduce traffic accidents and fatalities in the region and significantly reduce emissions generated, relative to the traditional delivery of sand by truck.

We plan to use a portion of the net proceeds from this offering to fund the construction of the Dune Express. We plan to break ground in the first half of 2023, with commercial in-service planned to begin by the end of 2024. Our anticipated cost for completion of the Dune Express is approximately $400 million.

Illustrative Rendering of the Dune Express

Please see "Business—Our Company—Significant Innovation Projects—Dune Express" for additional information regarding the Dune Express.

Wellsite Delivery Assets*:* Our existing logistics business utilizes third-party transportation contractors which we plan to supplement and bring in-house with our own trucks and trailers. As our trucks and trailers continue to be deployed in 2023, we expect to deliver significant productivity gains, as measured by tons per truck that can be delivered daily, compared to the throughput performance of traditional trucking assets. These immediate productivity gains will be made possible through a combination of process improvements and targeted investments in fit-for-purpose equipment. We have partnered with a provider of autonomy and robotic technology with experience in the field of GPS-denied off-road autonomous driving applications to procure a fleet of vehicles equipped with technology designed to support autonomous wellsite delivery. We expect to begin testing in the field during 2023 with the goal of developing this technology over the next several years.

Atlas Logistics Solutions Can Expand Potential Throughput per Vehicle Dramatically

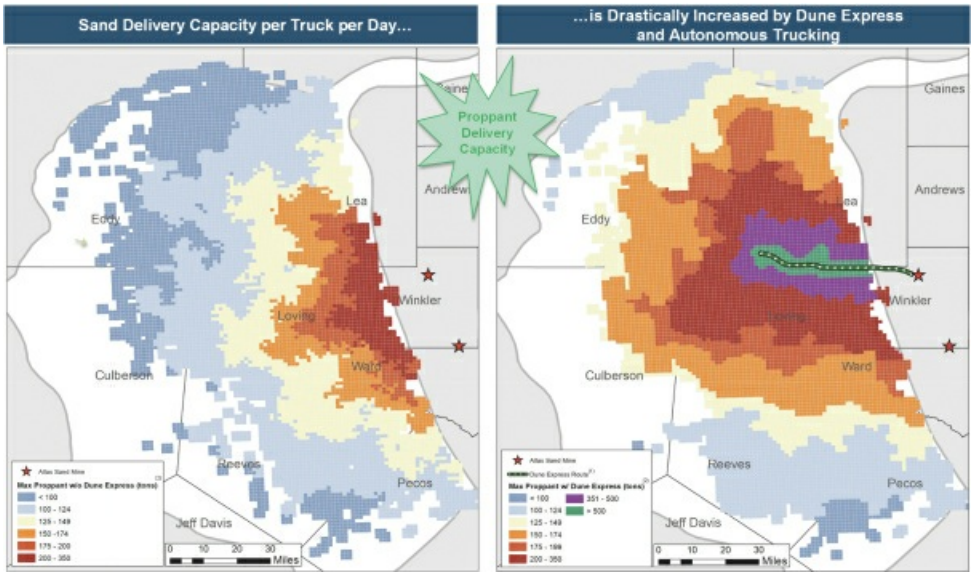
Atlas Energy Solutions	Conventional Delivery	Atlas Trucks without Dune Express	Atlas Trucks with Dune Express
Shifts per Day	1	2	2
Turns per Shift	2 – 3	2 – 3	4 – 5
Tons per Turn	24	70 – 105	70 – 105
Tons per Day	48 – 72	280 – 630	560 – 1,050

Please see “Business—Our Company—Significant Innovation Projects—Wellsite Delivery Assets” for additional information regarding our wellsite delivery assets and goals to bring autonomous wellsite delivery to the Permian.

Combined Impact of Our Logistics Solutions*:* Together, we believe these initiatives could have a significant impact in driving future revenue and increasing cash flow, reducing emissions, improving safety and relieving traffic and other burdens produced by the existing means of last-mile delivery. Furthermore, by reducing the intermittency of proppant delivery to the wellsite – and thereby increasing the reliability of delivery and potential throughput per truck per day – we believe our delivery solutions significantly mitigate a major bottleneck to the completions supply chain that may support increased pressure-pumping efficiencies.

The graphic below shows the estimated amount of proppant, in tons, that can be delivered to Delaware Basin drilling spacing units in a day by an individual truck. Based on the current supply chain configuration, each truck is limited to very few deliveries per day for a variety of reasons, including the distance from local mines to wellsites that are distributed across a large geographic area, a limited public roadway network and the hours per day that a driver can work. Upon commercialization of the Dune Express and our trucking assets, this throughput potential expands dramatically due to the reduced delivery distance, higher payload capacity and increased asset utilization.

Atlas Logistics Solutions Expand Potential Throughput per Vehicle Dramatically



Source: Enverus.

In addition to the efficiency and reliability gains that we expect to realize through our logistics solutions, we anticipate that we will also be able to deliver significant safety benefits to the communities of the Permian Basin. The public road network in the Permian Basin today is ill-equipped

for the massive amounts of oilfield traffic that is required for the industry to operate. By reducing the number of trucks required to fulfill proppant deliveries and removing these trucks from public roads, we anticipate that the rate of traffic accidents and associated injuries and fatalities will be reduced. Please see the subsection titled "—Value Proposition to Our Community and Stakeholders: A Demonstration of the Harmony of Capitalism with Sustainable Environmental & Social Progress" below for additional information regarding our anticipated community impact.

Our logistics solutions have been designed to offer a further extension of our promise of reliability to our customers. We believe that customers will seek out our logistics solutions not only due to the compelling technology and infrastructure solutions we offer but also because they are tied into highly reliable production assets in our Kermit and Monahans facilities.

Atlas Logistics Solutions Expand Potential Throughput per Vehicle Dramatically

Value Proposition to Our Stockholders

Strong Margins and Cash Flow Generation: Our ability to generate cash flow is paramount to our value proposition, as it enables us to reinvest in growth, maintain a healthy balance sheet and regularly return capital to our stockholders. A brief summary of several of our key performance and financial metrics is provided below. Please see the subsection titled "—Summary Historical and Pro Forma Financial and Operating Data—Non-GAAP Financial Measures" for more information.

	Year Ended December 31,		
	2022	2021	2020
	(in thousands, except percentages)		
Net Income	$217,006	$ 4,258	$(34,442)
Adjusted EBITDA(1)	$263,983	$71,954	$ 24,667
Adjusted EBITDA Margin(1)	54.7%	41.7%	22.1%
Net Cash Provided by Operating Activities	$206,012	$21,356	$ 12,486
Adjusted Free Cash Flow(1)	$228,510	$64,239	$ 19,686
Adjusted Free Cash Flow Margin(1)	47.3%	37.3%	17.6%

(1) Please read "—Summary Historical and Pro Forma Financial and Operating Data—Non-GAAP Financial Measures" below for the definitions of Adjusted EBITDA, Adjusted EBITDA

Margin, Adjusted Free Cash Flow and Adjusted Free Cash Flow Margin and a reconciliation of these measures to our most directly comparable financial measures calculated and presented in accordance with generally accepted accounting principles in the United States of America ("GAAP").

Focus on Return of Capital: We commenced paying cash distributions in December 2021 and have paid $70.0 million in distributions to our unitholders since that time. We intend to continue to recommend to our board of directors that we continue to regularly return capital to our stockholders through a dividend framework that will be communicated to stockholders in the future. Furthermore, our credit agreements contain provisions that allow us to pay dividends, subject to certain covenants, including pro forma liquidity and leverage ratios. Please see the section titled "Dividend Policy" for more information.

Management & Historical Successes: We were founded by Bud Brigham, our Executive Chairman and Chief Executive Officer, and are led by an experienced team of entrepreneurs from oil and natural gas, transportation, industrial automation and proppant industry backgrounds. We believe our management team's deep industry experience, record of successful value creation and established history as entrepreneurs and positive disruptors in the energy industry are unique advantages that enable us to continually identify critical value-creation drivers that will allow us to maximize the full potential of our business and the outcomes for our stockholders and stakeholders alike. While our management team has had significant success, past performance is not a guarantee of our future success or similar results. You should not rely on the historical record of our management team, our directors or their affiliates as indicative of the future performance of an investment in us or the returns we will, or are likely to, generate going forward.

- *Brigham Exploration* - Prior to founding Atlas LLC, Bud Brigham founded Brigham Exploration, a positive disruptor and innovator in the E&P space. Brigham Exploration was an early pioneer in 3-D seismic exploration onshore, and completed its IPO in 1997. In subsequent years, Mr. Brigham oversaw the identification, acquisition, delineation and development of approximately 375,000 net acres in the Williston Basin. Brigham Exploration established itself as a leading innovator in horizontal drilling and fracking, as well as oil, gas and water gathering and distribution. The company delivered industry leading operational and economic performance, leading up to Brigham Exploration's sale to Statoil in December 2011 for an enterprise value of $4.7 billion.
- *Brigham Resources* - Immediately following the sale of Brigham Exploration, Bud Brigham and others from the Brigham Exploration management team founded Brigham Resources and executed on similar strategies in the Southern Delaware Basin in West Texas. By applying rigorous geologic evaluation criteria, Brigham Resources was an early entrant in the Southern Delaware Basin in Pecos County, Texas, where it assembled an approximately 80,185 net acre leasehold position in a largely contiguous block. Like Brigham Exploration, Brigham Resources again was a leading innovator in the play, generating significant enhancements in operational and economic performance, prior to selling its assets to Diamondback in February 2017 for approximately $2.6 billion.
- *Brigham Minerals* - In 2012, Bud Brigham and other members of his management team founded Brigham Minerals, a mineral acquisition company that leverages its knowledge base and experience to acquire mineral ownership in top-tier liquids rich domestic resource plays. Subsequent to its rapid growth as a private enterprise, Brigham Minerals' management executed an upsized $300 million IPO in April 2019. Brigham Minerals aggregated a portfolio of approximately 81,800 net royalty acres across 36 counties within the Delaware and Midland Basins in West Texas and New Mexico, in the Anadarko Basin in Oklahoma, the Denver-

Julesburg Basin in Colorado and Wyoming and the Williston Basin in North Dakota, prior to entering into an all-stock merger with Sitio Royalties in 2022 with a combined enterprise value of $4.8 billion (representing a $2.2 billion value to Brigham Minerals, or a 108% total return since its IPO, with total return calculated as cumulative dividends plus stock price appreciation).

Value Proposition to Our Community and Stakeholders: A Demonstration of the Harmony of Capitalism with Sustainable Environmental & Social Progress

Across our past and current ventures, we have a well-established history of being good stewards of not only stockholder capital but also of the environments and communities in which we live and operate. Our core obligation is to our stockholders, and we recognize that maximizing value for our stockholders requires that we build goodwill and optimize the outcomes for our broader stakeholders, including our employees and the communities in which we operate.

As a result, we deliver leadership across all aspects of Sustainable Environmental and Social Progress ("SESP"). Our aptitude on SESP benefits from our commitment to identifying and executing upon opportunities to transform our business which enhance our growth and profitability through the implementation of new technologies. Our planned Dune Express is one of several initiatives we have undertaken that exhibits our initiatives to transform our business, enhance growth and increase our profitability, while simultaneously providing substantial environmental and safety benefits. This is the harmony of capitalism – innovation can and often does drive both profitability and environmental and/or social progress through free market activity.

The graphic below summarizes our estimates of the reduction in the truck miles driven and associated traffic accidents, traffic fatalities, truck miles driven and emissions attributable to the anticipated operation of the Dune Express as compared to traditional practices.

The Potential Long-Range Environmental & Safety Benefits from The Dune Express are Significant [2]

Source: *Management's internal analysis, based on results of study completed by Texas A&M Transportation Institute*

Sustainable Environmental Progress ("SEP")

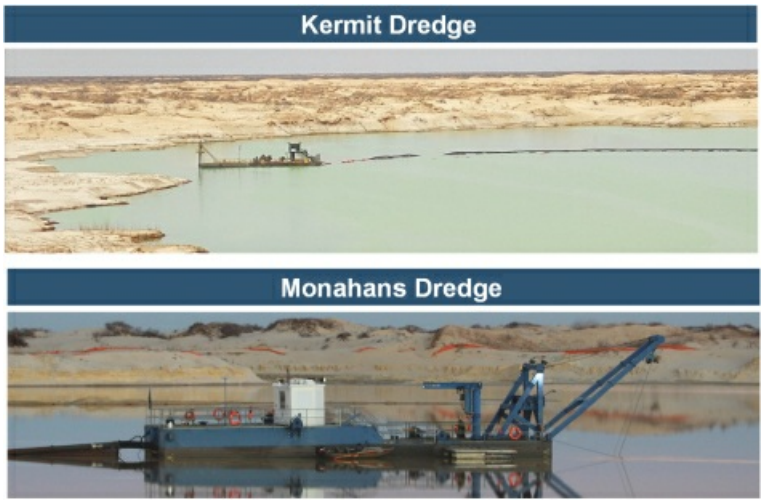
To our knowledge, we are the only proppant producer in the Permian Basin that engages in electric dredge mining. Furthermore, we plan to continue transitioning our mining activities from diesel powered mining methods to electric dredging (or "e-mining") over the next twelve to twenty-four months, which generates materially lower emissions when compared to traditional sand mining. Our shift towards e-mining at both of our Kermit and Monahans facilities exemplifies the alignment of both our operational and SEP leadership, as dredge mining, based on our estimates, will materially improve

[2] Charts reflect anticipated reductions over a 30-year period.

safety and reduce emissions by approximately 50% versus traditional sand mining methods due to the significant reduction in diesel fuel usage required to mine sand traditionally, partially offset by increased electricity consumption from our electric dredges. Our dredge mining process also leads to less surface area disturbance per ton of sand produced as we mine to greater depth as compared to mining associated with buried sand deposits.

Our giant open-dune reserves, paired with the replenishing water sources from our acreage's in-ground aquifers, are the key reasons why we are able to adopt a technology more often reserved for use in rivers and other naturally occurring bodies of water for use in the desert of West Texas. Our reserves benefit from a naturally occurring water table near the surface of our mines, which is unique in the Permian Basin sand fairway (the "Winkler Sand Trend") and provides an ample natural supply of costless water for dredge and wash plant operations.

Atlas Electric Dredges



Additionally, the results of a study commissioned by us with the Texas A&M Transportation Institute, an independent research agency (the "Transportation Study"), when integrated with our management's internal analysis, support our estimate that our planned Dune Express could significantly reduce emissions that would otherwise be produced by trucking-related activities associated with the delivery of proppant from the mines of Permian Basin providers to end users. Our estimates project that the system will result in an approximate 70% reduction in carbon dioxide emissions and other emissions, including other pollutants that are harmful to humans. Please see "Business—Our Company—Significant Innovation Projects—Dune Express" for additional information regarding the Dune Express.

Our management team has been proactive with respect to the protection of the dunes sagebrush lizard ("DSL") and its habitat in an effort to reduce the risk that our business and operations will be materially interrupted in the event that the DSL is listed under the Endangered Species Act ("ESA"). We have adopted numerous best practices to promote active conservation measures for the benefit of

the DSL, including our identification of up to 17,000 acres of land for potential set asides, our pursuit of more environmentally friendly mining practices and our participation in the Candidate Conservation Agreement with Assurances ("CCAA") for the DSL. Please see the subsection titled "—Competitive Strengths—Proactive approach to the well-being of the environment and our employees" below.

In January 2021, the CCAA was approved by the U.S. Fish and Wildlife Service ("USFWS") to provide a framework for entry into voluntary conservation agreements between the USFWS and stakeholder participants under which the parties work together to identify threats to the DSL, design and implement conservation measures to address these threats and monitor their effectiveness, among other things. Atlas has been a supporter of the CCAA since its inception and was the first proppant producer to apply for a permit under, and be accepted into, the CCAA. Due to our participation in the CCAA and other conservation measures that we have voluntarily adopted, we do not anticipate that a listing of the DSL as an endangered species would materially reduce sand production at our Kermit and Monahans facilities. We are currently only one of three companies participating in the CCAA. In the event that the DSL is listed as an endangered species under the ESA, it is possible that companies that are not participants in the CCAA at the time of a potential ESA listing would see a disruption to their operations.

Sustainable Social Progress ("SSP")

We have committed to fostering a safe environment at our worksites and we are committed to extending this culture of safety far beyond our premises. We have a rigorous safety training program with well-developed protocols. We have automated or have invested in remote operations technology to substantially reduce the amount of the activities at the plant sites that require physical interaction between human beings and industrial equipment, and in doing so have removed many of the safety hazards at our facilities.

We anticipate that our planned Dune Express will provide significant environmental benefits, while also benefitting the surrounding region, making it a safer place to live and work. Our management's analysis of the results of the Transportation Study supports our expectation that the Dune Express will contribute to a meaningful reduction in Permian Basin traffic accidents, congestion and automobile fatalities, by taking trucks off public roads and operating in a much more efficient manner than the industry has historically operated. We believe this will also benefit the community by reducing the wear and tear on local infrastructure, while making the region a safer and better place to live and work. Furthermore, by reducing the number of drivers needed per well and in the aggregate, these initiatives can meaningfully reduce trucking-related hazards on customer wellsites and mitigate future driver shortages.

We are actively engaged in the West Texas community in which we operate, as we believe that by supporting our community, our community will support us. We sponsor a number of programs benefitting schools and the youth in Winkler and Ward Counties, Texas, including supporting after-school programs for children and skill-development programs for high school students.

Our Company's culture is a product of our employees, and as such, we embrace the responsibility of promoting a diverse and inclusive meritocracy, with approximately 64% minority and/or female representation in our workforce as of December 31, 2022. We reward the hard work of our employees by compensating them well, with our median employee earning in excess of $100,000 per year as of 2022. Furthermore, we provide our employees with a high-quality benefits package including fully paid family medical, dental and vision insurance, a company 401(k) match program and substantial paid time off or rotational schedules. For our employees in West Texas, we provide

convenient, safe and comfortable living facilities at Wyatt's Lodge, our distinctive alternative to the traditional, notoriously unsafe and unsanitary housing accommodations provided for many oilfield employees. Wyatt's Lodge provides employees with fully furnished housing, a full cafeteria with a chef and a diverse menu including healthy options, a workout facility, as well as a recreational room and a movie theater. The success of our efforts to create a high-quality workplace is evidenced by our low employee turnover and accolades that include the "Great Place to Work" certification from the Great Place to Work Institute, Inc. for the years ended December 31, 2019, 2020, 2021 and 2022, as well as the "Top Work Places" Award of Recognition from Austin American-Statesman for the years ended December 31, 2021 and 2022.

We believe that the men and women who have served in the United States armed forces have earned a special place in our society. As such, at our founding we created a dedicated effort to support our veterans in our hiring. We have found our focus on recruiting veterans to work for Atlas has brought us many hardworking and outstanding employees over the years and has positively influenced our corporate values. We have received external recognition for our veteran hiring practices, including the Hire Vets Medallion from the U.S. Department of Labor ("DOL") in 2019, 2020, 2021 and 2022. As of December 31, 2022, 8.4% of our employees served in the U.S. military as compared to an average of 5.6% across all employers nationally.

Governance

We believe that the alignment of our employees, our management and our board of directors with our stockholders is paramount. A few examples of the actions that we will take in connection with this offering or the characteristics that highlight the alignment of interests between our management and stockholders are as follows:

- We will establish a diverse and independent board of directors with complementary skills and backgrounds.
- We will adopt an executive compensation program that encourages return of capital to stockholders, including through the use of performance-based compensation, with performance metrics that focus business strategy and corporate objectives on total shareholder return, and equity-based long-term incentives.
- We will adopt a director compensation policy for our non-employee directors in which a significant portion of the total compensation package is equity-based to further align the interests of our directors with our stockholders.
- Management and their affiliates will maintain significant initial ownership in the Company after completion of this offering.

Our organizational structure following the offering and corporate reorganization is commonly referred to as an umbrella partnership-C corporation (or "Up-C") structure. Pursuant to this structure, following this offering we will hold a number of Atlas Units (as defined below) equal to the number of shares of Class A common stock issued and outstanding, and holders of Atlas Units (each, an "Atlas Unitholder") (other than us) will hold a number of Atlas Units equal to the number of shares of Class B common stock issued and outstanding. The Up-C structure was selected in order to (i) allow certain existing (direct or indirect) holders of membership interests in Atlas LLC ("Legacy Owners") the option to continue to hold their economic ownership in Atlas LLC in "pass-through" form for U.S. federal income tax purposes through their direct and indirect ownership of Atlas Units (as defined below), and (ii) potentially allow us to benefit from certain net cash tax savings that we might realize as a result of certain increases in tax basis that may occur as a result of Atlas Inc.'s (as defined below) acquisition (or deemed acquisition for U.S. federal income tax purposes) of Atlas Units pursuant to the exercise of the Redemption Right (as defined below) or the Call Right (as defined below). In contrast to many offerings

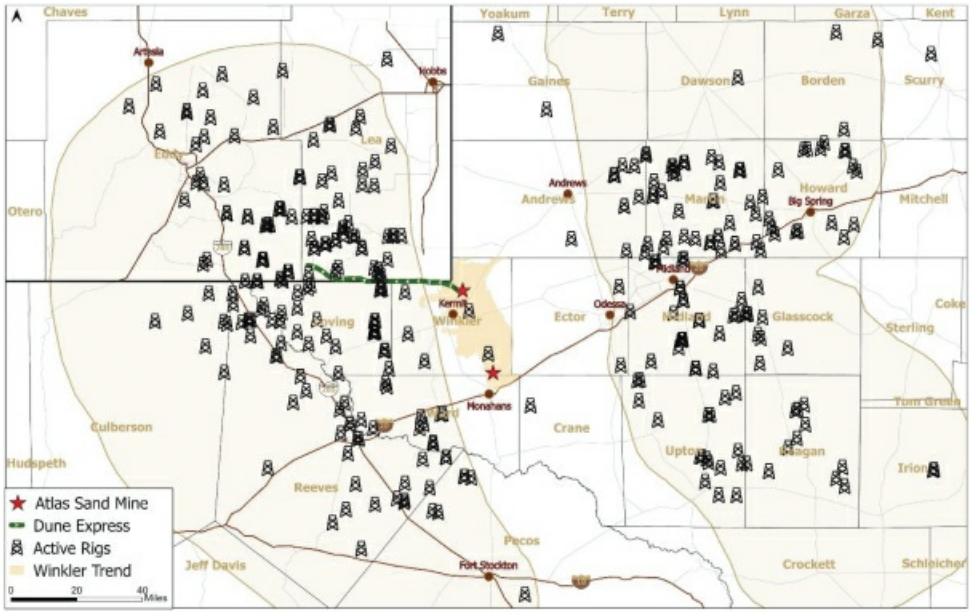
by issuers choosing an Up-C structure, we have made the decision not to enter into a tax receivable agreement with the Legacy Owners with respect to any such cash tax savings we might realize, which we believe provides for increased alignment between us and our stockholders over the long term.

Assets and Operations

We currently control the largest and, we believe, the highest quality sand position in West Texas. We have developed our Kermit and Monahans facilities as in-basin proppant mines on approximately 38,000 surface acres that we own or lease in Winkler and Ward Counties, Texas. We control 14,575 acres of large open-dune reserves and resources, which represent more than 70% of the total giant open dune acreage in the Winkler Sand Trend available for sand mining. The Monahans Dune consists of approximately 8,750 acres of premium open-dune reserves. Additionally, we have substantial off-dune acreage at Monahans that is not included in our estimated reserves or resources but that could be mined following our removal of material, such as soil and unusable sand, that lies above the useable sand and must be removed to excavate the useable sand, which we refer to as "overburden." The Kermit Dune consists of approximately 5,826 acres of premium open-dune reserves.

The following map shows the location of our Kermit and Monahans facilities in Winkler and Ward Counties, Texas, as well as the secured right-of-way for the Dune Express alongside a recent snapshot of the rig count in the Permian Basin as of December 31, 2022:

Map of Operations

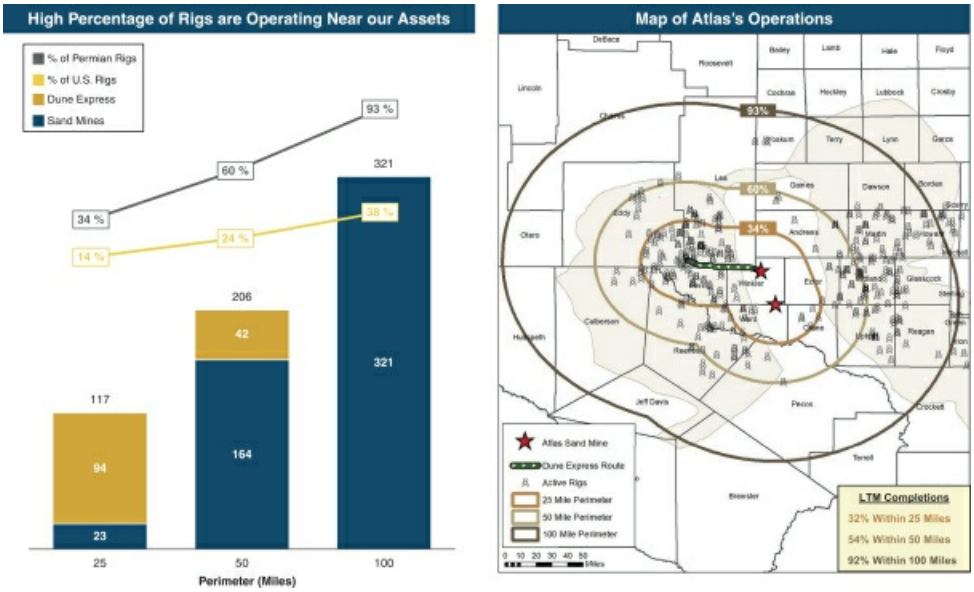


Source: Enverus, Baker Hughes.

Our "twin" mines, located on the bookends of the Winkler Sand Trend, provide optimal logistics to serve both the Southern and Northern portions of the Delaware and Midland Basins and, as of

December 31, 2022, have a combined annual production capacity of 10.0 million tons, 70,000 tons of dry storage, 700,000 tons of wet storage and 14 loadout lanes. Innovative plant design and large-scale operations ensure low-cost operations and continuity on site. Redundancies were designed into our facilities to remove singular points of failure that can disrupt the production process, ensuring maximum reliability of proppant production and delivery.

Atlas's Facilities are Strategically Located



Source: Enverus, Baker Hughes.

Our Kermit and Monahans facilities were built to produce high quality 40/70-mesh and 100-mesh sands, each of which are used extensively in upstream operations in the Permian Basin. As of December 31, 2022, each facility is capable of producing 5.0 million tons of proppant annually for a combined annual production capacity of 10.0 million tons.

Each facility was constructed with a modular design that provides us with the flexibility to expand one or both of the existing facilities to achieve incremental production capacity if such expansion were found to be necessary or desirable in light of customer demand, broader market conditions or other relevant considerations. The facilities are capable of operating year-round and feature advanced safety designs, onsite water supply, power infrastructure and access to low-cost natural gas through connections to interstate natural gas lines. Further, we strategically benefit from the locations of our facilities proximal to major highways at the south and north ends of the Winkler Sand Trend. Our Kermit facility is bisected by two state highways, while our Monahans facility its adjacent to two highways, one of which is Interstate 20, facilitating efficient transportation of our proppant to customers located at various points within the Permian Basin.

The operations of both sand facilities are managed and monitored in a highly automated manner from our command center in Austin, Texas. We have designed and/or adopted cutting-edge technology that we believe delivers one of the most efficient production and truck loading processes in the industry. The remote ecosystem allows our employees to simultaneously manage processes at both facilities, resulting in significant personnel productivity gains.

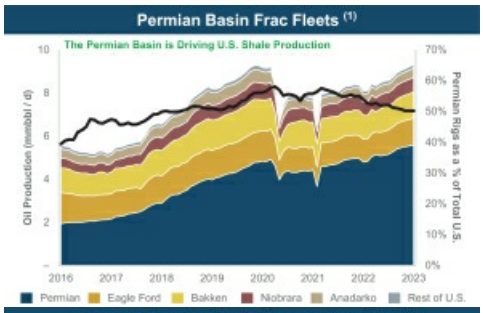
As of December 31, 2022, we had 357 million tons of proven and probable sand reserves at our Kermit and Monahans facilities according to estimates by John T. Boyd Company, our independent mining engineers and geologists. Based on our current total annual expected production capacity of approximately 10.0 million tons as of December 31, 2022, our reserve life is expected to be approximately 36 years. As of December 31, 2022, our reserves are composed of approximately 59% 40/70-mesh and 41% 70/140-mesh substrate sand. We believe our reserve composition is attractive to customers that want to consolidate sourcing and positions us as a go-to provider of high quality in-basin proppant.

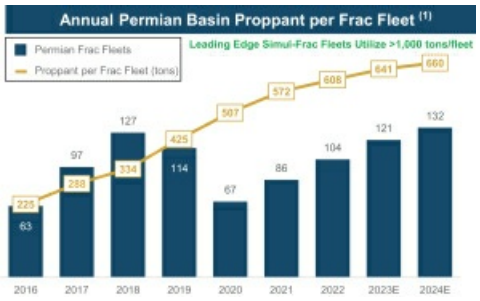
In response to the significant increase in market demand and also in connection with the expansion of our logistics offering, we are expanding our Kermit production capacity to add a facility capable of 5.0 million tons of annual production capacity by the end of 2023. Our plants were designed modularly to accommodate efficient expansion—maximizing the increase in production capacity while minimally increasing the facilities' footprint. Pro forma for the completion of our ongoing capacity expansion, the Kermit Facility will have a total of six dryers averaging approximately 225 tons-per-hour, 27 screeners, two dredges, three wet sand storage facilities (totaling approximately 840,000 tons of total wet sand storage), four wet plants with attrition scrubbers, and 10 loadout lanes and silos.

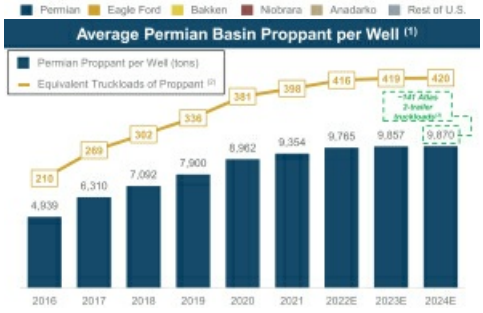
The Permian Basin Proppant and Proppant Logistics Market

The oil and natural gas proppant industry is comprised of businesses involved in the mining, manufacturing, distribution and sale of the propping agents used in the stimulation of hydrocarbon-bearing shale reservoirs as a method to enable production from oil and natural gas wells. During this process, proppants are blended into a fluid mixture and injected downhole into the wellbore at high pressure. This creates cracks in the resource-bearing rock allowing for proppants to become lodged in these cracks, resulting in increased permeability of the reservoir, and in turn, driving greater production of hydrocarbons over the life of the well.

Key Permian Basin Drilling, Completions and Proppant Consumption Metrics







(1) Baker Hughes rig count as of January 2023 and EIA; represents all active U.S. and Permian horizontal land rigs.
(2) Per Lium + Management Estimates.
(3) Assumes 23.5 tons per truckload of proppant generally, and 70 tons per Atlas truckload.

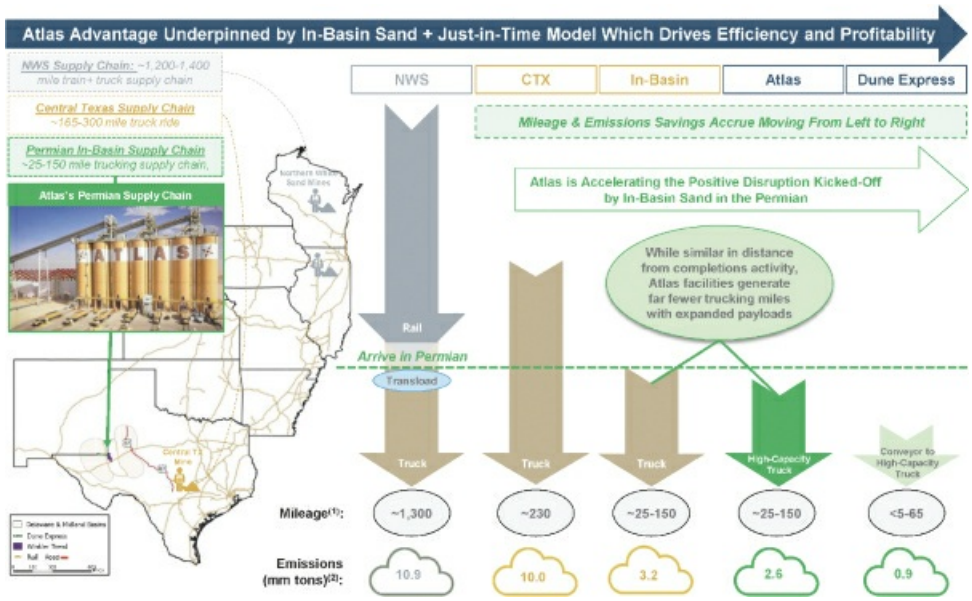
Source: Baker Hughes, EIA, Lium and management estimates. Assumes 23.5 tons per truckload of proppant.

A typical horizontal well-design in the Permian Basin can call for greater than 10,000 tons of proppant for completion, which implies greater than 425 truckloads of proppant per well, more than 50,000 miles driven per well, and more than 250 million miles driven per year, according to Rystad Energy. Rystad Energy also estimates an average day in 2021 in the Permian Basin had more than 3,000 trucks transporting proppant over the surrounding network of public highways and lease roads. Prior to the development of in-basin sand facilities, proppant was predominately shipped long distances in bulk from processing facilities in the midwestern United States by rail and barge to various resource basins. It was then further transferred to a truck for “last mile” wellsite delivery. This long supply chain made transportation costs a significant portion of the customer’s overall proppant cost. The discovery and subsequent development of in-basin proppant deposits afforded customers a significant cost-saving alternative. The supply chain was shortened to remove the costly rail or barge portion of the transportation cost, and in the Permian Basin customers have effectively reached full adoption of in-basin proppants. With the relocation of the proppant supply stack to the Permian Basin, which shortened the supply chain and eliminated extended seasonal disruptions, the proppant industry has been transformed into a “just-in-time” delivery model reliant on large quantities of trucks to fulfill orders. In-basin deliveries take place over a matter of hours, whereas the legacy mid-western supply chain

required weeks for the fulfillment of delivery. While this has reduced the severity of fulfillment disruptions experienced as compared to the legacy rail-based midwestern supply chain, it has increased pressure on in-basin proppant-production facilities to maximize uptime and on trucking companies to supply a sufficient quantity of trucks to effectively and efficiently fulfill deliveries to end-users.

As customers continue to drive efficiencies and productivity in their drilling and completions programs, in turn drives the demand for more proppant, we expect increased demand for the products and services that we provide. Please see the section titled “Industry” for additional information regarding the Permian Basin proppant and logistics market.

In-Basin Sand Disrupted the Industry and Placed a Premium on Efficiency



Source: Management’s internal analysis, based on results of study completed by Texas A&M Transportation Institute

Competitive Strengths

We believe the following competitive strengths will allow us to successfully execute our business strategies, achieve our primary business objectives and generate free cash flow, including:

- ***Superior geology combined with next-generation plant design promotes efficiency & reliability*** . Our Kermit and Monahans acreage holds a unique combination of key attributes that drive our differentiated business profile, including (i) unmatched scale of reserves and acreage within the two large open-dune deposits at the northern and southern ends of the

Winkler Sand Trend, (ii) the associated high quality of proppant, (iii) the associated ease of access to our reserves and resources, (iv) the depth of our deposit, which provides a smaller areal footprint per ton produced, and (v) plentiful availability of water. We are not aware of any other area in the Permian Basin that is able to replicate this combination of key attributes. As of December 31, 2022, our combined facilities have 10.0 million tons of annual production capacity, two dredges, six dryers, 70,000 tons of onsite, finished-good storage, 14 dedicated truck loadout lanes with high-speed loadout silos, a comprehensive water recycling system at each plant, which allows us to reuse approximately 95% of the water used in the production process, and 700,000 tons of damp sand storage. Our facilities are capable of operating year-round and feature advanced safety designs, onsite water supply and recycling, power infrastructure and access to low-cost natural gas through connections to interstate natural gas lines.

- ***High margins and strong balance sheet drive compelling combination of growth & yield .*** Our margin profile has been tested through industry cycles, and we have demonstrated strong performance relative to our peers in both high and low proppant price environments. We maintain modest levels of debt and intend to continue to reduce our debt over time. As of December 31, 2022, we have a Net Debt/LTM Adjusted EBITDA multiple of 0.3x. We are currently pursuing attractive growth projects and have been returning capital to stockholders. We plan to offer a balanced value proposition to stockholders that we believe will include growth and yield while maintaining financial flexibility and a strong balance sheet.
- ***Unique logistics offering.*** Our Dune Express and wellsite delivery assets hold the potential to revolutionize the delivery of proppant in the Permian Basin. By leveraging technology and infrastructure, we will increase asset utilization and payload per delivery resulting in increased efficiency and reliability for our customers. This will also reduce the miles driven on public roadways in the Permian Basin, which will improve the road safety in the basin.
- ***Strategically located facilities.*** Our facilities are located on the giant open dunes near Kermit and Monahans, Texas, that bookend the Winkler Sand Trend and enable us to reliably and efficiently meet the proppant demand of our customers in both the Delaware and Midland Basins. In addition, we strategically located our Kermit facility to be bisected by two state highways and positioned our Monahans facility adjacent to two highways to facilitate the efficient transportation of our proppant. Our Kermit facility's location also provides a strategic origination point for the initial Dune Express, which will travel across the Texas-New Mexico state line area, one of the highest development intensity sections of the Permian Basin.
- ***Strong brand recognition for reliability drives contracting and solidifies valuable relationships with a diverse group of customers.*** The success of our business has been underpinned by our relationships with some of the most respected operators and service companies in the Permian Basin. Our customers range from high-profile, public oil and natural gas and service companies to private, independent enterprises. We also have a diverse customer base, which we believe minimizes counterparty risk. During the year ended December 31, 2022, we had 39 customers, with the top 10 customers accounting for approximately 68% of our revenue for that period. During the year ended December 31, 2021, we had 39 customers, with the top 10 customers accounting for approximately 79% of our revenue for that period. Our ability to secure and maintain these robust relationships lends support to our ability to weather economic headwinds. In 2020, we continued to operate throughout the height of the pandemic, grew sales volumes year over year from 2019 to 2020, and increased our market share, as we expanded our customer base by the addition of 14 new customers since January 1, 2020. While our contracting strategy changes over time and through industry cycles, we are currently highly contracted on our existing production capacity, which provides for significant visibility in our future revenue and cash flow. We plan to continue to pursue contracts when they stand to benefit our business over the long term.

- ***Ability to leverage technology in optimizing cost structure and addressing our customer's sustainable environmental progress (SEP) goals***. Our ability to generate cash flow in various commodity price environments and through industry cycles is underpinned by our commitment to the continuous optimization of our operating and capital cost structures. The move from traditional excavation methods to e-mining reduces the need for on-site personnel, heavy equipment and diesel fuel. Further, this technology also provides us the ability to enhance our customers' SEP initiatives. Numerous employees once located on-site in the Permian Basin now work in a smaller group at our command center in Austin, Texas, monitoring and operating the facilities by video and telecom. This has led to cost reductions and also has enabled us to attract and retain an exceptionally credentialed workforce as compared to competitors with traditional operations that by nature do not provide such flexibility with respect to the location of personnel deployment.
- ***Unique equity investor capitalization of the Company.*** We are differentiated and advantaged by our unique equity investor capitalization. Rather than sourcing private equity capital, Bud Brigham funded the initial investments in us. Subsequently, we conducted a successful "friends and family" equity capital raise, which included many investors that had previously invested in Bud Brigham's prior enterprises. Importantly, approximately 40 of our equity investors are energy entrepreneurs, energy executives and sophisticated energy investors, providing both a validation of the business and facilitating our growth. As a result, we are differentiated in our space with a diverse and sophisticated investor group that is aligned and actively supportive of our shareholder value creation objectives. Furthermore, the lack of traditional private-equity ownership has enabled us to elect to forgo a tax receivable agreement, which we believe provides for increased alignment between the Company and its stockholders over the long term. This is an example of the shareholder alignment we intend to instill through corporate governance policy.
- ***Incentivized board of directors and management team with significant experience in the Permian Basin and a track record of stockholder value creation***. Our executive management team has a combined total of over 90 years of experience in the energy industry. This experience includes two successful IPOs, three successful company sales or mergers, multiple asset monetization events and the successful building of other enterprises. Please see the subsection titled "—Value Proposition to Our Stockholders—Management & Historical Successes" above. Management benefits from extensive experience in the Permian Basin, where our founder was born and raised, and he and other management members have extensive relationships built over a long history of involvement with various businesses in the region across upstream operations, non-operated enterprises, sand mine development, mineral acquisitions and water sourcing. We believe our management team's experience managing upstream operations in the Permian Basin lends a unique perspective that provides us with a network of key potential customers, suppliers, vendors and employees, contributes to our ability to provide a high-quality customer experience and serves as a strong foundation for our role as a collaborative partner in meeting the advanced completion needs of our customers. Further, our management team has extensive experience in identifying attractive operating areas and evaluating resource potential through a variety of means, including extensive geologic studies; we believe this experience will continue to allow us to expand our operations by selectively pursuing organic development opportunities and innovations in the Permian Basin.
- ***Proactive approach to the well-being of the environment and our employees***. Our voluntary agreement under the CCAA ensures that the USFWS will not require us to comply with conservation measures or impose any restrictions on our use of resources beyond those which we have already agreed. Our large acreage position also provides us with the flexibility to set

aside as much as 17,000 acres of high suitability DSL habitat for conservation protection, which would exempt us from certain enrollment fees otherwise required under the CCAA. The smaller acreage position of many of our Permian Basin competitors may make similar set-asides commercially challenging for them. We believe that our voluntary participation under the CCAA will help to safeguard our assets and operations against adverse effects that could result from non-participation or any future listing of the DSL as an endangered species. We believe potential customers, focused on improving the sustainability profile of their own operations, value our proactive stance towards environmental risk management. As we focus on the well-being of the environment we operate in, we also focus on the well-being of our employees through initiatives such as our compensation and benefits package and Wyatt's Lodge. We believe that this differentiated investment in our employees creates a culture of pride and ownership that fosters the positive disruptions and innovations our business successes are built on.

Business Strategies

Our principal business objective is to drive improvements to critical products and services in the Permian Basin through innovation which may reduce environmental impacts and optimize our cost structure, while driving notable value creation for our stockholders and stakeholders alike.

- ***Continuously optimize cost structure in order to deliver free cash flow across commodity cycles.*** Demand for services used in the development of unconventional resources in the United States varies notably based on the pace and intensity of such development, which is driven in large part by the prevailing commodity price environment. Since the beginning of 2020 through December 31, 2022, per-barrel prices of West Texas Intermediate ("WTI") crude oil exhibited substantial volatility ranging from $16.55 to $114.84, and we expect commodity prices to continue to be unpredictable going forward; as such, since our inception, we have continuously strived to optimize our cost structure and we believe we are able to provide our stockholders with a return of capital through cycles. For instance, substantial up-front investments were made in our Kermit and Monahans facilities and associated equipment in order for their design to maximize uptime and reliability. Our access to a natural water table near the surface of our deposit has allowed us to significantly lower our production costs through dredge mining. Our transition to e-mining, when fully completed is expected to result in reduced production costs, as we have seen historically when we have been able to use electric dredging as our primary mining method. In the future, the modular designs of our facilities will accommodate future expansions at a significantly reduced expense as compared to the conventionally designed facilities of our Permian Basin competitors.
- ***Seek out opportunities to positively disrupt the market for products and services critical to unconventional resource development projects.*** Innovation is central to our corporate culture, as it has been since the leadership role of certain members of our management team in the Bakken Formation's evolution via Brigham Exploration, and we continuously strive to holistically improve unconventional resource development in the United States, particularly in the Permian Basin. We were a leader in the disruption in the proppant supply chain as early entrants into "in-basin" sand which eliminated the need for in excess of 1,000-mile train hauls from the midwestern United States and in excess of 250-mile truck hauls from central Texas, providing substantial economic and environmental benefits. More recently, we were the first to bring e-mining to the Permian Basin, and we are advancing our initiative to meaningfully electrify sand delivery operations in the Permian Basin through our Dune Express and autonomous wellsite delivery initiatives.
- ***Use our unmatched scale to amplify innovation and disruptive technology to improve the unconventional resource supply chain.*** Our Kermit and Monahans facilities represent a complete reinvention of the more traditional proppant production facility. Most proppant production facilities were historically located far from the point of consumption and therefore had long supply lines. Generally speaking, these facilities frequently experienced downtime on

an unpredictable schedule. With the onset of in-basin sand, we recognized the need for our facilities to operate on a just-in-time delivery basis and took to redesigning the traditional facility to ensure that redundancy was built in at critical junctures to mitigate the effects of unplanned equipment downtime. Additional early measures included investments into the automation of our loadout lanes to drive down load times and the automation of many of our operations activities to improve efficiency and safety. More recently, we were the first, and currently the only, Permian Basin miner to partially electrify the mining of proppant through the use of electric dredges, and we plan to increase our electric dredge volumes over the next twelve to twenty-four months. Our Dune Express and wellsite delivery assets are the next positive major disruptions that we are bringing to the Permian Basin. As a positive disruptive industry technology, the Dune Express replaces much of the trucking haul with electric, conveyor-based transportation, which is likely to provide substantial SESP benefits, including a significant reduction in the emissions generated, relative to the traditional delivery of sand to customer wellsites due to the reduction in miles driven per ton of payload delivered. These strategic initiatives and other innovations are clear demonstrations of our commitment to evaluate and pursue strategies and technologies that positively disrupt our industry and continue to establish, maintain and optimize aspects of our business that provide distinct advantages over our competitors.

- ***Grow business around anchor contracts with high quality counterparties***. Innovation and the pursuit of additional projects like the Dune Express are central to our strategy, but they are only made possible by our relationships with high-quality, top-tier companies that operate in the Permian Basin. We have supply contracts in place with a variety of leading oil and natural gas and oilfield services companies, many of which are high-credit quality customers. The quality of our customer base is reflected in our collections rate over the year ended December 31, 2022, which exceeded 99.9%. We had similar collection rates for the years ended December 31, 2021, 2020 and 2019, which also exceeded 99.9%. Our transition to e-mining, when fully completed is expected to result in reduced production costs, as we have seen historically when we have been able to use electric dredging as our primary mining method. While many factors influence the selection of proppant providers, we believe that our differentiated environmental profile, resulting from our major electrification projects, paired with our ability to reliably provide large volumes of quality proppant at attractive rates makes us a preferred partner for customers similarly prioritizing enhanced sustainability of operations and cost structure optimization.
- ***Drive stockholder value creation by prioritizing our other stakeholders through sustainable environmental and social progress***. We have recognized, from our founding, that long-term profitability for our stockholders can be achieved only by delivering positive outcomes for our other stakeholders—treating our employees well, executing as good stewards in the communities and the environments we do business in, and operating with the highest governance and diligence standards. Though many of our stakeholders are not owners of our business, they do have a meaningful influence in the success of our business. Therefore, to optimize value creation for our stockholders, we strive to provide attractive outcomes for our stakeholders.
- ***Maintain a conservative financial profile in order to provide durable capital returns in a cyclical industry*** . The energy services business is historically cyclical, and we believe that a strong balance sheet and substantial liquidity are key, not only for the long-term health of the Company, but also for its ability to continuously return capital to its stockholders through cycles. On a pro forma basis after giving effect to this offering, we expect to have approximately $ million of cash on hand, $ million available under our asset-based loan credit

facility (the "2023 ABL Credit Facility"), and $ outstanding under our credit agreement with Stonebriar Commercial Finance LLC (the "Term Lender") pursuant to which the Term Lender extended a $180.0 million single advance six-year term loan credit facility (the "2021 Term Loan Credit Facility"). Further, we plan to continue making regular stockholder distributions as we transition into a public company, likely in the form of regular base dividends and potentially a combination of special dividends and share repurchases. Please see the subsection titled "—Recent Developments—Cash Distribution" and the section titled "Dividend Policy."

Recent Developments

Cash Distribution and Debt Repayment

In January 2023, we made cash distributions to unitholders of Atlas LLC in the aggregate amount of $15.0 million as permitted by the terms of the Third Amended and Restated Limited Liability Company Agreement of Atlas LLC. Concurrent with this distribution, Atlas LLC repaid $3.75 million of the 2021 Term Loan Credit Facility at par per the terms of the 2021 Term Loan Credit Facility agreement.

Sand Supply & Logistics Agreements with Provisions to Support the Dune Express

Atlas has recently signed sand supply and logistics contracts with major oil companies for the delivery of proppant via the Dune Express upon commercial in-service, which is currently expected to take place in 2024.

2023 ABL Credit Facility

On February 22, 2023, the Company, Bank of America, N.A., as administrative agent, and certain financial institutions party thereto as lenders (the "ABL Lenders") entered into a Loan, Security and Guaranty Agreement (the "ABL Credit Agreement") pursuant to which the ABL Lenders provide revolving credit financing to the Company in an aggregate principal amount of up to $75.0 million with availability thereunder subject to a borrowing base as described in the ABL Credit Agreement. The 2023 ABL Credit Facility includes a letter of credit sub-facility, which permits issuances of letters of credit up to an aggregate amount of $25.0 million. The scheduled maturity date of the 2023 ABL Credit Facility is February 22, 2028.

Corporate Reorganization

Atlas LLC was formed on April 20, 2017 for the purpose of being an in-basin, pure-play producer and provider of proppant primarily in the Permian Basin.

Atlas Energy Solutions Inc. ("Atlas Inc.") was incorporated as a Delaware corporation in February 2022. Following this offering and the corporate reorganization described below, (i) Atlas Inc. will be a holding company whose sole material asset will consist of membership interests in Atlas Sand Operating, LLC ("Atlas Operating"), (ii) Atlas Operating will be a holding company whose sole material asset will be 100% of the membership interests in Atlas LLC and (iii) Atlas LLC will own, directly or indirectly, all of our operating assets. After the consummation of this offering and the corporate reorganization described below, Atlas Inc. will be the managing member of Atlas Operating, will be responsible for all operational, management and administrative decisions relating to Atlas LLC's business and will consolidate the financial results of Atlas LLC and its subsidiaries.

In connection with the completion of this offering, we will engage in the following transactions, which we refer to as the "corporate reorganization":

- a merger will be effected in which Atlas LLC will survive as a wholly owned subsidiary of Atlas Operating;
- recently formed holding companies ("HoldCos") will hold the Legacy Owners' membership interests in Atlas Operating, which membership interests will be represented by a single class of common units ("Atlas Units");
- the Legacy Owners will indirectly, through the HoldCos, transfer all or a portion of their Atlas Units and voting rights, as applicable, in Atlas Operating to Atlas Inc. in exchange for shares of Class A common stock and, in the case of Legacy Owners continuing to hold Atlas Units through the HoldCos, shares of Class B common stock (so that such Legacy Owners continuing to hold Atlas Units will, through the HoldCos, hold one share of Class B common stock for each Atlas Unit held by them immediately following this offering); and
- Atlas Inc. will contribute all of the net proceeds received by it in this offering to Atlas Operating in exchange for a number of Atlas Units (such that the total number of Atlas Units held by Atlas Inc. equals the number of shares of Class A common stock outstanding after this offering), and Atlas Operating will further contribute the net proceeds received to Atlas LLC.

In the event we increase or decrease the number of shares of Class A common stock sold in this offering, the number of Atlas Units held by us immediately following this offering will correspondingly increase or decrease, respectively.

Immediately following this offering, each Legacy Owner's ownership interest in any shares of Class A common stock, Class B common stock and/or Atlas Units, as the case may be, will be indirect ownership of such securities by virtue of such Legacy Owner's direct ownership interest in one or more of the HoldCos, which will be the direct record owners of all such securities.

After giving effect to these transactions and this offering and assuming the underwriters' option to purchase additional shares is not exercised:

- the Legacy Owners will collectively own all of the outstanding shares of Class B common stock and shares of Class A common stock, collectively representing % of the voting power and % of the economic interest of Atlas Inc.;
- Atlas Inc. will own an approximate % interest in Atlas Operating; and
- the Legacy Owners that continue to hold Atlas Units immediately following the corporate reorganization and this offering will collectively own an approximate % interest in Atlas Operating.

If the underwriters' option to purchase additional shares is exercised in full:

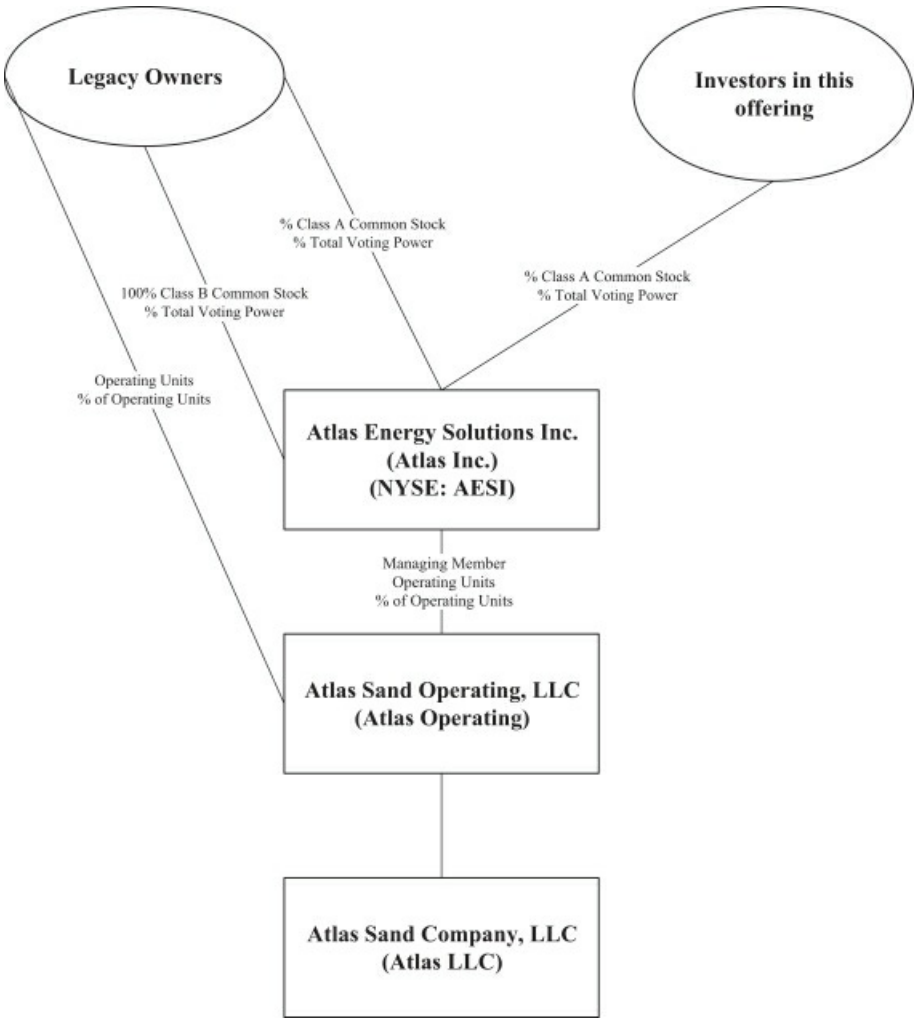
- the Legacy Owners will collectively own all of the outstanding shares of Class B common stock and shares of Class A common stock, collectively representing % of the voting power and % of the economic interest of Atlas Inc.;
- Atlas Inc. will own an approximate % interest in Atlas Operating; and
- the Legacy Owners that continue to hold Atlas Units immediately following the corporate reorganization and this offering will collectively own an approximate % interest in Atlas Operating.

Each share of Class B common stock has no economic rights but entitles its holder to one vote on all matters to be voted on by stockholders generally. Holders of Class A common stock and Class B common stock will vote together as a single class on all matters presented to our stockholders for their vote or approval, except as otherwise required by applicable law or by our amended and restated certificate of incorporation. We do not intend to list our Class B common stock on any exchange.

Our organizational structure following the offering and corporate reorganization is commonly referred to as an "Up-C" structure. Pursuant to this structure, following this offering we will hold a number of Atlas Units equal to the number of shares of Class A common stock issued and outstanding, and the Atlas Unitholders (other than us) will hold a number of Atlas Units equal to the number of shares of Class B common stock issued and outstanding. The Up-C structure was selected in order to (i) allow certain Legacy Owners the option to continue to hold their economic ownership in Atlas LLC in "pass-through" form for U.S. federal income tax purposes through their direct and indirect ownership of Atlas Units, and (ii) potentially allow us to benefit from certain net cash tax savings that we might realize as a result of certain increases in tax basis that may occur as a result of Atlas Inc.'s acquisition (or deemed acquisition for U.S. federal income tax purposes) of Atlas Units pursuant to the exercise of the Redemption Right (as defined below) or the Call Right (as defined below). In contrast to many offerings by issuers choosing an Up-C structure, we have made the decision not to enter into a tax receivable agreement with the Legacy Owners with respect to any such cash tax savings we might realize, which we believe provides for increased alignment between us and our stockholders over the long term.

Following this offering, under the Amended and Restated Limited Liability Company Agreement of Atlas Sand Operating, LLC (the "Atlas Operating LLC Agreement"), the Atlas Unitholders, other than Atlas Inc., will, subject to certain limitations, have the right (the "Redemption Right") to cause Atlas Operating to acquire all or a portion of their Atlas Units for, at Atlas Operating's election, (i) shares of our Class A common stock at a redemption ratio of one share of Class A common stock for each Atlas Unit redeemed, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (ii) an equivalent amount of cash. We will determine whether to issue shares of Class A common stock or cash based on facts in existence at the time of the decision, which we expect would include the relative value of the Class A common stock (including the trading prices for the Class A common stock at the time), the cash purchase price, the availability of other sources of liquidity (such as an issuance of preferred stock) to acquire the Atlas Units and alternative uses for such cash. Alternatively, upon the exercise of the Redemption Right, Atlas Inc. (instead of Atlas Operating) will have the right (the "Call Right") to, for administrative convenience, acquire each tendered Atlas Unit directly from the redeeming Atlas Unitholder for, at its election, (x) one share of Class A common stock, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (y) an equivalent amount of cash. In connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right, a corresponding number of shares of Class B common stock will be cancelled. Please see the section titled "Certain Relationships and Related Party Transactions—Atlas Operating LLC Agreement."

The following diagram indicates our simplified ownership structure immediately following this offering and the transactions related thereto (assuming the underwriters' option to purchase additional shares is not exercised):



Summary Risk Factors

Investing in our Class A common stock involves risks. You should carefully read the section of this prospectus titled "Risk Factors" and the other information in this prospectus for an explanation of these risks before investing in our Class A common stock. In particular, the following is a summary of some of the principal risks that could materially adversely affect our business, financial condition and results of operations, which could cause a decrease in the price of our Class A common stock and a loss of all or part of your investment.

Risks Related to Our Business and Operations

- Our proppant production and logistics operations depend on the level of activity in the oil and natural gas industries, which experiences substantial volatility due to a number of factors, including demand for oil and natural gas, the COVID-19 pandemic, weather, seasonality and demand for proppant, among others.
- Increasing costs, a lack of dependability or availability of transportation services, or infrastructure or an oversupply of transportation services could have an adverse effect on our business, financial condition and results of operations.
- We may be adversely affected by decreased demand for proppant or the development of technically and cost-effective alternative proppants or new processes to replace hydraulic fracturing.
- Given the nature of our proppant production operations, we face a material risk of liability, delays and increased cash costs of production from environmental and industrial accidents and operational breakdowns.
- The development of the Dune Express is a complex and challenging process that may take longer and cost more than estimated, or not be completed at all. In addition, successful development and operation of the Dune Express will depend on certain factors that may be outside of our control, and the storage and transportation capacity or other anticipated benefits of our Dune Express may not be achieved.
- A negative shift in investor sentiment towards the oil and natural gas industry and increased attention to ESG and conservation matters may adversely impact our business.
- Most of our product sales are currently generated at two facilities. Any adverse developments at those facilities could have an adverse effect on our business, financial condition and results of operations.
- If we or our customers are not able to obtain and maintain necessary permits, our results of operations could suffer.
- An increase in the supply of proppant having similar characteristics as the proppant we produce could make it more difficult for us to renew or replace our existing contracts on favorable terms, or at all.

Risks Related to Financial Conditions

- Our indebtedness could adversely affect our financial flexibility and our competitive position.
- Our supply agreements contain provisions requiring us to deliver minimum amounts of sand-based proppant. If we are unable to meet our minimum requirements under these contracts, we may be required to pay penalties or the contract counterparty may be able to terminate the agreement.

Risks Related to Environmental, Mining and Other Regulations

- Silica-related health issues and legislation, including compliance with existing or future regulations relating to respirable crystalline silica, or litigation could have an adverse effect on our business, reputation or results of operations.
- Federal, state and local legislative and regulatory initiatives relating to hydraulic fracturing and the potential for related litigation could result in increased costs, additional operating restrictions or delays for our customers, which could cause a decline in the demand for our proppant and negatively impact our business, results of operations and financial condition.
- We and our customers are subject to other extensive regulations, including licensing, plant and wildlife protection and reclamation regulation, that impose, and will continue to impose, significant costs and liabilities. In addition, future regulations, or more stringent enforcement of existing regulations, could increase those costs and liabilities, which could adversely affect our results of operations.

Risks Related to Our Class A Common Stock and Organizational Structure

- We are a holding company. Our sole material asset after completion of this offering and our corporate reorganization will be our equity interest in Atlas Operating, and we will accordingly be dependent upon cash distributions from Atlas Operating to cover our taxes and corporate and overhead expenses, among other expenses.
- The requirements of being a public company, including compliance with the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the requirements of the Sarbanes-Oxley Act, may strain our resources, increase our costs and distract management, and we may be unable to comply with these requirements in a timely or cost-effective manner.

Emerging Growth Company Status

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act (the "JOBS Act"). For as long as we are an emerging growth company, unlike other public companies that are not emerging growth companies under the JOBS Act, we are not required to:

- provide an auditor's attestation report on management's assessment of the effectiveness of our system of internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- provide more than two years of audited financial statements and related management's discussion and analysis of financial condition and results of operations;
- comply with any new requirements that may be adopted by the Public Company Accounting Oversight Board (the "PCAOB") requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and the financial statements of the issuer;
- provide certain disclosure regarding executive compensation required of larger public companies or hold stockholder advisory votes on executive compensation required by the Dodd-Frank Wall Street Reform and Consumer Protection Act; or
- obtain stockholder approval of any golden parachute payments not previously approved.

We will cease to be an emerging growth company upon the earliest of:

- the last day of the fiscal year in which we have $1.235 billion or more in annual revenues;
- the date on which we become a “large accelerated filer” (the fiscal year-end on which the total market value of our common equity securities held by non-affiliates is $700 million or more as of June 30);
- the date on which we issue more than $1.0 billion of non-convertible debt over a three-year period; or
- the last day of the fiscal year following the fifth anniversary of our initial public offering.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended (the “Securities Act”), for complying with new or revised accounting standards. We intend to take advantage of these reporting exemptions until we are no longer an emerging growth company. Our election to use the phase-in periods permitted by this election may make it difficult to compare our financial statements to those of non-emerging growth companies and other emerging growth companies that have opted out of the longer phase-in periods under Section 107 of the JOBS Act and who will comply with new or revised financial accounting standards. If we were to subsequently elect instead to comply with these public company effective dates, such election would be irrevocable pursuant to Section 107 of the JOBS Act.

Principal Executive Offices and Internet Address

Our principal executive offices are located at 5918 W. Courtyard Drive, Suite 500, Austin, Texas 78730, and our telephone number at that address is (512) 220-1200. Our website address is *https://atlas.energy*. We expect to make our periodic reports and other information filed with or furnished to the SEC available free of charge through our website as soon as reasonably practicable after those reports and other information are electronically filed with or furnished to the SEC. Information contained on, or otherwise accessible through, our website or any other website is not incorporated herein by reference and does not constitute part of this prospectus.

The Offering	
Class A common stock offered by us	shares (shares if the underwriters' option to purchase additional shares is exercised in full).
Class A common stock to be outstanding immediately after completion of this offering	shares (shares if the underwriters' option to purchase additional shares is exercised in full).
Class B common stock to be outstanding immediately after completion of this offering	shares, or one share for each Atlas Unit held by certain Legacy Owners immediately following this offering and any exercise of the underwriters' option to purchase additional shares. Class B shares are non-economic. In connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right, a corresponding number of shares of Class B common stock will be cancelled.
Voting power of Class A common stock after giving effect to this offering	% (or (i) % if the underwriters' option to purchase additional shares is exercised in full and (ii) 100% if all outstanding Atlas Units held by certain Legacy Owners were redeemed, along with a corresponding number of shares of our Class B common stock, for newly issued shares of Class A common stock on a one-for-one basis).
Voting power of Class B common stock after giving effect to this offering	% (or (i) % if the underwriters' option to purchase additional shares is exercised in full and (ii) 0% if all outstanding Atlas Units held by certain Legacy Owners were redeemed, along with a corresponding number of shares of our Class B common stock, for newly issued shares of Class A common stock on a one-for-one basis).
Voting rights	Each share of our Class A common stock entitles its holder to one vote on all matters to be voted on by stockholders generally. Each share of our Class B common stock entitles its holder to one vote on all matters to be voted on by stockholders generally. Holders of our Class A common stock and Class B common stock vote together as a single class on all matters presented to our stockholders for their vote or

	approval, except as otherwise required by applicable law or by our amended and restated certificate of incorporation. Please see "Description of Capital Stock."
Use of proceeds	We expect to receive approximately $ million of net proceeds from the sale of Class A common stock, after deducting underwriting discounts and estimated offering expenses payable by us (assuming the midpoint of the price range set forth on the cover page of this prospectus) (or approximately $ million if the underwriters' option to purchase additional shares is exercised in full). We intend to contribute all of the net proceeds of this offering to Atlas Operating in exchange for Atlas Units and Atlas Operating will further contribute the net proceeds received to Atlas LLC. Atlas LLC will use: • approximately $ million of the net proceeds of this offering to fund the construction of the Dune Express; and • approximately $ million of the net proceeds of this offering to fund general corporate purposes. Please see "Use of Proceeds" for a more complete description of the intended use of proceeds from this offering.
Dividend policy	We expect to pay dividends on our Class A common stock in amounts determined from time to time by our board of directors. Future dividend levels will depend on the earnings of our subsidiaries, their financial condition, cash requirements, regulatory restrictions any restrictions in financing agreements and other factors deemed relevant by the board of directors. Please see "Dividend Policy."
Redemption rights of Atlas Unitholders	Following this offering, under the Atlas Operating LLC Agreement, the Atlas Unitholders, other than Atlas Inc., will, subject to certain limitations, have the right, pursuant to the Redemption Right, to cause Atlas Operating to acquire all or a portion of their Atlas Units for, at Atlas Operating's election, (i) shares of our Class A common stock at a redemption ratio of one share

	of Class A common stock for each Atlas Unit redeemed, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (ii) an equivalent amount of cash. Alternatively, upon the exercise of the Redemption Right, Atlas Inc. (instead of Atlas Operating) will have the right, pursuant to the Call Right, to, for administrative convenience, acquire each tendered Atlas Unit directly from the redeeming Atlas Unitholder for, at its election, (x) one share of Class A common stock, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (y) an equivalent amount of cash. In connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right, a corresponding number of shares of Class B common stock will be cancelled. Please see "Certain Relationships and Related Party Transactions—Atlas Operating LLC Agreement."
Directed share program	At our request, an affiliate of BofA Securities, Inc., a participating Underwriter, has reserved for sale, at the initial public offering price, up to 5% of the shares offered by this prospectus for sale to some of our directors, officers, employees, distributors, dealers, business associates and related persons. If these persons purchase reserved shares it will reduce the number of shares available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.
Proposed listing symbol	We have applied to list our Class A common stock on the NYSE under the symbol "AESI."
Risk factors	You should carefully read and consider the information set forth under the heading "Risk Factors" and all other information set forth in this prospectus before deciding to invest in our Class A common stock.

The information above excludes (i) shares of Class A common stock reserved for issuance under our long-term incentive plan (the "LTIP"), which we intend to adopt in connection with the completion of this offering and (ii) shares of Class A common stock reserved for issuance in connection with any exercise of the Redemption Right or Call Right.

Summary Historical and Pro Forma Financial and Operating Data

Atlas Inc. was formed on February 3, 2022 and does not have historical financial results. The following table shows the summary historical condensed consolidated financial information of our Predecessor and the summary pro forma financial information of Atlas Inc. for the periods and as of the dates indicated.

The summary historical condensed consolidated financial information of our Predecessor as of and for the years ended December 31, 2022, 2021, and 2020 was derived from the historical audited consolidated financial statements of our Predecessor included elsewhere in this prospectus.

The summary unaudited pro forma statement of operations and balance sheet data as of and for the year ended December 31, 2022 has been prepared to give pro forma effect to (i) the reorganization transactions described under "Corporate Reorganization" and (ii) this offering and the application of the net proceeds therefrom as if each had been completed as of January 1, 2022, in the case of the statement of operations data, and on December 31, 2022, in the case of the balance sheet data. This information is subject to and gives effect to the assumptions and adjustments described in the notes accompanying the unaudited pro forma financial statements included elsewhere in this prospectus. The summary unaudited pro forma financial and operating data is presented for informational purposes only and should not be considered indicative of actual results of operations that would have been achieved had such transactions been consummated on the dates indicated, and does not purport to be indicative of statements of financial position or results of operations as of any future date or for any future period.

The following table should be read together with the sections titled "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Corporate Reorganization," and the historical consolidated financial statements of our Predecessor, our pro forma financial statements and related notes included elsewhere in this prospectus.

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands, except percentages and per ton amounts)		
Statement of Operations Data:			
Total sales	$ 482,724	$ 172,404	$ 111,772
Cost of sales (excluding depreciation, depletion and accretion expense)	198,918	84,656	73,118
Depreciation, depletion and accretion expense	27,498	23,681	20,887
Gross profit	256,308	64,067	17,767
Selling, general and administrative expense	24,317	17,071	17,743
Impairment of long-lived assets	—	—	1,250
Operating income (loss)	231,991	46,996	(1,226)
Interest expense, net(1)	(15,760)	(42,198)	(32,819)
Other income (loss)	2,631	291	(25)
Income (loss) before income taxes	218,862	5,089	(34,070)
Income tax expense	1,856	831	372
Net income (loss)	$ 217,006	$ 4,258	$ (34,442)

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands, except percentages and per ton amounts)		
Pro Forma Information (unaudited):			
Pro forma net income (loss)(2)			
Pro forma non-controlling interest(3)			
Pro forma net income (loss) attributable to common stockholders(4)			
Pro forma net income (loss) per common share attributable to common stockholders(2)(4)			
Basic			
Diluted			
Pro forma weighted-average shares outstanding(4)			
Basic			
Diluted			
Other Data:			
Sales Volumes (tons)	10,186,886	8,279,036	6,317,716
Contribution Margin(5)	$ 283,806	$ 87,748	$ 38,654
Adjusted EBITDA(5)	$ 263,983	$ 71,954	$ 24,667
Adjusted EBITDA Margin(5)	54.7%	41.7%	22.1%
Adjusted Free Cash flow(5)	$ 228,510	$ 64,239	$ 19,686
Adjusted Free Cash Flow Margin(5)	47.3%	37.3%	17.6%
Adjusted Free Cash Flow Conversion(5)	86.6%	89.3%	79.8%
Net Debt	$ 87,140	$ 137,773	$ 158,736
Cost of Sales per ton(6)	$ 19.53	$ 10.23	$ 11.57
Statement of Cash Flows Data:			
Net cash provided by operating activities	$ 206,012	$ 21,356	$ 12,486
Net cash used in investing activities	(89,592)	(19,371)	(9,532)
Net cash provided by (used in) financing activities	(74,811)	2,344	11,826
Net increase in cash and cash equivalents	$ 41,609	$ 4,329	$ 14,780
Balance Sheet Data (at end of period):			
Cash and cash equivalents	$ 82,010	$ 40,401	$ 36,072
Total assets	$ 750,999	$ 543,850	$ 521,742
Long-term debt, net of discount and deferred financing costs(7)	126,588	159,712	134,844
Total liabilities	239,642	205,153	190,045
Total members' equity	$ 511,357	$ 338,697	$ 331,697

(1) For the year ended December 31, 2021, includes loss on extinguishment of debt of $11.9 million resulting from the recognition of unamortized debt discount and deferred financing costs upon redemption of the 2018 Term Loan Credit Facility. Additionally, there was a make-whole premium of $4.5 million paid upon redemption of the 2018 Term Loan Credit Facility.

(2) Pro forma net income (loss) reflects pro forma income tax expense of $ for the year ended December 31, 2022 associated with the income tax effects of this offering and the corporate reorganization described under the section titled "Corporate Reorganization." Atlas Inc. is a corporation and is subject to U.S. federal income tax. Our Predecessor is and was generally not subject to U.S. federal income tax at an entity level. As a result, the consolidated net income in our Predecessor's historical financial statements does not reflect the tax expense we would have incurred if we had been subject to U.S. federal income tax at an entity level during such periods.

(3) Reflects the pro forma adjustment to non-controlling interest and net income attributable to common stockholders to reflect the ownership of Atlas Units by the Legacy Owners holding Atlas Units immediately following the corporate reorganization and this offering.

(4) Pro forma net income per share attributable to common stockholders and weighted average shares reflect the estimated number of shares of Class A common stock we expect to have outstanding upon the completion of our corporate reorganization described under the section titled "Corporate Reorganization" and this offering. On a pro forma basis for the year ended December 31, 2022, the potential redemption of Atlas Units and cancellation of the corresponding shares of Class B common stock has been excluded from the reported diluted weighted average shares outstanding used to compute diluted earnings per share as the impact of such redemption would be antidilutive. We use the "if-converted" method to determine the potential dilutive effect of our Class B common stock.

(5) Please read "—Non-GAAP Financial Measures" below for the definitions of Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted Free Cash Flow Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt and a reconciliation of Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted Free Cash Flow Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt to our most directly comparable financial measures calculated and presented in accordance with GAAP.

(6) Includes the cost of sales for product sales and service sales. Excludes cost of sales depreciation, depletion and accretion expense.

(7) Excludes long-term finance right-of-use lease liabilities.

Non-GAAP Financial Measures

Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt are non-GAAP supplemental financial measures used by our management and by external users of our financial statements such as investors, research analysts and others, in the case of Adjusted EBITDA, to assess our operating performance on a consistent basis across periods by removing the effects of development activities, provide views on capital resources available to organically fund growth projects and, in the case of Adjusted Free Cash Flow and Adjusted EBITDA less Capital Expenditures, assess the financial performance of our assets and their ability to sustain dividends over the long term without regard to financing methods, capital structure, levels of reinvestment or historical cost basis.

We define Adjusted EBITDA as net income (loss) before depreciation, depletion and accretion, interest expense, net, income tax expense, expense related to workforce reduction, impairment of long-lived assets, unit-based compensation, loss on disposal of property, plant and equipment, gain (loss) on extinguishment of debt and unrealized commodity derivative gain (loss). Management believes Adjusted EBITDA is useful because it allows them to more effectively evaluate our operating performance and compare the results of our operations from period to period and against our peers without regard to our financing methods or capital structure. We exclude the items listed above from net income in arriving at Adjusted EBITDA because these amounts can vary substantially from company to company within our industry depending upon accounting methods and book values of assets, capital structures and the method by which the assets were acquired.

We define Adjusted EBITDA Margin as Adjusted EBITDA divided by total sales.

We define Adjusted Free Cash Flow as Adjusted EBITDA less maintenance capital expenditures. We define Adjusted EBITDA less Capital Expenditures as Adjusted EBITDA less Net Cash Used in Investing Activities. We believe that Adjusted Free Cash Flow and Adjusted EBITDA less Capital Expenditures are useful to investors as it provides a measure of the ability of our business to generate cash.

We define Adjusted Free Cash Flow Margin as Adjusted Free Cash Flow divided by total sales.

We define Adjusted EBITDA less Capital Expenditures Margin as Adjusted EBITDA less Capital Expenditures divided by total sales.

We define Adjusted Free Cash Flow Conversion as Adjusted Free Cash Flow divided by Adjusted EBITDA.

We define Contribution Margin as gross profit plus depreciation, depletion and accretion expense.

We define Maintenance Capital Expenditures as capital expenditures excluding growth capital expenditures.

We define Net Debt as total debt, net of discount and deferred financing costs, plus discount and deferred financing costs, plus right-of-use lease liabilities, less cash and cash equivalents.

Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt do not represent and should not be considered alternatives to, or more meaningful than, net income, income from operations, cash flows provided by operating activities or any other measure of financial performance presented in accordance with GAAP as measures of our financial performance. Adjusted EBITDA, Adjusted Free Cash Flow, and Adjusted EBITDA less Capital Expenditures have important limitations as analytical tools because they exclude some but not all items that affect net income, the most directly comparable GAAP financial measure. Our computation of Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt may differ from computations of similarly titled measures of other companies.

The following table presents a reconciliation of Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt to the most directly comparable GAAP financial measure for the periods indicated.

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Net income (loss)(1)	**$ 217,006**	**$ 4,258**	**$ (34,442)**
Depreciation, depletion and accretion expense	28,617	24,604	21,579
Interest expense, net	15,760	30,276	32,819
Income tax expense	1,856	831	372
EBITDA	**263,239**	**59,969**	**20,328**
Unit-based compensation expense	678	129	2,545
Impairment of long-lived assets	—	—	1,250
Reduction in workforce expense	—	—	426
Loss on disposal of property, plant and equipment	—	—	118
Loss on extinguishment of debt	—	11,922	—
Unrealized derivative (gain) loss	66	(66)	—
Adjusted EBITDA	**263,983**	**71,954**	**24,667**
Maintenance Capital Expenditures	35,473	7,715	4,981
Adjusted Free Cash Flow	**$ 228,510**	**$ 64,239**	**$ 19,686**

	Predecessor		
	For the Year Ended December 31,		
	2022	2021	2020
	(In thousands)		
Net income (loss)(1)	**$ 217,006**	**$ 4,258**	**$ (34,442)**
Depreciation, depletion and accretion expense	28,617	24,604	21,579
Interest expense, net	15,760	30,276	32,819
Income tax expense	1,856	831	372
EBITDA	**263,239**	**59,969**	**20,328**
Unit-based compensation expense	678	129	2,545
Impairment of long-lived assets	—	—	1,250
Reduction in workforce expense	—	—	426
Loss on disposal of property, plant and equipment	—	—	118
Loss on extinguishment of debt	—	11,922	—
Unrealized derivative (gain) loss	66	(66)	—
Adjusted EBITDA	**263,983**	**71,954**	**24,667**
Capital expenditures	89,592	19,371	9,532
Adjusted EBITDA less Capital Expenditures	**$ 174,391**	**$ 52,583**	**$ 15,135**

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Cash from operating activities	**$206,012**	**$ 21,356**	**$12,486**
Repayment of paid-in-kind interest borrowings	—	22,233	—
Current income tax expense (benefit)(2)	1,858	471	(294)
Change in operating assets and liabilities	41,774	8,622	(369)
Cash interest expense(2)	14,904	19,173	12,136
Maintenance Capital Expenditures	(35,473)	(7,715)	(4,981)
Other	(565)	99	282
Reduction in workforce expense	—	—	426
Adjusted Free Cash Flow	**$228,510**	**$ 64,239**	**$19,686**

	Predecessor		
	For the Year Ended December 31,		
	2022	2021	2020
	(In thousands, except percentages)		
Cash from operating activities	**$206,012**	**$ 21,356**	**$12,486**
Repayment of paid-in-kind interest borrowings	—	22,233	—
Current income tax expense (benefit)(2)	1,858	471	(294)
Change in operating assets and liabilities	41,774	8,622	(369)
Cash interest expense(2)	14,904	19,173	12,136
Capital expenditures	(89,592)	(19,371)	(9,532)
Other	(565)	99	282
Reduction in workforce expense	—	—	426
Adjusted EBITDA less Capital Expenditures	**$174,391**	**$ 52,583**	**$15,135**
Adjusted EBITDA Margin	54.7%	41.7%	22.1%
Adjusted EBITDA less Capital Expenditure Margin	36.1%	30.5%	13.5%
Adjusted Free Cash Flow Margin	47.3%	37.3%	17.6%
Adjusted Free Cash Flow Conversion	86.6%	89.3%	79.8%

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Gross Profit	**$ 256,308**	**$ 64,067**	**$ 17,767**
Depreciation, depletion and accretion expense	27,498	23,681	20,887
Contribution Margin	**$ 283,806**	**$ 87,748**	**$ 38,654**

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Total Debt	**$ 147,174**	**$ 175,275**	**$ 174,428**
Discount and deferred financing costs	1,821	2,264	19,591
Finance right-of-use lease liabilities(3)	20,155	—	—
Capital lease liabilities(3)	—	635	789
Less: Cash and cash equivalents	(82,010)	(40,401)	(36,072)
Net Debt	**$ 87,140**	**$ 137,773**	**$ 158,736**

(1) Pro forma net income (loss) reflects pro forma income tax expense of $ for the year ended December 31, 2022, associated with the income tax effects of this offering and the corporate reorganization described under the section titled "Corporate Reorganization." Atlas Inc. is a corporation and is subject to U.S. federal income tax. Our Predecessor is and was generally not subject to U.S. federal income tax at an entity level. As a result, the consolidated net income in our Predecessor's historical financial statements does not reflect the tax expense we would have incurred if we had been subject to U.S. federal income tax at an entity level during such periods.

(2) A reconciliation of the adjustment of these items used to calculate Adjusted Free Cash Flow to the Consolidated Financial Statements is included below.

(3) On January 1, 2022, the Company adopted ASU 2016-02, Leases (Topic 842), which resulted in the recognition of $0.6 million of finance right-of-use lease liabilities, previously recognized as capital lease liabilities. Information prior to January 1, 2022 has not been restated and continues to be reported under the accounting standards in effect for the period (ASC Topic 840).

	Predecessor		
	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Current tax expense reconciliation			
Income tax expense	**$ 1,856**	**$ 831**	**$ 372**
Less: deferred tax liabilities	2	(360)	(666)
Current income tax expense	**$ 1,858**	**$ 471**	**$ (294)**
Cash interest expense reconciliation			
Interest expense, net, excluding loss on extinguishment of debt	**$ 15,760**	**$ 30,276**	**$ 32,819**
Less: Interest paid-in-kind through issuance of additional term loans	—	(3,039)	(11,794)
Less: Amortization of debt discount	(457)	(7,320)	(8,110)
Less: Amortization of deferred financing costs	(442)	(739)	(791)
Less: Other	43	(5)	12
Cash interest expense	**$ 14,904**	**$ 19,173**	**$ 12,136**
Maintenance capital expenditures, accrual basis reconciliation			
Purchase of property, plant and equipment	**$ 89,592**	**$ 19,371**	**$ 9,532**
Changes in operating assets and liabilities associated with investing activities(1)	20,747	2,362	(844)
Less: Growth capital expenditures and capital lease additions	(74,866)	(14,018)	(3,707)
Maintenance Capital Expenditures, accrual basis	**$ 35,473**	**$ 7,715**	**$ 4,981**

(1) Positive working capital changes reflect capital expenditures in the current period that will be paid in a future period. Negative working capital changes reflect capital expenditures incurred in a prior period but paid during the period presented.

RISK FACTORS

Investing in our Class A common stock involves risks. The risks described below as well as information in this prospectus should be considered carefully, including our consolidated financial statements and the notes thereto, and the matters addressed under the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Cautionary Statement Regarding Forward-Looking Statements," before making an investment decision. The risks and uncertainties described below are not the only ones we face. Additional risks not presently known to us or that we currently deem immaterial may also materially affect our business. The occurrence of any of the following risks or additional risks and uncertainties that are currently immaterial or unknown could materially and adversely affect our business, financial condition, liquidity, results of operations, cash flows and prospects. In such an event, the trading price of our Class A common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Business and Operations

Our proppant production and logistics operations depend on the level of activity in the oil and natural gas industries, which experience substantial volatility.

Our operations that produce and transport proppant are materially dependent on the levels of activity in oil and natural gas exploration, development and production. More specifically, the demand for the proppant we produce is closely related to the number of oil and natural gas wells completed in geological formations where sand-based proppant is used in fracture treatments. These activity levels are affected by both short- and long-term trends in oil and natural gas prices. In recent years, oil and natural gas prices and, therefore, the level of exploration, development and production activity, have experienced significant volatility.

When oil and natural gas prices decrease, exploration and production companies may reduce their exploration, development, production and well completion activities. During such periods, demand for our product and services which supply oil and natural gas wells, including our transportation and logistics solutions, may decline, and may lead to a decline in the market price of proppant, if the supply of proppant is not similarly reduced. When demand for proppant increases, there may not be a corresponding increase in the prices for our products or our customers may not increase use of our products, which could have an adverse effect on our business, financial condition and results of operations.

Worldwide economic, political and military events, including war, terrorist activity, events in the Middle East and initiatives by the Organization of the Petroleum Exporting Countries ("OPEC"), have contributed, and are likely to continue to contribute, to oil and natural gas price volatility. For example, in February 2022, Russia invaded Ukraine and is still engaged in active armed conflict against the country. The conflict and the sanctions imposed in response have led to regional instability and caused dramatic fluctuations in global financial markets and have increased the level of global economic uncertainty, including uncertainty about world-wide oil supply and demand, which in turn has caused increased volatility in commodity prices. Additionally, warmer than normal winters in North America and other weather patterns may adversely impact the short-term demand for natural gas and, therefore, demand for our products. Reduction in demand for natural gas to generate electricity could also adversely impact the demand for proppant. In addition, any future decrease in the rate at which oil and natural gas reserves are discovered or developed, whether due to increased governmental regulation, limitations on exploration and drilling activity, technological innovations that result in new processes for oil and natural gas production that do not require proppant or other factors, could adversely affect the demand for our products, even in a stronger oil and natural gas price environment. Moreover, the energy transition to a low carbon economy, increased deployment of renewable power generation,

renewable fuels and electric vehicles all have the potential to reduce demand for oil and natural gas and consequently the services we provide. The continued or future occurrence of any of these risks could have an adverse effect on our business, financial condition and results of operations.

Our business is subject to the cyclical nature of our customers' businesses and on the oil and natural gas industry.

Our business is directly affected by capital spending to explore for, develop and produce oil and natural gas in the United States. The oil and natural gas industry is cyclical and historically has experienced periodic downturns in activity. During periods of economic slowdown in one or more of the industries or geographic regions we serve or in the worldwide economy, our customers often reduce their production and capital expenditures by deferring or canceling pending projects, even if such customers are not experiencing financial difficulties. These developments can have an adverse effect on sales of our products and our results of operations.

Weakness in the industries we serve has had, and may in the future have, an adverse effect on sales and our results of operations. A continued or renewed economic downturn in one or more of the industries that we serve, or in the worldwide economy, could cause actual results of operations to differ materially from historical and expected results.

Industry conditions are influenced by numerous factors over which we have no control, including:

- expected economic returns to E&P companies of new well completions;
- domestic and foreign economic conditions and supply of and demand for oil and natural gas;
- the level of prices, and expectations about future prices, of oil and natural gas;
- the level of global oil and natural gas exploration and production, and inventories;
- federal, state and local regulation of hydraulic fracturing and exploration and production activities;
- United States federal, tribal, state and local and non-United States governmental laws, regulations and taxes, including the policies of governments regarding the exploration for and production and development of their oil and natural gas reserves;
- changes in the transportation industry that services our business, including the price and availability of transportation;
- political and economic conditions in oil and natural gas producing countries, including uncertainty or instability resulting from civil unrest, terrorism or war, such as the current conflict between Russia and Ukraine;
- actions by members of OPEC, Russia and other oil-producing countries with respect to oil production levels and announcements of potential changes in such levels, including the failure of such countries to comply with supply limitation and production cuts;
- global or national health epidemics, such as the ongoing COVID-19 pandemic (including the spread of variants or mutant strains);
- political or civil unrest in the United States or elsewhere;
- worldwide political, military and economic conditions;
- stockholder activism or activities by non-governmental organizations to limit certain sources of funding for the energy sector or restrict the exploration, development and production of oil and natural gas;

- advances in exploration, development and production technologies or in technologies affecting energy consumption; and
- the potential acceleration of development of alternative fuels.

Decreased demand for proppant or the development of technically and cost-effective alternative proppants or new processes to replace hydraulic fracturing would negatively impact our business.

Frac sand is the most commonly used proppant in the completion and re-completion of oil and natural gas wells through hydraulic fracturing. A significant shift in demand from frac sand to other proppants, such as ceramic proppant, the development and use of other effective alternative proppants, or the development of new processes to replace hydraulic fracturing altogether, could cause a decline in demand for frac sand that we produce and would have an adverse effect on our business, financial condition and results of operations.

In addition, fuel conservation measures, alternative fuel requirements and increasing consumer demand for alternatives to oil and natural gas could reduce demand for oil and natural gas. The impact of the reduced demand for oil and natural gas may have an adverse effect on our business, financial condition, prospects, results of operations and cash flows. Additionally, the increased competitiveness of alternative energy sources (such as wind, solar, geothermal, tidal and biofuels) could reduce demand for oil and natural gas and therefore for our product and services, which would lead to a reduction in our revenues and negatively impact our business, financial condition and results of operations.

Our future performance will depend on our ability to succeed in competitive markets and on our ability to appropriately react to potential fluctuations in demand for, and supply of, our products and services.

We operate in a highly competitive market that is characterized by a small number of large, national producers and a larger number of small, regional or local producers. Transportation costs are a significant portion of the total cost to customers of proppant (in many instances transportation costs can represent more than 50% of delivered cost), the proppant market is typically local, and competition from beyond the local area is limited. Further, competition in the industry is based on customer relationships, reliability of supply, consistency and quality of product, customer service, site location, distribution capability, breadth of product offering, technical support and price.

Some of our competitors may have or may develop greater financial, natural and other resources than we do. Periodically, some of our competitors may reduce the pricing that they offer to our customers for a variety of reasons. One or more of our competitors may develop technology superior to ours or may have production facilities located in closer proximity to certain customer location than we do. For example, mobile mines may be able to mine resources in close proximity to wells, enabling them to deliver sand with significantly lower transportation costs. When the demand for hydraulic fracturing services decreases or the supply of proppant available in the market increases, prices in the proppant market can materially decrease. Our competitors may choose to consolidate, which could provide them with greater financial and other resources than us and improve their competitive positioning. Furthermore, oil and natural gas exploration and production companies and other providers of hydraulic fracturing services have acquired, and in the future may acquire, their own proppant reserves to fulfill their proppant requirements, and these other market participants may expand their existing proppant production capacity, all of which would negatively impact demand for our proppant. In addition, increased competition in the proppant industry could have an adverse impact on our ability to enter into long-term contracts or to enter into contracts on favorable terms.

Past performance by members of our management team, our directors or their respective affiliates may not be indicative of future performance of an investment in us.

Information regarding performance by, or businesses associated with, our management team, our directors and their affiliates is presented for informational purposes only. Past performance of our management team, our directors and their affiliates is not a guarantee of our future success or similar results. You should not rely on the historical record of the performance of our management team, our directors or their affiliates as being indicative of the future performance of an investment in us or the returns we will, or are likely to, generate going forward.

Increasing costs, a lack of dependability or availability of transportation services or infrastructure or an oversupply of transportation services could have an adverse effect on our business, financial condition and results of operations.

The transportation industry is subject to possible legislative and regulatory changes that may affect the economics of the industry by requiring changes in operating practices or by changing the demand or the cost of providing truckload services.

Transportation and related costs tend to be a significant component of the total delivered cost to our customers purchasing our proppant. The high relative cost of transportation related expense tends to favor manufacturers located in close proximity to the customer. Additionally, increases in the price of transportation costs, including freight charges, fuel surcharges and demurrage costs, could negatively impact operating costs if we are unable to pass those increased costs along to our customers. Failure to find long-term solutions to these logistical challenges could adversely affect our ability to respond quickly to the needs of our customers or result in additional increased costs, and thus could negatively impact our business, results of operations and financial condition.

Our operations are subject to operational hazards and inherent risks, some of which are beyond our control, and some of which may not be fully covered by insurance.

Our business and operations may be affected by natural or man-made disasters and other external events, many of which are not in our control. In addition to the other risks described in these risk factors, these risks include:

- unanticipated ground, grade or water conditions;
- environmental hazards;
- physical facility security breaches;
- inability to acquire or maintain necessary permits or mining or water rights;
- failure to maintain dust controls and meet restrictions on respirable crystalline silica dust;
- failures in quality control systems or training programs;
- technical difficulties or key equipment failures;
- inability to obtain necessary mining or production equipment or replacement parts;
- fires, explosions or industrial accidents or other accidents; and
- facility shutdowns in response to environmental regulatory actions.

These hazards can also cause personal injury and loss of life, severe damage to and destruction of property and equipment, pollution or environmental damage and suspension or cancellation of operations. Any prolonged downtime or shutdowns at our mining properties or production facilities

could have an adverse effect on our business, financial condition and results of operations. In addition, our operations are subject to, and exposed to, employee/employer liabilities and risks such as wrongful termination, discrimination, labor organizing, retaliation claims and general human resource related matters.

Not all of these risks are reasonably insurable, and our insurance coverage contains limits, deductibles, exclusions and endorsements. Our insurance coverage may not be sufficient to meet our needs in the event of loss and any such loss may have an adverse effect on our business, financial condition and results of operations.

Our ability to produce our products economically and in commercial quantities could be impaired if we are unable to acquire adequate supplies of water for our dredging operations.

The dredging process that we currently employ to produce from our Kermit and Monahans facilities requires significant quantities of water from the aquifer underlying our acreage. If in the future there is insufficient capacity available from this aquifer to provide a source of water for our dredging and associated processes as a result of drought or similar conditions affecting the environment, we will be required to obtain water from other sources that may not be available, or may be too costly, and we may be unable to continue our dredge mining operations entirely. The effects of climate change may also further exacerbate water scarcity in certain regions, including at the aquifer on our acreage. If such an event were to require us to discontinue dredging and resume operations using traditional proppant production processes, this could impair our cost of operations and ability to economically produce our reserves and would have an adverse effect on our financial condition, results of operations and cash flows.

Failure to maintain effective quality control systems at our mining and production facilities could have an adverse effect on our business, financial condition and operations.

The quality and safety of our products are critical to the success of our business. These factors depend significantly on the effectiveness of our quality control systems, which, in turn, depend on a number of factors, including the design of our quality control systems, our quality-training program and our ability to ensure that our employees adhere to the quality control policies and guidelines. Any significant failure or deterioration of our quality control systems could have an adverse effect on our business, financial condition, results of operations and reputation.

Given the nature of our proppant production operations, we face a material risk of liability, delays and increased cash costs of production from environmental and industrial accidents and operational breakdowns.

Our business involves significant risks and hazards, including environmental hazards, industrial accidents and breakdowns of equipment and machinery. Our electric dredge mining operations are subject to delays and accidents associated with electrical supply, repositioning and maintenance. Furthermore, during operational breakdowns, the relevant facility may not be fully operational within the anticipated timeframe, which could result in further business losses. The occurrence of any of these or other hazards could delay production, suspend operations, increase repair, maintenance or medical costs and, due to the integration of our facilities, could have an adverse effect on the productivity and profitability of a particular facility or on our business as a whole. Although insurance policies provide limited coverage for these risks, such policies will not fully cover some of these risks.

The development of the Dune Express is a complex and challenging process that may take longer and cost more than estimated, or not be completed at all. In addition, successful

development and operation of the Dune Express will depend on certain factors that may be outside of our control, and the storage and transportation capacity or other anticipated benefits of our Dune Express may not be achieved.

We may encounter adverse geological conditions, regulatory procedures or other legal requirements that could impede the construction or operation of the Dune Express. The inability to obtain any permits and other federal, state or local approvals that may be required, and any excessive delays in obtaining such permits and approvals due, for example, to litigation or third-party appeals, could potentially prevent us from successfully constructing and operating the Dune Express in a timely manner.

We plan to engage qualified construction firms to perform work associated with the construction of the Dune Express. However, if such firms experience delays, if they perform sub-standard work or if we fail to properly monitor the quality of their work or the timeliness of their progress, we may not be able to complete construction or begin operation of the Dune Express by the date or at the cost currently estimated. In any such circumstance, we could also face difficulties meeting certain delivery obligations to our customers or incur additional costs in making such deliveries by truck or other alternative means. Any material delay caused by our construction firms and subcontractors could therefore ultimately impact our ability achieve the anticipated benefits of the Dune Express and its integrated mining facilities and have an adverse effect on our business, financial condition and results of operations.

Operation of the Dune Express will depend on transmission and distribution facilities. If transmission to the Dune Express or any of its integrated mining facilities were to be interrupted physically, mechanically or with cyber means, it may hinder our ability to mine, sell or deliver proppant to our customers, satisfy our contractual obligations or otherwise operate or fully realize the expected benefits of the Dune Express.

A negative shift in investor sentiment towards the oil and natural gas industry and increased attention to environmental, social and governance ("ESG") and conservation matters may adversely impact our business.

Increasing attention to climate change and natural capital, societal expectations on companies to address climate change, investor and societal expectations regarding voluntary ESG initiatives and disclosures, and consumer demand for alternative sources of energy may result in increased costs (including but not limited to increased costs associated with compliance, stakeholder engagement, contracting, and insurance), reduced demand for our customers' hydrocarbon products and our product and services, reduced profits, increased legislative and judicial scrutiny, investigations and litigation, and negative impacts on our stock price and access to capital markets. Increasing attention to climate change and environmental conservation, for example, may result in demand shifts for our customers' hydrocarbon products and additional governmental investigations and private litigation against those customers. To the extent that societal pressures or political or other factors are involved, it is possible that liability could be imposed on our customers without regard to their causation of or contribution to the asserted damage, or to other mitigating factors. To date, however, changes in societal pressures and consumer demand related to increased attention to ESG and conservation matters have not had a material impact on our customers' operations or otherwise materially and adversely affected our business. Voluntary disclosures regarding ESG matters, as well as any ESG disclosures mandated by law, could result in private litigation or government investigation or enforcement action regarding the sufficiency or validity of such disclosures. In addition, failure or a perception (whether or not valid) of failure to implement ESG strategies or achieve ESG goals or commitments, including any GHG reduction or neutralization goals or commitments, could result in governmental investigations or enforcement, private litigation and damage our reputation, cause our investors or consumers to lose confidence in our Company, and negatively impact our operations.

Moreover, while we may create and publish disclosures regarding ESG matters, many of the statements in those disclosures may be on hypothetical expectations and assumptions that may or may not be representative of current or actual risks or events or forecasts of expected risks or events, including the costs associated therewith. Such expectations and assumptions are necessarily uncertain and may be prone to error or subject to misinterpretation given the long timelines involved and the lack of an established single approach to identifying and measuring many ESG matters. Such disclosures may also be partially reliant on third-party information that we have not or cannot independently verify. Additionally, we expect there will likely be increasing levels of regulation, disclosure-related and otherwise, with respect to ESG matters, and increased regulation will likely to lead to increased compliance costs as well as scrutiny that could heighten all of the risks identified in this risk factor.

In addition, organizations that provide information to investors on corporate governance and related matters have developed ratings processes for evaluating companies on their approach to ESG matters. Such ratings are used by some investors to inform their investment and voting decisions. Unfavorable ESG ratings and recent activism directed at shifting funding away from companies with energy-related assets could lead to increased negative investor sentiment toward us or our customers and to the diversion of investment to other industries, which could have a negative impact on our stock price and our or our customers' access to and costs of capital. Also, institutional lenders may, of their own accord, decide not to provide funding for fossil fuel industry companies based on climate change, natural capital, or other ESG related concerns, which could affect our or our customers' access to capital for potential growth projects. Moreover, to the extent ESG matters negatively impact our or the fossil fuel industry's reputation, we may not be able to compete as effectively to recruit or retain employees, which may adversely affect our operations.

Our business may suffer if we lose or are unable to attract and retain members of our workforce.

We depend to a large extent on the services of our senior management team and other key personnel. These employees have extensive experience and expertise in evaluating and analyzing industrial mineral properties, maximizing production from such properties, marketing industrial mineral production and developing and executing financing and hedging strategies.

Competition for management and key personnel is intense, and the pool of qualified candidates is limited. The loss of any of these individuals or the failure to attract additional personnel as needed could have an adverse effect on our operations and could lead to higher labor costs or the use of less-qualified personnel. In addition, if any of our executives or other key employees were to join a competitor or form a competing company, we could lose customers, suppliers, know-how and other personnel. Our operations also rely on skilled laborers using modern techniques and equipment to mine efficiently. We may be unable to train or attract the necessary number of skilled laborers to maintain our operating costs.

With respect to our trucking services, the industry periodically experiences a shortage of qualified drivers, particularly during periods of economic expansion, in which alternative employment opportunities are more plentiful and freight demand increases, or during periods of economic downturns, in which unemployment benefits might be extended. The trucking industry suffers from a high driver turnover rate, which requires us to continually recruit a substantial number of drivers to operate our equipment and could negatively affect our operations and expenses if we are unable to do so. Our success will be dependent on our ability to continue to attract, employ and retain highly skilled personnel at all levels of our operations.

A shortage of skilled labor together with rising labor costs in the excavation industry may further increase operating costs, which could adversely affect our business, results of operations and financial condition.

Efficient sand excavation using modern techniques and equipment requires skilled laborers, preferably with several years of experience and proficiency in multiple tasks, including processing of mined minerals. If there is a shortage of experienced labor in areas in which we operate, we may find it difficult to hire or train the necessary number of skilled laborers to perform our own operations which could have an adverse impact on our business, results of operations and financial condition.

As a result of the volatility of the oilfield services industry and the demanding nature of the work, workers may choose to pursue employment in fields that offer a more desirable work environment at wage rates that are competitive. Increased competition for their services could result in a loss of available, skilled workers or at a price that is not as advantageous to our business, both of which could negatively affect our operating results. If we are unable to retain or meet growing demand for skilled technical personnel, our operating results and our ability to execute our growth strategies may be adversely affected.

Inaccuracies in our estimates of sand reserves and resource deposits, or deficiencies in our title to those deposits, could result in our inability to mine the deposits or require us to pay higher than expected costs.

We base our sand reserve and resource estimates on engineering, economic and geological data assembled and analyzed by our mining engineers, which are reviewed periodically by outside firms. However, frac sand reserve estimates are by nature imprecise and depend to some extent on statistical inferences drawn from available drilling data, which may prove unreliable. There are numerous uncertainties inherent in estimating quantities and qualities of frac sand reserves and non-reserve frac sand deposits and costs to mine recoverable reserves, many of which are beyond our control and any of which could cause actual results to differ materially from our expectations. These uncertainties include:

- geological and mining conditions that may not be fully identified by available data or that may differ from experience;
- assumptions regarding the effectiveness of our mining, quality control and training programs;
- assumptions concerning future prices of frac sand, operating costs, mining technology improvements, development costs and reclamation costs; and
- assumptions concerning future effects of regulation, including the issuance of required permits and taxes by governmental agencies.

In addition, title to, and the area of, mineral properties and water rights may also be disputed. Mineral properties sometimes contain claims or transfer histories that examiners cannot verify. A successful claim that we do not have title to one or more of our properties or lack appropriate water rights could cause us to lose any rights to explore, develop and extract any minerals on that property, without compensation for our prior expenditures relating to such property. Any inaccuracy in our estimates related to our mineral reserves and non-reserve mineral deposits, or our title to such deposits, could result in our inability to mine the deposits or require us to pay higher than expected costs.

Further, the SEC has adopted amendments to its disclosure rules (the “SEC Modernization Rules”) to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act, which are codified in Regulation S-K subpart 1300. Under the SEC Modernization Rules, the historical property disclosure requirements for mining registrants included in SEC Industry Guide 7 have been replaced. As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of “measured mineral resources,” “indicated mineral

resources" and "inferred mineral resources." However, compared to mineralization that has been characterized as reserves, mineralization described using these terms has a greater amount of uncertainty as to their existence and whether they can be mined legally or economically, and investors are therefore cautioned not to assume that any reported "measured mineral resources," "indicated mineral resources" or "inferred mineral resources" are or will be economically or legally mineable.

All of our product sales are currently generated at two facilities. Any adverse developments at those facilities could have an adverse effect on our business, financial condition and results of operations.

All of our product sales are currently derived from our Kermit and Monahans facilities located in Winkler and Ward Counties in Texas. Any adverse development at these facilities due to catastrophic events or weather, adverse government regulatory impacts, transportation-related constraints or any other event that could cause us to curtail, suspend or terminate operations at either of these facilities, could result in us being unable to deliver our contracted volumes and related obligations. Although we maintain insurance coverage to cover a portion of these types of risks, there could be potential risks associated with our operations not covered by insurance. There also may be certain risks covered by insurance where the policy does not reimburse us for all of the costs related to such risks. Downtime or other delays or interruptions to our future operations that are not covered by insurance could have an adverse effect on our business, results of operations and financial condition. In addition, under our supply contracts, if we are unable to deliver contracted volumes, we may be required to pay liquidated damages that could have an adverse effect on our financial condition and results of operations.

Our operations consume large amounts of natural gas and electricity. An increase in the price or a significant interruption in the supply of these or any other energy sources could have an adverse effect on our business, financial condition and results of operations.

Natural gas and electricity costs represented approximately 3.4% and 0.7%, respectively, of our total product sales in the year ended December 31, 2022, and 5.9% and 1.9%, respectively, of our total product sales in the year ended December 31, 2021. Potential climate change regulations or carbon or emissions taxes could result in higher cost of production for energy, which may be passed on to us in whole or in part. A significant increase in the price of energy that is not recovered through an increase in the price of our product and services or covered through our hedging arrangements or an extended interruption in the supply of electricity or natural gas to our production facilities could have an adverse effect on our business, results of operations and financial condition.

A large portion of our sales is generated by our top 10 customers, and the loss of or a significant reduction in purchases by our largest customers could adversely affect our business, financial condition and results of operations.

Our 10 largest customers accounted for approximately 67.7% of total sales for the year ended December 31, 2022. During the years ended December 31, 2021 and 2020, our 10 largest customers accounted for 79.0% and 81.4% of total sales, respectively. Some of our customers have exited or could exit the business, or have been or could be acquired by other companies that purchase proppant solutions or logistics services we provide from other third-party providers. Our current customers also may seek to acquire proppant or logistics services from other providers that offer more competitive pricing or capture and develop their own sources of proppant solutions or logistics services. The loss of a customer or contract, or a reduction in the amount of proppant solutions or logistics services purchased by any customer, could have an adverse effect on our business, financial condition and results of operations. Further, as a result of market conditions, competition or other factors, these customers may not continue to purchase the same levels of our products in the future, if at all. Substantial reductions in purchase volumes across these customers could have an adverse effect on our business, financial condition and results of operations.

Upon the expiration of our current contracts, our customers may not continue to purchase the same levels of proppant solutions or logistics services due to a variety of reasons. In addition, we may choose to renegotiate our existing contracts on less favorable terms or at reduced volumes in order to preserve relationships with our customers. Any renegotiation of our contracts on less favorable terms, or inability to enter into new contracts on economically acceptable terms upon the expiration of our current contracts, could have an adverse effect on our business, financial condition and results of operations.

Our business and operations depend on our and our customers' ability to obtain and maintain necessary permits.

We and our customers hold numerous governmental, environmental, mining and other permits and approvals authorizing operations at each of our facilities. Our future success depends on, among other things, our ability, and the ability of our customers, to obtain and maintain the necessary permits and licenses required to conduct operations. In order to obtain permits and renewals of permits in the future, we may be required to prepare and present data to governmental authorities pertaining to the impact that our activities may have on the environment. Compliance with these regulatory requirements is expensive and significantly lengthens the time needed to conduct operations. Additionally, obtaining or renewing required permits is sometimes delayed, conditioned or prevented due to community opposition, opposition from other parties, the location of existing or proposed third-party operations, or other factors beyond our control. The denial of a new or renewed permit essential to our operations, delays in obtaining such a permit or the imposition of conditions in order to acquire the permit could impair our ability to continue operations at the affected facilities, delay those operations, or involve significant unplanned costs, any of which could adversely affect our business, performance and financial condition.

Our supply agreements may preclude us from taking advantage of increasing prices for proppant or mitigating the effect of increased operational costs during the term of those contracts.

The supply agreements we have may negatively impact our results of operations. Our sales contracts require our customers to pay a specified price for a specified volume of proppant. Although some of our supply agreements provide for price adjustments based on various factors, such adjustments are generally calculated on a quarterly basis and do not adjust dollar-for-dollar with adjustments in spot market prices. As a result, in periods with increasing prices our sales will not keep pace with market prices.

Additionally, if our operational costs increase during the terms of our supply agreements, we will not be able to pass some of those increased costs to our customers. If we are unable to otherwise mitigate these increased operational costs, our net income could decline.

A proppant production facility closure entails substantial costs, and if we close any of our facilities sooner than anticipated, our results of operations may be adversely affected.

We base our assumptions regarding the life of our proppant production facilities on detailed studies that we perform from time to time, but our studies and assumptions do not always prove to be accurate. If we close any of our proppant production facilities sooner than expected, sales will decline unless we are able to increase production at any of our other proppant production facilities, which may not be possible. The closure of a proppant production facility may also involve significant fixed closure costs, including accelerated employment legacy costs, severance-related obligations, and potentially reclamation and other environmental costs and the costs of terminating long-term obligations, including energy contracts and equipment leases. We accrue for the estimated costs to retire the assets over the expected timing of settlement. If we were to reduce the estimated time to settlement, the fixed proppant production facilities closure costs could be applied to a shorter period of production, which would increase production costs per ton produced and could adversely affect our results of operations and financial condition.

In addition, some environmental laws such as the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), impose strict, retroactive and joint and several liability for the remediation of releases of hazardous substances.

Certain of our contracts contain provisions requiring us to deliver minimum amounts of sand-based proppant. If we are unable to meet our minimum requirements under these contracts, we may be required to pay penalties or the contract counterparty may be able to terminate the agreement.

In certain instances, we commit to deliver products under penalty of nonperformance. We commit to deliver products to our customers prior to production, and we are obligated to deliver a minimum volume of sand-based proppant per year or per month under our supply agreements over their respective terms. Depending on the contract, our inability to deliver the requisite volume of sand-based proppant may permit our customers to terminate the agreement or require us to pay our customers a fee, the amount of which is generally calculated by multiplying the difference between the amount of volume contracted for and the amount delivered by a per-ton penalty specified in the contract. In such events, our results of operations may be adversely affected.

Currently, all of our operations are concentrated in the Permian Basin, making us vulnerable to risks associated with operating in a limited geographic area.

Currently, all of our operations are geographically concentrated in the Permian Basin. As a result, we may be disproportionately exposed to various factors, including, among others: (i) the impact of regional supply and demand factors, (ii) delays or interruptions of completion activity in such areas caused by governmental regulation, (iii) processing or transportation capacity constraints, (iv) market limitations, (v) availability of equipment and personnel or (vi) water shortages or other drought related conditions. This concentration in a limited geographic area also increases our exposure to changes in local laws and regulations, certain lease stipulations designed to protect wildlife and unexpected events that may occur in the regions such as natural disasters, seismic events, industrial accidents or labor difficulties. Any of the risks described above could have an adverse effect on our business, financial condition, results of operations and cash flow.

An increase in the supply of proppant having similar characteristics as the proppant we produce could make it more difficult for us to renew or replace our existing contracts on favorable terms, or at all.

If significant new reserves of proppant are discovered and developed and have similar characteristics to the proppant we produce, we may be unable to renew or replace our existing contracts on favorable terms, if at all. Specifically, if proppant is oversupplied, our customers may not be willing to enter into long-term take-or-pay contracts, may demand lower prices or both, which would have an adverse effect on our business, results of operations and financial condition. Similarly, the ongoing COVID-19 pandemic has caused a historic slowdown in oil and natural gas activity, which has led to an increase in available proppant supply relative to the reduced demand. The foregoing events have led to increased competition among our competitors, which could lead to pressure to further reduce prices to compete effectively.

Our results of operations are significantly affected by the market price of sand-based proppant, which have been historically subject to substantial price fluctuations.

Our results of operations and financial conditions are, and will continue to be, particularly sensitive to the long- and short-term changes in the market price of sand-based proppant. Among other factors, these prices also affect the value of our reserves and inventories, and could negatively impact the market price of our Class A common stock.

Market prices are affected by numerous factors beyond our control, including, among others, demand for high quality sand-based proppant, the availability and relative cost of alternate sources of sand, drilling and completion activity in the Permian Basin, prevailing commodity prices and overall economic activity.

Additionally, when demand for sand-based proppant increases, there may not be a corresponding or immediate increase in the prices for our products or our customers may choose to opt for lower-quality, lower priced products, which could have an adverse effect on our results of operations and financial condition. For example, the average price of frac sand F.O.B. minegate in the Permian Basin in 2019 was approximately $17.86 per ton, compared to a low of approximately $13.25 per ton in 2020 during the COVID-19 pandemic. As activity recovered during 2021, the average price of frac sand F.O.B. minegate increased to approximately $18.59 per ton, recovering only a portion of the previous price decrease. In addition, any future decreases in the rate at which oil and natural gas reserves are discovered or developed, whether due to increased governmental regulation, limitations on exploration and drilling activity, including hydraulic fracturing or other factors, could have an adverse effect on our business and financial condition, even in a stronger oil and natural gas price environment.

Our E&P customers' operations are subject to operating risks that are often beyond our control and could have an adverse effect on our business, financial condition and results of operations.

In addition to the sand-based proppant that we supply, the operations of our E&P customers rely on several other products and services in order to perform hydraulic fracturing activities, such as skilled laborers and equipment required for pumping proppant, water and fluids into oil and natural gas wells. Any failure by our E&P customers to obtain these other products and services could have an adverse effect on our business, financial condition and results of operations.

Our business and operations could suffer in the event of cybersecurity breaches, information technology system failures, network disruptions or other cyber security risks. A cyber incident could occur and result in information theft, data corruption, operational disruption and/or financial loss.

We rely on our information technology systems and other digital information to process transactions, summarize our operating results, deliver our systems, perform many of our services and manage our business and operations. In the ordinary course of our business, we collect and store sensitive data, including our proprietary business information and personally identifiable information of our employees. Our information technology systems and networks, and those of our customers, vendors, suppliers and other business partners, are subject to damage or interruption from power outages; computer and telecommunications failures; computer viruses; cyberattack or other security breaches; catastrophic events, such as fires, floods, earthquakes, tornadoes, hurricanes, acts of war or terrorism; and usage errors by our employees. If our information technology systems are damaged or cease to function properly, we may need to make a significant investment to fix or replace them, and we may suffer loss of critical data and interruptions or delays in our operations.

We have been the target of cyberattacks, and while to date none of these incidents has had a material impact on us, we expect to continue to be targeted in the future. Our risk and exposure to these matters remains heightened because of, among other things, the evolving nature of these threats, the current global economic and political environment, the outsourcing of some of our business operations, the ongoing shortage of qualified cybersecurity professionals and the interconnectivity and interdependence of third parties to our systems.

As cyber incidents continue to evolve, we will likely be required to expend additional resources to continue to modify or enhance our protective measures or to investigate and remediate any vulnerability to cyber incidents. In addition, any technology required for any mandate by authorities

requiring the transition to remote work increases our vulnerability to cybersecurity threats, including threats to gain unauthorized access to sensitive information or to render data or systems. Any material disruption in our information technology systems or systems that affect our business operations, delays or difficulties in implementing or integrating new systems or enhancing current systems, or any vulnerabilities rendering data or systems unusable following any mandated remote work situations, could have an adverse effect on our business and results of operations.

The systems we employ to detect and prevent cyberattacks may be insufficient to protect us from an incident or to allow us to minimize the magnitude and effects of such incident for a significant period of time. The occurrence of a cyberattack, breach, unauthorized access, misuse, computer virus or other cybersecurity event could jeopardize our systems, interrupt our operations or result in the unauthorized disclosure, gathering, monitoring, misuse, corruption, loss or destruction of confidential and other information that belongs to us, our customers, our counterparties or third-party service providers that is processed and stored in, and transmitted through, our computer systems and networks. Any such event could result in significant losses, loss of customers and business opportunities, reputational damage, litigation, regulatory fines, penalties or intervention, reimbursement or other compensatory costs, or otherwise adversely affect our business, financial condition or results of operations.

Our business and results of operations have been adversely affected by, and may again in the future be adversely affected by, the ongoing COVID-19 pandemic.

Public health crises, pandemics and epidemics, such as the ongoing COVID-19 pandemic, have adversely impacted, and may again adversely impact our operations, the operations of our customers and the global economy, including the worldwide demand for oil and natural gas and the level of demand for our product and services. Fear of such events has also altered the level of capital spending by oil and natural gas companies for exploration and production activities and has adversely affected global economies and financial markets, resulting in an economic downturn that has affected demand for our product and services. For instance, the outbreak of COVID-19 and its development into a pandemic has caused governmental authorities to impose mandatory closures, seek voluntary closures and impose restrictions on, or advisories with respect to, travel, business operations and public gatherings or interactions. Though we are currently deemed an essential business and, as a result, are exempt from many orders in their current form, the impact of the ongoing COVID-19 pandemic, and measures to prevent its spread, have adversely affected our businesses in a number of ways.

The COVID-19 pandemic (including the spread of variants of mutant strains) may significantly worsen during the upcoming months, which may cause governmental authorities to consider further restrictions on business and social activities. In the event governmental authorities increase restrictions, the re-opening of the economy may be further curtailed. We have experienced, and expect to continue to experience, some resulting disruptions to our business operations, as these restrictions have significantly impacted, and may continue to impact, many sectors of the economy. For example, the COVID-19 pandemic has caused one of the most challenging times in the recent history of the North-American E&P industry. The rig count in the Permian Basin decreased from a peak of 488 in 2019 to a trough of 117 in 2020, however our revenues and net cash provided by operating activities only contracted from $140.1 million and $22.7 million, respectively, for the year ended December 31, 2019, to $111.8 million and $12.5 million, respectively, for the year ended December 31, 2020, before recovering to $172.4 million and $21.4 million, respectively, for the year ended December 31, 2021. Our revenues and net cash provided by operating activities increased by $310.3 million and $184.6 million, respectively, from the year ended December 31, 2021, to $482.7 million and $206.0 million, respectively, for the year ended December 31, 2022.

The global impact of the ongoing COVID-19 pandemic continues to evolve, and we will continue to monitor the situation closely. The ultimate impact of the pandemic (including the spread of variants of mutant strains) on our business, financial condition and results of operations is highly uncertain and

subject to change, and will depend on future developments, including the duration of the outbreak within the United States and the related impact on the oil and natural gas industry, the impact of governmental actions designed to prevent the spread of COVID-19 and the availability of effective treatments and vaccines, all of which cannot be predicted with certainty at this time. While vaccines have become available in most countries and many economies have reopened, the status of the global recovery remains uncertain and unpredictable, especially in light of new variant strains. Business activity may not recover as quickly as anticipated, and widespread recovery will be impacted by future developments, including future waves of outbreak or new variant strains of the virus which may require re-closures or other preventative measures. Conditions will be subject to the effectiveness of government policies, vaccine administration rates, and other factors that may not be foreseeable. Any of the foregoing could adversely affect our business, results of operations and financial condition.

There are complex software and technology systems that need to be developed in coordination with our technology partner in connection with our autonomous trucking initiative, and there can be no assurance such systems will be successfully developed or implemented for use in our planned applications or at all.

Our planned autonomous proppant-delivery vehicles will use a substantial amount of third-party software codes and complex hardware to operate. The development of these advanced technologies is inherently complex, and we will need to coordinate with our technology partner in connection with the design, production and deployment of our autonomous proppant-delivery vehicles. Defects and errors may be revealed over time and our control over the performance of such third-party services and systems may be limited. Accordingly, our potential inability to successfully develop and implement the necessary software and technology systems may harm our competitive position.

We are relying on our technology partner to develop, manufacture and install a number of emerging technologies for use in our autonomous proppant-delivery vehicles. These technologies may not be commercially viable when used in our planned applications or at all. There can be no assurances that our technology partner will be able to meet the technological requirements, production timing and end-use specifications required to successfully implement our planned autonomous trucking initiative. In addition, the initial deliveries of our autonomous vehicles may not occur by the date or at the cost currently estimated. If any material delays or cost increases were to occur, we may also be unable to meet certain proppant-delivery obligations to our customers or incur additional costs in making such deliveries by traditional trucking methods or other alternative means, which could have an adverse effect on our business, financial condition and results of operations.

Our autonomous driving technology and related hardware and software could have undetected defects, errors or bugs in hardware or software, which could create safety or cybersecurity issues and could expose us to liability and other claims that could adversely affect our business.

Autonomous driving technology is highly technical and very complex, and has in the past and may in the future experience defects, errors or bugs at various stages of implementation. In the event of such defect, error or bug, we may incur significant additional development costs, repair or replacement costs, or more importantly, liability for personal injury or property damage caused by such errors or defects. Any insurance that we carry may not be sufficient or it may not apply to all situations that may arise in connection with the planned applications of our autonomous delivery vehicles. In accidents involving semi-trucks, most of the resulting fatalities are victims outside of the vehicle. If we experience such an event or multiple events, our insurance premiums could significantly increase or insurance may not be available to us at all. In addition, lawmakers or governmental agencies could pass laws or adopt regulations that limit the use of autonomous-trucking technology or increase liability associated with its use. Any of these events could adversely affect our reputation, relationships with our customers, financial condition and results of operations.

In addition, we could face material legal claims as a result of these problems. Any such lawsuit may cause irreparable damage to our brand and reputation. In addition, defending a lawsuit, regardless of its merit, could be costly and may divert management's attention and adversely affect the market's perception of us and our products and services. In addition, our business liability insurance coverage could prove inadequate with respect to a claim and future coverage may be unavailable to us on acceptable terms or at all. These product-related issues could result in claims against us and have an adverse effect on our business, financial condition and results of operations.

Any unauthorized control or manipulation of the information technology systems in our autonomous proppant-delivery vehicles could result in loss of customer confidence in us and the products and services we provide.

Our autonomous proppant-delivery vehicles will contain complex information technology systems and built-in data connectivity to log location data and accept and install periodic remote updates to improve or update their functionality or performance. Our technology partner expects to design, implement and test security measures intended to prevent unauthorized access to its and our information technology networks, the autonomous vehicle platforms it produces and related or connected systems. However, hackers may attempt to gain unauthorized access to modify, alter and use such networks, vehicles and systems to gain control of or to change our autonomous vehicles' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by our autonomous vehicles. Future vulnerabilities could be identified and manipulated and our or our technology partner's efforts to remediate such vulnerabilities may not be successful. Any unauthorized access to or control of our autonomous proppant-delivery vehicles, or any loss of data, could result in legal claims or proceedings against us and remediation of such problems could result in significant, unplanned capital expenditures. In addition, regardless of their veracity, reports of unauthorized access to our autonomous proppant-delivery vehicles or our or our customers' data, as well as other factors that may result in the perception that our autonomous proppant-deliver vehicles or data are capable of being "hacked," could negatively affect our brand and harm our business, financial condition and results of operations.

Risks Related to Our Financial Condition

We may be unable to generate sufficient cash to service all of our indebtedness and financial commitments.

Our ability to make scheduled payments on or to refinance our indebtedness and financial commitments depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions including financial, business and other factors beyond our control. We may be unable to generate sufficient cash flow to permit us to pay the principal, premium, if any, and interest on our indebtedness.

If our cash flows and capital resources are insufficient to fund debt and other obligations, we may be forced to reduce or delay capital expenditures, sell assets, seek additional capital or restructure our indebtedness. Our ability to restructure or refinance indebtedness will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of indebtedness could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our operations. The terms of existing or future debt instruments may restrict us from adopting some of these alternatives. In addition, any failure to service our debt would likely result in a reduction of our future credit rating, if any, which could harm our ability to incur additional indebtedness. If we face substantial liquidity problems, we might be required to sell assets to meet debt and other obligations. Our debt restricts our ability to dispose of assets and dictates our use of the proceeds from such disposition. We may not be able to consummate dispositions, and the proceeds of any such disposition may be inadequate to meet our obligations.

We may be unable to access adequate funding as a result of a decrease in the borrowing base under the 2023 ABL Credit Facility due to an unwillingness or inability on the part of lending counterparties to meet their funding obligations and the inability of other lenders to provide additional funding to cover a defaulting lender's portion. As a result, we may be unable to execute our development plan, make acquisitions or otherwise conduct operations, which would have an adverse effect on our financial condition and results of operations.

Our indebtedness could adversely affect our financial flexibility and our competitive position.

On October 20, 2021, we entered into the 2021 Term Loan Credit Facility. As of December 31, 2022, $149.0 million of the principal amount of the term loan was outstanding under the 2021 Term Loan Credit Facility. The proceeds of the 2021 Term Loan Credit Facility were used, among other uses, to repay all outstanding indebtedness under the 2018 Term Loan Credit Facility. The term loan outstanding under the 2021 Term Loan Credit Facility (the "Term Loan") bears interest at a rate of 8.47% per annum.

Atlas Operating and its subsidiaries have, and we expect to maintain in the near term, a significant amount of indebtedness. Under our 2023 ABL Credit Facility, the lenders thereunder (the "ABL Lenders") provide revolving credit financing to Atlas LLC in an aggregate principal amount of up to $75.0 million with availability thereunder subject to a borrowing base as described in the loan agreement governing the 2023 ABL Credit Facility (the "ABL Credit Agreement"). As of December 31, 2022, we had no loans outstanding under our previous asset-based loan credit facility (the "2018 ABL Credit Facility") and we were using $1.1 million for outstanding letters of credit, leaving $48.9 million of borrowing availability under our 2018 ABL Credit Facility prior to its repayment in full in February 2023.

Our debt agreements contain a number of significant covenants that may limit our ability to, among other things:

- incur additional indebtedness;
- sell or convey assets;
- make loans to or investments in others;
- enter into mergers;
- make certain payments;
- hedge future production or interest rates;
- incur liens;
- pay dividends; and
- engage in certain other transactions without the prior consent of the lenders.

Our indebtedness could also have important consequences to you and significant effects on our business, including:

- increasing our vulnerability to adverse changes in general economic, industry and competitive conditions;
- requiring us to dedicate a substantial portion of our cash flow from operations to make payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures and other general corporate purposes, including dividend payments;
- restricting us from exploiting business opportunities;
- making it more difficult to satisfy our financial obligations, including payments on our indebtedness;

- disadvantaging us when compared to our competitors that have less debt; and
- increasing our borrowing costs or otherwise limiting our ability to borrow additional funds for the execution of our business strategy.

Changes to applicable tax laws and regulations, exposure to additional income tax liabilities, changes in our effective tax rates or an assessment of taxes resulting from an examination of our income or other tax returns could adversely affect our results of operations and financial condition, including our ability to repay our debt.

We are subject to various complex and evolving U.S. federal, state and local taxes. U.S. federal, state and local tax laws, policies, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us, in each case, possibly with retroactive effect, and may have an adverse effect on our results of operations and financial condition, including our ability to repay our debt. For example, several tax proposals have been set forth that would, if enacted into law, make significant changes to U.S. tax laws. Such proposals include, but are not limited to, (i) an increase in the U.S. income tax rates applicable to individuals and corporations, (ii) the elimination of tax subsidies for fossil fuels, (iii) the imposition of a minimum tax on book income for certain corporations and (iv) the imposition of an excise tax on certain corporate stock repurchases that would be borne by the corporation repurchasing such stock. Congress may consider, and could include, some or all of these proposals in connection with tax reform that may be undertaken. It is unclear whether these or similar changes will be enacted and, if enacted, how soon any such changes could take effect. The passage of any legislation as a result of these proposals and other similar changes in U.S. federal income tax laws could adversely affect our results of operations and financial condition.

Changes in our effective tax rates or tax liabilities could also adversely affect our results of operations and financial condition. Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including:

- changes in the valuation of our deferred tax assets and liabilities;
- expected timing and amount of the release of any tax valuation allowances;
- expansion into future activities in new jurisdictions;
- the availability of tax deductions, credits, exemptions, refunds and other benefits to reduce tax liabilities; and
- tax effects of share-based compensation.

In addition, an adverse outcome arising from an examination of our income or other tax returns could result in higher tax exposure, penalties, interest or other liabilities that could have an adverse effect on our results of operations and financial condition.

We will need substantial additional capital to operate our business, and the inability to obtain needed capital or financing, on satisfactory terms, or at all, whether due to restrictions in our 2023 ABL Credit Facility, 2021 Term Loan Credit Facility or otherwise, could have an adverse effect on our growth and profitability.

Our business plan requires a significant amount of capital expenditures to maintain and grow our production levels over the long term. Although we currently use a significant amount of our cash reserves and cash generated from our operations to fund the maintenance and development of our existing sand reserves, we may need to depend on external sources of capital to fund future capital expenditures if proppant prices were to decline for an extended period of time, if the costs of our operations were to increase substantially or if other events were to occur that reduce our sales or

increase our costs. Our ability to obtain bank financing or to access the capital markets for future equity or debt offerings may be limited by our financial condition at the time of any such financing or offering, adverse market conditions or other contingencies and uncertainties that are beyond our control. Our failure to obtain the funds necessary to maintain, develop and increase our asset base could adversely impact our growth and profitability.

In addition, our existing 2023 ABL Credit Facility and 2021 Term Loan Credit Facility contain, and any future financing agreements we may enter into could also contain, operating and financial restrictions and covenants that may limit our ability to finance future operations or capital needs or to engage in, expand or pursue our business activities.

Our ability to comply with these restrictions and covenants is uncertain and will be affected by the levels of cash flow from our operations and events and circumstances beyond our control, including the ongoing COVID-19 pandemic (including the spread of variants of mutant strains). If market or other economic conditions deteriorate, our ability to comply with these covenants may be impaired. If we violate any of the restrictions or covenants in our 2023 ABL Credit Facility and 2021 Term Loan Credit Facility, a significant portion of our indebtedness may become immediately due and payable and our lenders' commitment to make further loans to us may terminate. We might not have, or be able to obtain, sufficient funds to make these accelerated payments. In addition, our obligations under our 2021 Term Loan Credit Facility are secured by substantially all of our assets, and if we are unable to repay our indebtedness or satisfy our other obligations under these, the lenders could seek to foreclose on our assets.

Even if we are able to maintain existing financing or access the capital markets, incurring additional debt may significantly increase our interest expense and financial leverage, and our indebtedness could restrict our ability to fund future development and acquisition activities. In addition, the issuance of any additional equity interests may result in significant dilution to our common stockholders.

We are subject to counterparty credit risk. Nonpayment or nonperformance by our customers, suppliers or vendors could have an adverse effect on our business, liquidity, financial condition and results of operations.

We are subject to the risk of loss resulting from nonpayment or nonperformance by our customers, suppliers and vendors. Our credit procedures and policies may not be adequate to fully eliminate customer credit risk. If we fail to adequately assess the creditworthiness of existing or future customers or unanticipated deterioration in their creditworthiness, any resulting increase in nonpayment or nonperformance by them and our inability to re-market or otherwise use the production could have an adverse effect on our business, results of operations and financial condition. A decline in oil and natural gas prices could negatively impact the financial condition of our customers and sustained lower prices could impact their ability to meet their financial obligations to us. Further, our contract counterparties may not perform or adhere to our existing or future contractual arrangements. To the extent one or more of our contract counterparties is in financial distress or commences bankruptcy proceedings, contracts with these counterparties may be subject to renegotiation or rejection under applicable provisions of the United States Bankruptcy Code. Any material nonpayment or nonperformance by our contract counterparties due to inability or unwillingness to perform or adhere to contractual arrangements could adversely affect our business and results of operations. If our customers delay or fail to pay us a significant amount of our outstanding receivables, it could have an adverse effect on our business, liquidity financial condition and results of operations.

If we fail to comply with the restrictions and covenants in our debt agreements, there could be an event of default under the terms of such agreements, which could result in an acceleration of payment.

A breach of any representation, warranty or covenant in any of our debt agreements would result in a default under the applicable agreement after any applicable grace periods. A default could result in acceleration of the indebtedness which would have an adverse effect on us. If an acceleration occurs, it would likely accelerate all of our indebtedness through cross-default provisions and we would likely be unable to make all of the required payments to refinance such indebtedness. Even if new financing were available at that time, it may not be on terms that are acceptable to us.

Any future indebtedness could adversely affect our financial condition.

We will, subject to the terms and conditions in the ABL Credit Agreement and availability under the borrowing base described therein, be able to borrow up to $75.0 million under our 2023 ABL Credit Facility and anticipate that up to $ under the 2021 Term Loan Credit Facility will remain outstanding after giving effect to the use of the net proceeds of this offering.

In addition, subject to the limits contained in our 2023 ABL Credit Facility and 2021 Term Loan Credit Facility, we may incur substantial additional debt from time to time. Any borrowings we may incur in the future would have several important consequences for our future operations, including that:

- covenants contained in the documents governing such indebtedness may require us to meet or maintain certain financial tests, which may affect our flexibility in planning for, and reacting to, changes in our industry, such as being able to take advantage of acquisition opportunities when they arise;
- our ability to obtain additional financing for working capital, capital expenditures, acquisitions, general corporate and other purposes may be limited;
- we may be competitively disadvantaged to our competitors that are less leveraged or have greater access to capital resources; and
- we may be more vulnerable to adverse economic and industry conditions.

If we incur indebtedness in the future, we may have significant principal payments due at specified future dates under the documents governing such indebtedness. Our ability to meet such principal obligations will be dependent upon future performance, which in turn will be subject to general economic conditions, industry cycles and financial, business and other factors affecting our operations, many of which are beyond our control. Our business may not continue to generate sufficient cash flow from operations to repay any incurred indebtedness. If we are unable to generate sufficient cash flow from operations, we may be required to sell assets, to refinance all or a portion of such indebtedness or to obtain additional financing.

Risks Related to Environmental, Mining and Other Regulations

Silica-related health issues and legislation, including compliance with existing or future regulations relating to respirable crystalline silica, or litigation could have an adverse effect on our business, reputation or results of operations.

We are subject to laws and regulations relating to human exposure to crystalline silica. For example, the federal Occupational Safety and Health Act (“OSHA”) has implemented rules establishing a more stringent permissible exposure limit for exposure to respirable crystalline silica and provided other provisions to protect employees. These rules require compliance with engineering control obligations to

limit exposures to respirable crystalline silica in connection with hydraulic fracturing activities. In June 2022, the DOL's Mine Safety and Health Administration ("MSHA") launched a new enforcement initiative to better protect U.S. miners from health hazards resulting from repeated overexposure to respirable crystalline silica. MSHA reports that silica dust affects thousands of miners each year and, without adequate protection, miners face risks of serious illnesses, many of which can be fatal.

As part of the program, MSHA will conduct silica dust-related mine inspections and expand silica sampling at mines, while providing mine operators with compliance assistance and best practices to limit miners' exposure to silica dust.

Specifically, the silica enforcement initiative will include:

- Spot inspections at mines with a history of repeated silica overexposures to closely monitor and evaluate health and safety conditions.
- Increased oversight and enforcement of known silica hazards at mines with previous citations for exposing miners to silica dust levels over the existing permissible exposure limit of 100 micrograms. For mines where the operator has not timely abated hazards, MSHA will issue a withdrawal order until the silica overexposure hazard has been abated.
- Expanded silica sampling at mines to ensure inspectors' samples represent the mines, commodities, and occupations known to have the highest risk for overexposure.
- A focus on sampling during periods of the mining process that present the highest risk of silica exposure for miners.
- Reminding miners about their rights to report hazardous health conditions, including any attempt to tamper with the sampling process.

In addition, the DOL's Educational Field and Small Mine Services staff will provide compliance assistance and outreach to mine operators, unions and other mining community organizations to promote and advance protections for miners. The MSHA initiative is intended to take immediate action to reduce the risks of silica dust exposure as the DOL's development of a mining industry standard continues.

If we are unable to satisfy these obligations, or are not able to do so in a manner that is cost effective or attractive to our customers, our business operations may be adversely affected or availability or demand for our products could be significantly affected. Federal and state regulatory authorities, including OSHA and MSHA, and analogous state agencies may continue to propose changes in their regulations regarding workplace exposure to crystalline silica, such as permissible exposure limits and required controls and personal protective equipment, and we can provide no assurance that we will be able to comply with any future laws and regulations relating to exposure to crystalline silica that are adopted, or that costs of complying with such future laws and regulations would not have an adverse effect on our operating results by requiring us to modify or cease our operations.

In addition, the inhalation of respirable crystalline silica is associated with health risks, including the lung disease silicosis. There is evidence of an association between crystalline silica exposure or silicosis and lung cancer and possible association with other diseases, including immune system disorders such as scleroderma. These health risks have been, and may continue to be, a significant issue confronting the hydraulic fracturing industry. Concerns over silicosis and other potential adverse health effects, as well as concerns regarding potential liability from the use of hydraulic fracture sand, may have the effect of discouraging our customers' use of hydraulic fracture sand. The actual or perceived health risks of handling hydraulic fracture sand could adversely affect hydraulic fracturing service providers, including us, through reduced use of hydraulic fracture sand, the threat of product liability or employee lawsuits naming us as a defendant, increased scrutiny by federal, state and local regulatory authorities of us and our customers or reduced financing sources available to the hydraulic fracturing industry.

Over the past few decades, a number of companies that utilize silica in their operations have been named as a defendant, usually among many defendants, in numerous product liability lawsuits brought by or on behalf of current or former employees or customers alleging damages caused by silica exposure. The silica-related litigation brought against us to date and associated litigation costs, settlements and verdicts have not resulted in a material liability to us, and we presently maintain insurance policies where available. However, we may continue to have silica exposure claims filed against us in the future, including claims that allege silica exposure for periods or in areas not covered by insurance, and the costs, outcome and impact to us of any pending or future claims is not certain. Any such pending or future claims or inadequacies of our insurance coverage could have a material adverse effect on our business, reputation, financial condition, and results of operations.

Federal, state and local legislative and regulatory initiatives relating to hydraulic fracturing and the potential for related litigation could result in increased costs, additional operating restrictions or delays for our customers, which could cause a decline in the demand for our proppant and negatively impact our business, results of operations and financial condition.

We supply proppant to hydraulic fracturing operators in the oil and natural gas industry. Hydraulic fracturing is an important practice that is used to stimulate production of oil and natural gas from low permeability hydrocarbon bearing subsurface rock formations. The hydraulic fracturing process involves the injection of water, proppant, and chemicals under pressure into the formation to fracture the surrounding rock, increase permeability and stimulate production.

Although we do not directly engage in hydraulic fracturing activities, our customers purchase our proppant for use in their hydraulic fracturing activities. Hydraulic fracturing is typically regulated by state oil and natural gas commissions and similar agencies. Some states have adopted, and other states are considering adopting, regulations that could impose new or more stringent permitting, disclosure or well construction requirements on hydraulic fracturing operations. Aside from state laws, local land use restrictions may restrict drilling in general or hydraulic fracturing in particular. Municipalities may adopt local ordinances attempting to prohibit hydraulic fracturing altogether or, at a minimum, allow such fracturing processes within their jurisdictions to proceed but regulating the time, place and manner of those processes. In addition, federal agencies have started to assert regulatory authority over the process and various studies have been conducted or are currently underway by the Environmental Protection Agency (“EPA”), and other federal agencies concerning the potential environmental impacts of hydraulic fracturing activities. At the same time, certain environmental groups have suggested that additional laws may be needed and, in some instances, have pursued voter ballot initiatives to more closely and uniformly limit or otherwise regulate the hydraulic fracturing process, and legislation has been proposed by some members of Congress to provide for such regulation.

The adoption of new laws or regulations at the federal, state or local levels imposing reporting obligations on, or otherwise limiting, delaying, restricting, or prohibiting the hydraulic fracturing process could make it more difficult to complete oil and natural gas wells, increase our customers’ costs of compliance and doing business, and otherwise adversely affect the hydraulic fracturing services they perform, which could negatively impact demand for our proppant. In addition, heightened political, regulatory, and public scrutiny of hydraulic fracturing practices could expose us or our customers to increased legal and regulatory proceedings, which could be time-consuming, costly, or result in substantial legal liability or significant reputational harm. We could be directly affected by adverse litigation involving us, or indirectly affected if the cost of compliance limits the ability of our customers to operate. Such costs and scrutiny could directly or indirectly, through reduced demand for our proppant, have an adverse effect on our business, financial condition and results of operations.

We and our customers are subject to extensive environmental and occupational health and safety regulations that impose, and will continue to impose, significant costs and liabilities. In addition, future regulations, or more stringent enforcement of existing regulations, could increase those costs and liabilities, which could adversely affect our results of operations.

We are subject to a variety of federal, state and local environmental laws and regulations affecting the mining and mineral processing industry, including, among others, those relating to employee health and safety, environmental permitting and licensing, plant and wildlife protection, wetlands protection, air and water emissions, greenhouse gas emissions, water pollution, waste management, including the transportation and disposal of waste and other materials, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, hazardous materials and natural resources. These laws and regulations have imposed, and will continue to impose, numerous obligations on our operations and the operations of our customers, including the acquisition of permits or other approvals to conduct regulated activities, the imposition of restrictions on the types, quantities and concentrations of various substances that may be released into the environment or injected in non-productive formations below ground in connection with oil and natural gas drilling and production activities, the incurrence of capital expenditures to mitigate or prevent releases of materials from our equipment, facilities or from customer locations where we are providing services, the imposition of substantial liabilities for pollution resulting from our operations, and the application of specific health and safety criteria addressing worker protection. Some environmental laws impose substantial penalties for noncompliance, and others, such as CERCLA, impose strict, retroactive and joint and several liability for the remediation of releases of hazardous substances.

The denial of a permit essential to our operations or the imposition of conditions with which it is not practicable or feasible to comply could have an adverse effect on our business. Significant opposition to a permit by neighboring property owners, members of the public or other third parties or delay in the environmental review and permitting process also could impair or delay our operations.

Moreover, environmental requirements, and the interpretation and enforcement of these requirements, change frequently and have tended to become more stringent over time. Future environmental laws and regulations could restrict our ability to expand our facilities or extract our mineral deposits or could require us to acquire costly equipment or to incur other significant expenses in connection with our business. The costs associated with complying with such requirements, could have an adverse effect on our business, financial condition and results of operations.

Any failure by us or by our customers to comply with applicable environmental laws and regulations may cause governmental authorities to take actions that could adversely impact our operations and financial condition, including:

- assessment of sanctions including administrative, civil or criminal penalties;
- denial, modification, or revocation of permits or other authorizations;
- occurrence of restrictions, delays or cancellations in permitting or development or performance of projects or operations;
- imposition of injunctive obligations or other limitations on our operations, including cessation of operations; and
- requirements to perform site investigatory, remedial, or other corrective actions or the incurrence of capital expenditures.

Any such regulations could require us to modify existing permits or obtain new permits, implement additional pollution control technology, curtail operations, increase significantly our operating costs or impose additional operating restrictions among our customers that reduce demand

for our services. Such permit proceedings are often subject to public notice and comment, and third parties, including nongovernmental environmental organizations, may challenge government actions related to permits required for our operations.

Further, our business activities present risks of incurring significant environmental costs and liabilities, including costs and liabilities resulting from our handling of oilfield and other wastes, because of air emissions and wastewater discharges related to our operations, and due to historical oilfield industry operations and waste disposal practices. Moreover, accidental releases or spills may occur in the course of our operations or at facilities where our wastes are taken for reclamation or disposal, and we cannot assure you that we will not incur significant costs and liabilities as a result of such releases or spills, including any third-party claims for injuries to persons or damages to properties or natural resources. Some environmental laws and regulations may impose strict liability, which means that in some situations we could be exposed to liability as a result of our conduct that was lawful at the time it occurred or the conduct of, or conditions caused by, prior operators or other third parties. Remedial costs and other damages arising as a result of environmental laws and costs associated with changes in environmental laws and regulations could be significant and have an adverse effect on our liquidity, consolidated results of operations and financial condition.

Laws and regulations protecting the environment generally have become more stringent in recent years and are expected to continue to do so, which could lead to material increases in costs for future environmental compliance and remediation. In particular, the ESA restricts activities that may result in a “take” of endangered or threatened species and provides for substantial penalties in cases where listed species are taken by being harmed. The DSL is one example of a species that, if listed as endangered or threatened under the ESA, could impact our operations and the operations of our customers. The DSL is found in the active and semi-stable shinnery oak dunes of southeastern New Mexico and adjacent portions of Texas, including areas where our customers operate and our proppant facilities are located. The USFWS is currently conducting a thorough review to determine whether listing the dunes sagebrush lizard as endangered or threatened under the ESA is warranted. If the DSL is listed as an endangered or threatened species, our operations and the operations of our customers in any area that is designated as the DSL’s habitat may be limited, delayed or, in some circumstances, prohibited, and we and our customers could be required to comply with expensive mitigation measures intended to protect the DSL and its habitat. In 2021, we were accepted into the USFWS-approved CCAA for the DSL. We have supported and contributed to the development of the CCAA since its inception. Our participation in the CCAA and our other voluntary conservation measures for the benefit of the DSL, including plans to set aside as much as 17,000 acres for DSL habitat, helps reduce the risk of disruptions to our business and operations in the event the DSL is listed. Furthermore, new laws and regulations, amendment of existing laws and regulations, reinterpretation of legal requirements or increased governmental enforcement with respect to environmental matters could restrict, delay or curtail exploratory or developmental drilling for oil and natural gas by our customers and could limit our well servicing opportunities.

We may not be able to comply with any new or amended laws and regulations that are adopted, and any new or amended laws and regulations could have an adverse effect on our operating results by requiring us to modify our operations or equipment or shut down our facility. Additionally, our customers may not be able to comply with any new or amended laws and regulations, which could cause our customers to curtail or cease operations. We cannot at this time reasonably estimate our costs of compliance or the timing of any costs associated with any new or amended laws and regulations, or any material adverse effect that any new or modified standards will have on our customers and, consequently, on our operations.

Our and our customers' operations are subject to a number of risks arising out of the threat of climate change, including regulatory, political, litigation and financial risks, which could result in increased operating and capital costs for our customers and reduced demand for our products and services.

In recent years, the U.S. Congress has considered legislation to reduce emissions of greenhouse gas ("GHGs"), including methane, a primary component of natural gas, and carbon dioxide, a byproduct of the burning of natural gas. It presently appears unlikely that comprehensive climate legislation will be passed by either house of Congress in the near future, although energy legislation and other regulatory initiatives are expected to be proposed that may be relevant to GHG emissions issues. For example, in August 2022, U.S. Congress passed, and President Biden signed into law the Inflation Reduction Act of 2022 which appropriates significant federal funding for renewable energy initiatives and, for the first time ever, imposes a fee on GHG emissions from certain facilities. The emissions fee and funding provisions of the law could increase the operating costs of our customers and accelerate the transition away from fossil fuels, which could in turn adversely affect our business and results of operations. In addition, a number of states are addressing GHG emissions, primarily through the development of emission inventories or regional GHG cap and trade programs. Depending on the particular program, we could be required to control GHG emissions or to purchase and surrender allowances for GHG emissions resulting from our operations. Independent of Congress, the EPA has adopted regulations controlling GHG emissions under its existing authority under the federal Clean Air Act ("CAA.") For example, following its findings that emissions of GHGs present an endangerment to human health and the environment because such emissions contributed to warming of the earth's atmosphere and other climatic changes, the EPA has adopted regulations under existing provisions of the CAA that, among other things establish construction and operating permit reviews for GHG emissions from certain large stationary sources that are already potential major sources for conventional pollutants. In addition, the EPA has adopted rules requiring the monitoring and reporting of GHG emissions from specified production, processing, transmission and storage facilities in the United States on an annual basis. Relatedly, in November 2021, the EPA issued a proposed rule under the CAA that was intended to reduce methane and VOC emissions from the oil and natural gas industry, and in particular the crude oil and natural gas source category, which includes crude oil and natural gas production, as well as natural gas processing, transmission, and storage facilities. In November 2022, the EPA announced a supplemental proposed rulemaking intended to strengthen and expand its November 2021 proposed rule, and to impose more stringent requirements on the natural gas and oil industry. The 2022 proposed rule is currently subject to a public comment period that runs through February 13, 2023, and is expected to be finalized in 2023. We cannot predict whether and in what form EPA will finalize these amendments; however, any additional regulation of air emissions from the crude oil and natural gas sector could result in increased expenditures for pollution control equipment, which could impact our customers' operations and negatively impact our business.

On an international level, over 190 countries, including the United States reached an agreement, known as the Paris Agreement, to reduce global GHG emissions in December 2015. The United States withdrew from this agreement under the Trump Administration, but reentered shortly after President Biden took office.

In April 2021, President Biden announced a goal of reducing the United States' emissions by 50-52% below 2005 levels by 2030. In November 2021, the international community gathered again in Glasgow at the 26th Conference to the Parties on the UN Framework Convention on Climate Change ("COP26"), during which multiple announcements were made, including a call for parties to eliminate certain fossil fuel subsidies and pursue further action on non-CO2 GHGs. Relatedly, while at COP26, the United States and European Union jointly announced the launch of the "Global Methane Pledge," which aims to cut global methane pollution at least 30% by 2030 relative to 2020 levels, including "all feasible reductions" in the energy sector. Since its formal launch at COP26, over 150 countries have joined the

pledge. We cannot predict what additional legislative or regulatory requirements may result from these developments. COP26 concluded with the finalization of the Glasgow Climate Pact, which stated long-term global goals (including those in the Paris Agreement) aimed at limiting the increase in the global average temperature and reducing GHG emissions. These goals were reaffirmed at the November 2022 UN Climate Change Conference of Parties ("COP27"). Several states and geographic regions in the United States have also adopted legislation and regulations to reduce emissions of GHGs, including cap and trade regimes and commitments to contribute to meeting the goals of the Paris Agreement. To the extent that the United States and other countries implement the Paris Agreement and other international pledges or local, state, regional, national or international governments impose other climate change regulations on the oil and natural gas industry, our business could be adversely affected because substantial limitations on GHG emissions could adversely affect demand for the oil and natural gas that is produced by our customers.

Governmental, scientific and public concern over the threat of climate change arising from GHG emissions has resulted in increasing political risks in the United States, including climate change-related pledges made by certain candidates elected to public office. President Biden has issued several executive orders focused on addressing climate change, including items that may impact our costs to produce, or demand for, oil and natural gas. Additionally, in November 2021, the Biden Administration released "The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050," which establishes a roadmap to net-zero emissions in the United States by 2050 through, among other things, improving energy efficiency; decarbonizing energy sources via electricity, hydrogen and sustainable biofuels; and reducing non-CO2 GHG emissions, such as methane and nitrous oxide. The Biden Administration is also considering revisions to the leasing and permitting programs for oil and natural gas development on federal lands. For more information, see the risk factor below titled "Any restrictions on oil and natural gas development on federal lands has the potential to adversely impact our operations and the operations of our customers." Other actions that could be pursued may include the imposition of more restrictive requirements for the establishment of pipeline infrastructure or the permitting of LNG export facilities, as well as more strict GHG emission limitations for oil and natural gas facilities. Litigation risks are also increasing, as a number of entities have sought to bring suit against oil and natural gas companies in state or federal court, alleging, among other things, that such companies created public nuisances by producing fuels that contributed to climate change. Suits have also been brought against such companies under stockholder and consumer protection laws, alleging that companies have been aware of the adverse effects of climate change but failed to adequately disclose those impacts. To the extent these risks impact our customers, we may experience reduced demand for our proppant.

There are also increasing financial risks for fossil fuel producers as stockholders currently invested in fossil fuel energy companies may elect in the future to shift some or all of their investments into other sectors. Institutional lenders who provide financing to fossil fuel energy companies also have become more attentive to sustainable lending practices and some of them may elect not to provide funding for fossil fuel energy companies. For example, at COP26, the Glasgow Financial Alliance for Net Zero ("GFANZ") announced that commitments from over 550 firms around the world had resulted in over $130 trillion in capital committed to net zero goals. The various sub-alliances of GFANZ generally require participants to set short-term, sector-specific targets to transition their financing, investing, and/or underwriting activities to net zero emissions by 2050. There is also a risk that financial institutions will be required to adopt policies that have the effect of reducing the funding provided to the fossil fuel sector. President Biden signed an executive order calling for the development of a "climate finance plan" and, separately, the Federal Reserve has joined the Network for Greening the Financial System ("NGFS"), a consortium of financial regulators focused on addressing climate-related risks in the financial sector. In November 2021, the Federal Reserve issued a statement in support of the efforts of the NGFS to identify key issues and potential solutions for the climate-related challenges most relevant to central banks and supervisory authorities. Limitation of investments in and financings

for fossil fuel energy companies could result in the restriction, delay or cancellation of drilling programs or development or production activities, which could reduce demand for our proppant.

Additionally, in March 2022, the SEC proposed new rules relating to the disclosure of a range of climate-related data risks and opportunities, including financial impacts, physical and transition risks, related governance and strategy and GHG emissions, for certain public companies. We are currently assessing this rule but at this time we cannot predict the ultimate impact of the rule on our business or those of our customers. The SEC originally planned to issue a final rule by October 2022, but most commentators now expect a final rule to be issued in early 2023. To the extent this rule is finalized as proposed, we or our customers could incur increased costs related to the assessment and disclosure of climate-related risks and certain emissions metrics. In addition, enhanced climate disclosure requirements could accelerate the trend of certain stakeholders and lenders restricting or seeking more stringent conditions with respect to their investments in certain carbon intensive sectors.

Finally, physical climate change impacts, including increased frequency and severity of storms, severe and persistent drought conditions, winter storms, floods and other climatic events, may potentially have a large impact on our operations and financial results, and our customers' exploration and production operations. The potential impacts of climate change and climate change regulations are highly uncertain at this time, and thus we cannot currently anticipate or predict any material adverse effect of climate change-related matters on our consolidated financial condition, results of operations, or how our cash flows may be effected as a result of climate change and climate change regulations.

Restrictions on our operations and those of our customers intended to protect certain species of wildlife could have an adverse impact on our ability to expand some of our existing operations or limit our customers' ability to develop new oil and natural gas wells.

Various federal and state statutes prohibit certain actions that adversely affect endangered or threatened species and their habitat, migratory birds, wetlands, and natural resources. These statutes include the ESA, the Migratory Bird Treaty Act ("MBTA"), and the federal Clean Water Act ("CWA"). The USFWS may designate critical habitat areas that it believes are necessary for survival of threatened or endangered species. As a result of a 2011 settlement agreement, the USFWS was required to determine whether to identify more than 250 species as endangered or threatened under the ESA by no later than completion of the agency's 2017 fiscal year. The USFWS missed the deadline but reportedly continues to review new species for protected status under the ESA pursuant to the settlement agreement. A critical habitat designation could result in further material restrictions on federal land use or on private land use and could delay or prohibit land access or development. Where takings of or harm to species or damages to wetlands, habitat, or natural resources occur or may occur, government entities or at times private parties may act to prevent or restrict oil and natural gas exploration activities or seek damages for any injury, whether resulting from drilling or construction or releases of oil, wastes, hazardous substances or other regulated materials, and in some cases, criminal penalties may result. Similar protections are offered to migratory birds under the MBTA.

The DSL is one example of a species that, if listed as endangered or threatened under the ESA, could impact our operations and the operations of our customers. The DSL is found in the active and semi-stable shinnery oak dunes of southeastern New Mexico and adjacent portions of Texas, including areas where our customers operate and our proppant facilities are located. The USFWS is currently conducting a thorough review to determine whether listing the dunes sagebrush lizard as endangered or threatened under the ESA is warranted. On November 17, 2021, one environmental organization delivered a Notice of Intent to Sue to the U.S. Department of the Interior ("DOI") and the USFWS for failing to timely list the DSL as endangered. Then, in August 2022, the USFWS agreed, via a stipulated settlement agreement in a federal district court, to make an endangerment or threatened listing determination for the DSL by June 29, 2023. If the DSL is ultimately listed as an endangered or

threatened species, our operations and the operations of our customers in any area that is designated as the DSL's habitat may be limited, delayed or, in some circumstances, prohibited, and we and our customers could be required to comply with expensive mitigation measures intended to protect the dunes sagebrush lizard and its habitat. However, in January 2021, USFWS approved a CCAA for the DSL habitat in non-federal lands in certain counties of western Texas. We were a contributor to and supporter of the CCAA since its inception and have since been accepted into the program. Our participation in the CCAA and our other voluntary conservation measures for the benefit of the DSL reduces the risk of disruptions to our business and operations in the event the DSL is listed.

Another species whose recent listing could impact the operations of our customers is the Lesser Prairie-Chicken. In November 2022, the USFWS formally listed two Distinct Population Segments ("DPSs") of the lesser prairie-chicken under the ESA. The Southern DPS, the habitat of which includes portions of southeast New Mexico and western Texas, was listed as endangered, while the Northern DPS, the habitat of which spans from northern Texas, through eastern Oklahoma, and intro southeastern Colorado and southwester Nebraska, was listed as threatened. The listed territory of the Southern DPS could overlap with the operating areas of some our customers, who in turn may be adversely affected by any restrictions which arose as a result of the endangerment determination. The identification or designation of further previously unprotected species as threatened or endangered in areas where we or our customers operate could cause us to incur increased costs arising from species protection measures or could result in limitations on our customers that result in reduced demand for our services, adversely affects the results of our operations. There is also increasing interest from a variety of stakeholders, including investors and institutional lenders, in nature-related matters beyond protected species, such as general biodiversity, which may similarly require us to incur costs or take other measures which may materially impact our business or operations.

Any restrictions on oil and natural gas development on federal lands has the potential to adversely impact our operations and the operations of our customers.

Many of our customers possess leases in New Mexico which are granted by the federal government and administered by the Bureau of Land Management ("BLM"), a federal agency. Operations conducted by our customers on federal oil and natural gas leases must comply with numerous additional statutory and regulatory restrictions. These leases contain relatively standardized terms requiring compliance with detailed regulations. Under certain circumstances, the BLM may require operations on federal leases to be suspended or terminated. Any such suspension or termination of our customers' leases could reduce demand for our service and adversely impact the results of our operations.

Additionally, the Biden Administration has taken several actions to curtail oil and natural gas activities on federal lands. For example, on January 27, 2021, President Biden issued an executive order that instructed the Secretary of the Interior to pause new oil and natural gas leases on public lands, but not existing operations under valid leases or on tribal lands which the federal government merely holds in trust, pending completion of a comprehensive review and reconsideration of federal oil and natural issued a preliminary injunction against the order gas permitting and leasing practices. A federal district court in June 2021, which the Fifth U.S. Circuit Court of Appeals vacated and remanded to the district court on August 17, 2022. The federal district court issued a permanent injunction against the order on August 18, 2022 limited to the thirteen plaintiff states, which included Texas. Meanwhile, the DOI released a report on the federal oil and natural gas leasing program in November 2021 which included several recommendations for how to reform the program. Some of the report's recommendations, including an increased royalty rate and a significant reduction in total available acreage have been incorporated into recent lease sales. In November 2022, BLM also issued a proposed rule to reduce the waste of natural gas from venting, flaring, and leaks during oil and gas production activities on Federal and Native American leases, which is currently subject to a public

comment period that runs through January 30, 2023. While we cannot predict the ultimate impact of these changes or whether the DOI, or any additional operating restrictions, and BLM will implement further reforms, any revisions to the federal leasing or permitting process that make it more difficult for our customers to pursue operations on federal lands may adversely impact our operations. The outcome of litigation surrounding the Biden Administration's Social Cost of Carbon ("SCC") metric may also impact future regulatory decision-making and our customers' ability to obtain federal leases. In February 2022, a district court blocked the Biden Administration's use of its interim SCC value in agency decision-making. As a result the BLM's first quarter oil and gas lease sale was delayed. In March 2022, the Fifth Circuit stayed the order while the government's appeal remains in progress. The ultimate result of this litigation may impact the character of new regulations on certain of the federal oil and gas leases of our customers, which in turn could impact our results of operations.

Additionally, oil and natural gas operations on federal lands, and related infrastructure projects, may be impacted by recent changes to National Environmental Policy Act ("NEPA") implementing regulations. In 2020, the Trump Administration made a variety of substantive and procedural changes to NEPA, including limiting the scope of review to the direct effects of a proposed project on the environment. A new 'Final Rule,' introduced by the Biden Administration in April 2022, which took effect in May 2022, reversed several changes introduced by the 2020 rule, including the scope limitations. The 2022 Final Rule requires NEPA reviews to incorporate consideration of indirect and cumulative impacts of the proposed project, including effects on climate change and GHGs, consistent with pre-2020 requirements. The new rule also allows agencies to create stricter NEPA rules as they see fit, but left in place the 2020 rule two-year time limit to complete environmental impact statements. The issuance of the new rule completes the first of a two-phased process by the Council on Environmental Quality's ("CEQ") to reconsider and revise the 2020 rule, so additional changes to the NEPA rules may be expected after the second phase of CEQ's review is complete. While the ultimate impact of these changes or whether the DOI and the BLM will implement further reforms cannot be predicted, any revisions to the federal leasing or permitting process that makes it more difficult for our customers to operate economically on federal lands may materially and adversely impact our operations and results.

In addition to administrative and policy risks, operations on federal lands also face litigation risks. Ongoing litigation related to the federal oil and gas leasing program, the Biden Administration's use of the SCC metric, and NEPA review may impact the federal oil and gas leases of our customers, which in turn could impact our results of operations. More recently, a June 2022 settlement approved by a federal district court in Washington, D.C., obligates BLM to redo its environment reports under NEPA for all oil and gas leases sold between 2015 and 2020, including leases in New Mexico. The settlement stems from a 2016 lawsuit alleging that BLM was not properly accounting for the cumulative climate impacts of its federal leasing program. Separately, there is a risk that authorizations required for existing operations may be delayed to the point that it causes a business disruption, and we cannot guarantee that further action will not be taken to curtail oil and natural gas development on federal land. For example, certain lawmakers have proposed to reduce or ban further leasing on federal lands or to adopt further restrictions for same. To the extent such legislation is passed, it may adversely impact our customers' operations, which could negatively impact our financial performance or results of operations.

We and our customers are subject to regulations that impose stringent health and safety standards on numerous aspects of our operations.

Multiple aspects of our and our customers' operations are subject to health and safety standards, including our mining operations, our trucking operations, and employee exposure to crystalline silica.

Our mining operations are subject to the Mine Safety and Health Act of 1977 ("Mine Act"), as amended by the Mine Improvement and New Emergency Response Act of 2006, which imposes stringent health and safety standards on numerous aspects of mineral extraction and processing

operations, including the training of personnel, operating procedures, operating equipment and other matters. Our operating locations are regularly inspected by the MSHA for compliance with the Mine Act.

The Department of Transportation ("DOT") and various state agencies exercise broad powers over our trucking services, generally governing matters including authorization to engage in motor carrier service, equipment operation, safety, and financial reporting. In addition, our operations must comply with the Fair Labor Standard Act, which governs such matters as wages and overtime, and which is administered by the DOL. We may be audited periodically by the DOT or the DOL to ensure that we are in compliance with these safety, hours-of-service, wage and other rules and regulations.

We are also subject to laws and regulations relating to human exposure to crystalline silica. Several federal and state regulatory authorities, including MSHA and OSHA, may continue to propose changes to their regulations regarding workplace exposure to crystalline silica, such as permissible exposure limits, required controls and personal protective equipment. Our failure to comply with existing or new health and safety standards, or changes in such standards or the interpretation or enforcement thereof, could require us or our customers to modify operations or equipment, shut down some or all operating locations, impose significant restrictions on our ability to conduct operations or otherwise have an adverse effect on our business, financial condition and results of operations.

We and our customers are subject to other extensive regulations, including licensing, plant and wildlife protection and reclamation regulation, that impose, and will continue to impose, significant costs and liabilities. In addition, future regulations, or more stringent enforcement of existing regulations, could increase those costs and liabilities, which could adversely affect our results of operations.

In addition to the regulatory matters described above, we and our customers are subject to extensive governmental regulation on matters such as permitting and licensing requirements, plant and wildlife protection, wetlands protection, reclamation and restoration activities at mining properties after mining is completed, the discharge of materials into the environment, and the effects that mining and hydraulic fracturing have on groundwater quality and availability. Our future success depends, among other things, on the quantity and quality of our proppant deposits, our ability to extract these deposits profitably, and our customers being able to operate their businesses as they currently do.

In order to obtain permits and renewals of permits in the future, we may be required to prepare and present data to governmental authorities pertaining to the potential adverse impact that any proposed excavation or production activities, individually or in the aggregate, may have on the environment. Certain approval procedures may require preparation of archaeological surveys, endangered species studies, and other studies to assess the environmental impact of new sites or the expansion of existing sites. Compliance with these regulatory requirements is expensive and significantly lengthens the time needed to develop a site. Finally, obtaining or renewing required permits is sometimes delayed or prevented due to community opposition and other factors beyond our control. The denial of a permit essential to our operations or the imposition of conditions with which it is not practicable or feasible to comply could impair or prevent our ability to develop or expand a site. Significant opposition to a permit by neighboring property owners, members of the public, or other third parties, or delay in the environmental review and permitting process also could delay or impair our ability to develop or expand a site. New legal requirements, including those related to the protection of the environment, could be adopted that could adversely affect our mining operations (including our ability to extract or the pace of extraction of mineral deposits), our cost structure, or our customers' ability to use our proppant. Such current or future regulations could have an adverse effect on our business, and we may not be able to obtain or renew permits in the future.

Risks Related to Our Class A Common Stock and Organizational Structure

We are a holding company. Our sole material asset after completion of this offering and our corporate reorganization will be our equity interest in Atlas Operating, and we will accordingly be dependent upon cash distributions from Atlas Operating to cover our taxes and corporate and overhead expenses, among other expenses.

We are a holding company and will have no material assets other than our equity interest in Atlas Operating. We will have no independent means of generating revenue. To the extent Atlas Operating has available cash and subject to the terms of any current or future debt instruments, the Atlas Operating LLC Agreement will (i) require Atlas Operating to make pro rata cash distributions to the Atlas Unitholders, including us, in an amount sufficient to allow us to pay our taxes and (ii) permit us, as managing member of Atlas Operating, to cause Atlas Operating to make additional pro rata distributions to the Atlas Unitholders, including to us and the Legacy Owners holding Atlas Units after this offering, in an amount generally intended to allow such holders (other than us) to satisfy their respective income tax liabilities with respect to their allocable share of the income of Atlas Operating, based on certain assumptions and conventions, to the extent such liabilities exceed amounts otherwise distributed by Atlas Operating. We generally expect Atlas Operating to fund such distributions out of available cash. When Atlas Operating makes distributions, the Atlas Unitholders will be entitled to receive proportionate distributions based on their interests in Atlas Operating at the time of such distribution. In addition, the Atlas Operating LLC Agreement will require Atlas Operating to make non-pro rata payments to us to reimburse us for our corporate and other overhead expenses, which payments will not be treated as distributions under the Atlas Operating LLC Agreement. To the extent that we need funds and Atlas Operating or its subsidiaries (including Atlas LLC) are restricted from making such distributions or payments under applicable law or regulation or under the terms of the ABL Credit Agreement or any future financing arrangements, or are otherwise unable to provide such funds, our liquidity and financial condition could be adversely affected.

Moreover, because we will have no independent means of generating revenue, our ability to make tax payments is dependent on the ability of Atlas Operating to make distributions to us in an amount sufficient to cover our tax obligations. This ability, in turn, may depend on the ability of Atlas Operating's subsidiaries (including Atlas LLC) to make distributions to Atlas Operating. The ability of Atlas Operating, its subsidiaries and other entities in which it directly or indirectly holds an equity interest to make such distributions will be subject to, among other things, (i) the applicable provisions of Delaware law (or other applicable jurisdiction) that may limit the amount of funds available for distribution and (ii) restrictions in our debt instruments issued by Atlas Operating or its subsidiaries (including Atlas LLC) and other entities in which it directly or indirectly holds an equity interest.

Our stock prices and trading volumes could be volatile, and you may not be able to resell shares of your Class A common stock when desired, at or above the price you paid, or at all.

The stock market has experienced and continues to experience extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of the underlying businesses. In 2020, market volatility was especially high due to the ongoing COVID-19 pandemic. In addition, broad market fluctuations may adversely affect the market price of our Class A common stock, regardless of our actual operating performance. In addition to the other risks described in this section, the market price of our Class A common stock may fluctuate significantly in response to a number of factors, many of which we cannot control, including:

- our operating and financial performance;
- quarterly variations in the rate of growth of our financial indicator;
- the public reaction to our press releases, our other public announcements, and our filings with the SEC;

- announcements by others in or affecting our industry or our customers;
- strategic actions by our competitors;
- our failure to meet revenue or earnings estimates by research analysts or other investors;
- changes in revenue or earnings estimates, or changes in recommendations or withdrawal of research coverage, by equity research analysts;
- inaccurate or unfavorable research or ratings published by industry analysts about our business, or a cessation of coverage of us by industry analysts;
- speculation in the press or investment community;
- the failure of research analysts to cover our Class A common stock;
- sales of our Class A common stock by us, the Legacy Owners (including following an exercise of the Redemption Right or Call Right) or our other stockholders, or the perception that such sales may occur;
- changes in accounting principles, policies, guidance, interpretations or standards;
- additions or departures of key management personnel;
- actions by our stockholders;
- general market conditions, including fluctuations in commodity prices, sand-based proppant or industrial and recreational sand-based products;
- our acquisition of, investment in or disposition of other businesses;
- domestic and international economic, legal and regulatory factors unrelated to our performance; and
- the realization of any of the risks described under this “Risk Factors” section.

Volatility in the market price or trading volume of our Class A common stock may make it difficult or impossible for you to sell your Class A common stock at or above the price at which you purchased the stock. As a result, you may suffer a loss on your investment. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company’s securities. This litigation, if instituted against us, could result in substantial costs, reduce our profits, divert our management’s attention and resources and harm our business.

Investors in this offering will experience immediate and substantial dilution.

Based on an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover of this prospectus), purchasers of our Class A common stock in this offering will experience an immediate and substantial dilution of $ per share in the as adjusted net tangible book value per share of Class A common stock from the initial public offering price, and our as adjusted net tangible book value as of after giving effect to this offering and the transactions related thereto would be $ per share. This dilution is due in large part to earlier investors having paid substantially less than the initial public offering price when they purchased their shares. Please see the section titled “Dilution.”

Future sales of our Class A common stock in the public market, or the perception that such sales may occur, could reduce our stock price, and any additional capital raised by us through the sale of equity or convertible securities may dilute your ownership in us.

We may sell additional shares of our Class A common stock in subsequent offerings. In addition, subject to certain limitations and exceptions, the Legacy Owners holding Atlas Units may redeem their

Atlas Units for shares of Class A common stock (on a one-for-one basis, subject to conversion rate adjustments for stock splits, stock dividends and reclassification and other similar transactions) and then sell those shares of Class A common stock. Sales of substantial amounts of our Class A common stock (including shares issued in connection with an acquisition), or the perception that such sales could occur, may adversely affect prevailing market prices of our Class A common stock. Certain Legacy Owners who will own, in aggregate, approximately % of our Class A and Class B common stock on a combined basis, will be party to a registration rights agreement, which will include provisions by which we agree, after the expiration of the lock-up period described below, to register under the U.S. federal securities laws the offer and resale of shares of our Class A common stock (including shares issued in connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right) by such Legacy Owners or certain of their respective affiliates or permitted transferees under the registration rights agreement. See "Certain Relationships and Related Party Transaction—Registration Rights Agreement."

We cannot predict the size of future issuances of our Class A common stock or securities convertible into Class A common stock or the effect, if any, that future issuances and sales of shares of our Class A common stock will have on the market price of our Class A common stock. Sales of substantial amounts of our Class A common stock (including shares issued in connection with an acquisition), or the perception that such sales could occur, may adversely affect prevailing market prices of our Class A common stock.

Certain of our Principal Stockholders will have the ability to direct the voting of a majority of the voting power of our common stock, and their interests may conflict with those of our other stockholders.

Holders of Class A common stock and Class B common stock vote together as a single class on all matters presented to our stockholders for their vote or approval, except as otherwise required by applicable law or our certificate of incorporation. Upon completion of this offering, certain of our Legacy Owners will enter into a stockholders' agreement (the "Principal Stockholders") with us. The Principal Stockholders will collectively own approximately % of our voting stock (or approximately % if the underwriters' option to purchase additional shares is exercised in full). As a result, on a combined basis, our Principal Stockholders will be able to control matters requiring stockholder approval, including the election of directors, changes to our organizational documents and significant corporate transactions. This concentration of ownership makes it unlikely that any other holder or group of holders of our Class A common stock will be able to affect the way we are managed or the direction of our business. The interests of our Principal Stockholders with respect to matters potentially or actually involving or affecting us, such as future acquisitions, financings and other corporate opportunities and attempts to acquire us, may conflict with the interests of our other stockholders. Given this concentrated ownership, our Principal Stockholders would have to approve any potential acquisition of us.

The stockholders' agreement provides Mr. Brigham or his affiliates with the right to designate certain numbers of nominees to our board of directors and the right to approve certain actions by the Company, so long as such Principal Stockholders and their affiliates collectively beneficially own specified percentages of the outstanding shares of our Class A and Class B common stock on a combined basis. Additionally, the stockholders' agreement provides that the Principal Stockholders agree to cause their respective shares of Class A and Class B common stock to be voted in favor of the election of each of the director nominees designated by Mr. Brigham or his affiliates. See "Certain Relationships and Related Party Transactions—Stockholders' Agreement."

Accordingly, Mr. Brigham or his affiliates will have the ability to strongly influence the election of the members of our board of directors, and thereby our management and affairs. In addition, the

Principal Stockholders will be able to strongly influence the outcome of all matters requiring stockholder approval, including mergers and other material transactions. This ownership by the Principal Stockholders may also have the effect of deterring hostile takeovers, delaying or preventing changes in control or changes in management, or limiting the ability of our other stockholders to approve transactions that they may deem to be in the best interests of our Company. Moreover, this ownership by the Principal Stockholders may also adversely affect the trading price of our Class A common stock to the extent investors perceive a disadvantage in owning stock of a company with concentrated ownership.

Certain of our Principal Stockholders and members of our board of directors are not limited in their ability to compete with us, and the corporate opportunity provisions in our amended and restated certificate of incorporation could enable certain of our Principal Stockholders and members of our board of directors to benefit from corporate opportunities that might otherwise be available to us.

Our governing documents will provide that our Principal Stockholders and any member of our board of directors who is not at the time an officer of the Company and their respective affiliates are not restricted from owning assets or engaging in businesses that compete directly or indirectly with us and that we renounce any interest or expectancy in any business opportunity that may be from time to time presented to our Principal Stockholders and any member of our board of directors who is not at the time an officer of the Company or their respective affiliates. In particular, subject to the limitations of applicable law, our amended and restated certificate of incorporation will, among other things:

- permit our Principal Stockholders and any member of our board of directors who is not at the time an officer of the Company and their respective affiliates to conduct business that competes with us and to make investments in any kind of property in which we may make investments; and
- provide that if our Principal Stockholders or any member of our board of directors who is not at the time an officer of the Company or their respective affiliates becomes aware of a potential business opportunity, transaction or other matter, they will have no duty to communicate or offer that opportunity to us.

Our Principal Stockholders or any member of our board of directors who is not at the time an officer of the Company or their respective affiliates may become aware, from time to time, of certain business opportunities (such as acquisition opportunities) and may direct such opportunities to other businesses in which they have invested, in which case we may not become aware of or otherwise have the ability to pursue such opportunity. Further, such businesses may choose to compete with us for these opportunities, possibly causing these opportunities to not be available to us or causing them to be more expensive for us to pursue. In addition, our Principal Stockholders and any member of our board of directors who is not at the time an officer of the Company and their respective affiliates may dispose of mining or other properties or other assets in the future, without any obligation to offer us the opportunity to purchase any of those assets. As a result, our renouncing our interest and expectancy in any business opportunity that may be from time to time presented to our Principal Stockholders and any member of our board of directors who is not at the time an officer of the Company and their respective affiliates could adversely impact our business or prospects if attractive business opportunities are procured by such parties for their own benefit rather than for ours. Please read “Description of Capital Stock—Corporate Opportunity.”

Certain of our Principal Stockholders or their affiliates are established participants in the oil and natural gas industry and may have resources greater than ours, which may make it more difficult for us to compete with our Principal Stockholders or their affiliates with respect to commercial activities as well as for potential acquisitions. We cannot assure you that any conflicts that may arise between us and our stockholders, on the one hand, and our Principal Stockholders or their affiliates, on the other

hand, will be resolved in our favor. As a result, potential competition from our Principal Stockholders or their affiliates could adversely impact our results of operations.

We expect to be a "controlled company" within the meaning of the rules of the NYSE and, as a result, will qualify for exemptions from certain corporate governance requirements.

Upon completion of this offering, the Principal Stockholders will initially indirectly own shares of Class A common stock and shares of Class B common stock, representing approximately % of the voting power of our Common Stock (or shares of Class A common stock and shares of Class B common stock if the underwriters' option to purchase additional shares is exercised in full, representing approximately % of the voting power of our Common Stock). Pursuant to the terms of the stockholders' agreement, the Principal Stockholders have agreed to vote their respective shares of Class A and Class B common stock in favor of the election of each of the director nominees designated by Mr. Brigham or his affiliates. See "Certain Relationships and Related Party Transactions—Stockholders' Agreement." As a result, we expect to be a controlled company within the meaning of the NYSE's corporate governance standards. Under the rules of the NYSE, a company of which more than 50% of the voting power for the election of directors is held by an individual, company or group of persons acting together is a controlled company and may elect not to comply with certain NYSE corporate governance requirements, including the requirements that:

- a majority of the board of directors consist of independent directors as defined under the rules of the NYSE;
- the nominating and governance committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities; and
- the compensation committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities.

These requirements will not apply to us as long as we remain a controlled company. Accordingly, you may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of the NYSE. See "Management—Status as a Controlled Company."

Anti-takeover provisions in our organizational documents might discourage or delay acquisition bids or merger proposals, which may adversely affect the market price of our Class A common stock and limit the price investors might be willing to pay in the future for our Class A common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws will contain provisions that may discourage unsolicited takeover proposals that stockholders may consider to be in their best interests. These provisions:

- authorize the issuance of undesignated preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval, and which may include super voting, special approval, dividend or other rights or preferences superior to the rights of our Class A common stock;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders at such time as the Principal Stockholders cease to own more than a majority of the outstanding shares of our Class A common stock and Class B common stock on a combined basis;
- provide for our board of directors to be divided into three classes of directors, with each class as nearly equal in number as possible, serving staggered three-year terms, other than directors that may be elected by holders of our preferred stock, if any;

- provide that our board of directors is expressly authorized to make, alter or repeal our Bylaws; and
- establish advance notice requirements for nominations of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

These anti-takeover provisions could discourage, delay or prevent a transaction involving a change in control of our Company all together, even if doing so would benefit our stockholders. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing and to cause us to take other corporate actions you desire. Further, the stockholders' agreement, the staggered board of directors and the ability of the board of directors to designate the terms of and issue new series of preferred stock may make the removal of management more difficult and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities.

Our amended and restated certificate of incorporation will designate the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States of America as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our amended and restated certificate of incorporation will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the Superior Court of the State of Delaware, or, if the Superior Court of the State of Delaware does not have jurisdiction, the United States District Court for the District of Delaware, in each case, subject to that court having personal jurisdiction over the indispensable parties named defendants therein) will, to the fullest extent permitted by applicable law, be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers, employees or stockholders to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law (the "DGCL"), our amended and restated certificate of incorporation or our bylaws (as either may be amended or restated), or as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware, our amended and restated certificate of incorporation or our bylaws, or (v) any other action asserting a claim against us that is governed by the internal affairs doctrine.

Our amended and restated certificate of incorporation will also provide that, unless we consent in writing to an alternate forum, to the fullest extent permitted by applicable law, the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Notwithstanding the foregoing, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find the exclusive-forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business.

To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of, and consented to, the

provisions of our amended and restated certificate of incorporation described in the preceding sentence. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and such persons. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

In certain circumstances, Atlas Operating may make tax distributions to the Atlas Unitholders, including us, and such tax distributions may be substantial. To the extent we receive tax distributions in excess of our actual tax liabilities and retain such excess cash, the Legacy Owners that hold Atlas Units would benefit from such accumulated cash balances if they exercise their Redemption Right.

To the extent Atlas Operating has available cash and subject to the terms of any current or future debt instruments, the Atlas Operating LLC Agreement will (i) require Atlas Operating to make pro rata cash distributions to the Atlas Unitholders, including us, in an amount sufficient to allow us to pay our taxes and (ii) permit us, as managing member of Atlas Operating, to cause Atlas Operating to make additional pro rata distributions to the Atlas Unitholders, including to the Legacy Owners that hold Atlas Units and us, in an amount generally intended to allow such holders (other than us) to satisfy their respective income tax liabilities with respect to their allocable share of the income of Atlas Operating, based on certain assumptions and conventions, to the extent such liabilities exceed amounts otherwise distributed by Atlas Operating. The amount of such tax distributions will be determined based on certain assumptions, including an assumed individual income tax rate, and will be calculated after taking into account other distributions (including other tax distributions) made by Atlas Operating. Because tax distributions will be made pro rata based on ownership and due to, among other items, differences between the tax rates applicable to us and the assumed individual income tax rate used in the calculation and requirements under the applicable tax rules that Atlas Operating's net taxable income be allocated disproportionately to its unitholders in certain circumstances, tax distributions may significantly exceed the actual tax liability for many of the Atlas Unitholders, including us. If we retain the excess cash it receives, the Legacy Owners that hold Atlas Units would benefit from any value attributable to such accumulated cash balances upon their exercise of the Redemption Right. However, we expect to take steps to eliminate any material cash balances. In addition, the tax distributions Atlas Operating may make may be substantial and may exceed the tax liabilities that would be owed by a similarly situated corporate taxpayer. Funds used by Atlas Operating to make tax distributions will not be available for reinvestment in our business, except to the extent we use the excess cash it receives to reinvest in Atlas Operating for additional units.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We intend to take advantage of these reporting exemptions until we are no longer an emerging growth company. We cannot predict if investors will find our Class A common stock less attractive because we will rely on these exemptions.

If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

We will remain an emerging growth company for up to five years after our IPO, although we will lose that status sooner if we have more than $1.235 billion of revenues in a fiscal year, have more than $700 million in market value of our Class A common stock held by non-affiliates as of any June 30 or issue more than $1.0 billion of non-convertible debt over a rolling three-year period.

To the extent that we rely on any of the exemptions available to emerging growth companies, you will receive less information about our executive compensation and internal control over financial reporting than issuers that are not emerging growth companies. If some investors find our Class A common stock to be less attractive as a result, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

We may issue preferred stock whose terms could adversely affect the voting power or value of our Class A common stock.

Our amended and restated certificate of incorporation will authorize us to issue, without the approval of our stockholders, one or more classes or series of preferred stock having such designations, preferences, limitations and relative rights, including preferences over our Class A common stock respecting dividends and distributions, as our board of directors may determine. The terms of one or more classes or series of preferred stock could adversely impact the voting power or value of our Class A common stock. For example, we might grant holders of preferred stock the right to elect some number of our directors in all events or on the happening of specified events or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we might assign to holders of preferred stock could affect the residual value of the Class A common stock.

There is currently no existing market for our Class A common stock, and a market for our securities may not develop, which would adversely affect the liquidity and price of our securities.

Prior to this offering, there has not been a public market for our Class A common stock. We cannot predict the extent to which investor interest in our Company will lead to the development of an active trading market on the stock exchange on which we list our Class A common stock or otherwise or how liquid that market might become. If an active trading market does not develop, anyone purchasing our Class A common stock may have difficulty selling it. The initial public offering price for the Class A common stock was determined by negotiations between us and the representatives of the underwriters and may not be indicative of prices that will prevail in the open market following this offering. Consequently, purchasers of our Class A common stock may be unable to sell it at prices equal to or greater than the price paid.

The following factors could affect our stock price:

- quarterly variations in our financial and operating results;
- the public reaction to our press releases, our other public announcements and our filings with the SEC;
- strategic actions by our competitors;
- changes in revenues or earnings estimates, or changes in recommendations or withdrawal of research coverage, by equity research analysts;
- speculation in the press or investment community;
- the failure of research analysts to cover our Class A common stock;

- sales of our Class A common stock by us or other stockholders, or the perception that such sales may occur;
- equity capital markets transactions by other proppant companies, including by way of initial public offerings;
- changes in accounting principles, policies, guidance, interpretations or standards;
- additions or departures of key management personnel;
- actions by our stockholders;
- general market conditions, including fluctuations in commodity prices;
- changes in, or investors' perception of, the oil and natural gas industry;
- litigation involving us, our industry, or both;
- domestic and international economic, legal and regulatory factors unrelated to our performance; and
- the realization of any risks described under this "Risk Factors" section.

The stock markets in general have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our Class A common stock. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company's securities. Such litigation, if instituted against us, could result in very substantial costs, divert our management's attention and resources and harm our business, operating results and financial condition.

If Atlas Operating were to become a publicly traded partnership taxable as a corporation for U.S. federal income tax purposes, we and Atlas Operating might be subject to potentially significant tax inefficiencies.

We intend to operate such that Atlas Operating does not become a publicly traded partnership taxable as a corporation for U.S. federal income tax purposes. A "publicly traded partnership" is a partnership the interests of which are traded on an established securities market or are readily tradable on a secondary market or the substantial equivalent thereof. Under certain circumstances, redemptions of Atlas Units pursuant to the Redemption Right or Call Right, or other transfers of Atlas Units, could cause Atlas Operating to be treated as a publicly traded partnership. Applicable U.S. Treasury regulations provide for certain safe harbors from treatment as a publicly traded partnership, and we intend to operate such that redemptions or other transfers of Atlas Units qualify for one or more such safe harbors. For example, we intend to limit the number of holders of Atlas Units, and the Atlas Operating LLC Agreement, which will be entered into in connection with the corporate reorganization, will provide for limitations on the ability of holders of Atlas Units to transfer their Atlas Units and will provide us, as managing member of Atlas Operating, with the right to impose restrictions (in addition to those already in place) on the ability of holders of Atlas Units to redeem their Atlas Units pursuant to the Redemption Right to the extent we believe it is necessary to ensure that Atlas Operating will continue to be treated as a partnership for U.S. federal income tax purposes.

If Atlas Operating were to become a publicly traded partnership taxable as a corporation for U.S. federal income tax purposes, significant tax inefficiencies might result for us and for Atlas Operating, including as a result of the inability to file a consolidated U.S. federal income tax return with Atlas Operating.

Our organizational structure confers certain benefits upon the Legacy Owners that hold Atlas Units that will not benefit the holders of our Class A common stock to the same extent as it will benefit such Legacy Owners.

Our organizational structure confers certain benefits upon the Legacy Owners that hold Atlas Units that do not benefit the holders of our Class A common stock to the same extent as it will benefit such Legacy Owners. We are a holding company and have no material assets other than our ownership of Atlas Units. As a consequence, our ability to declare and pay dividends to the holders of our Class A common stock is subject to the ability of Atlas Operating to provide distributions to us. If Atlas Operating makes such distributions, the Legacy Owners that hold Atlas Units will be entitled to receive equivalent distributions from Atlas Operating on a pro rata basis. However, because we must pay taxes, amounts ultimately distributed as dividends to holders of our Class A common stock are expected to be less on a per share basis than the amounts distributed by Atlas Operating to such Legacy Owners on a per unit basis. This and other aspects of our organizational structure may adversely impact the future trading market for our Class A common stock.

The U.S. federal income tax treatment of distributions on our Class A common stock to a holder will depend upon our tax attributes and the holder's tax basis in our stock, which are not necessarily predictable and can change over time.

Distributions of cash or other property on our Class A common stock, if any, will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, the distributions will be treated as a non-taxable return of capital to the extent of the holder's tax basis in our Class A common stock and thereafter as capital gain from the sale or exchange of such common stock. Also, if any holder sells our Class A common stock, the holder will recognize a gain or loss equal to the difference between the amount realized and the holder's tax basis in such Class A common stock.

To the extent that the amount of our distributions is treated as a non-taxable return of capital as described above, such distribution will reduce a holder's tax basis in the Class A common stock. Consequently, such excess distributions will result in a corresponding increase in the amount of gain, or a corresponding decrease in the amount of loss, recognized by the holder upon the sale of the Class A common stock or subsequent distributions with respect to such stock. Additionally, with regard to U.S. corporate holders of our Class A common stock, to the extent that a distribution on our Class A common stock exceeds both our current and accumulated earnings and profits and such holder's tax basis in such shares, such holders would be unable to utilize the corporate dividends-received deduction (to the extent it would otherwise be applicable to such holder) with respect to the gain resulting from such excess distribution.

Investors in our Class A common stock are encouraged to consult their tax advisors as to the tax consequences of receiving distributions on our Class A common stock that are not treated as dividends for U.S. federal income tax purposes.

Because we have elected to take advantage of the extended transition period pursuant to Section 107 of the JOBS Act, our financial statements may not be comparable to those of other public companies.

Section 107 of the JOBS Act provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. This permits an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are choosing to take advantage of this extended transition period and, as a result, we will comply with new

or revised accounting standards on the relevant dates on which adoption of such standards is required for private companies. Accordingly, our financial statements may not be comparable to companies that comply with public company effective dates, and our stockholders and potential investors may have difficulty in analyzing our operating results by comparing us to such companies.

General Risk Factors

The requirements of being a public company, including compliance with the reporting requirements of the Exchange Act, and the requirements of Sarbanes-Oxley, may strain our resources, increase our costs and distract management, and we may be unable to comply with these requirements in a timely or cost-effective manner.

As a public company, we need to comply with laws, regulations and requirements, certain corporate governance provisions of Sarbanes-Oxley and related regulations of the SEC and the requirements of the NYSE. Complying with these statutes, regulations and requirements occupies a significant amount of time of our board of directors and management and significantly increases our costs and expenses. We will need to:

- institute a more comprehensive compliance function to test and conclude on the sufficiency of our internal controls around financial reporting;
- comply with rules promulgated by the NYSE;
- prepare and distribute periodic public reports;
- establish new internal policies, such as those relating to insider trading; and
- involve and retain to a greater degree outside professionals in the above activities.

Furthermore, while we must comply with Section 404 of Sarbanes-Oxley, we are not required to have our independent registered public accounting firm attest to the effectiveness of our internal controls until our first annual report subsequent to our ceasing to be an "emerging growth company" within the meaning of Section 2(a)(19) of the Securities Act. Accordingly, we may not be required to have our independent registered public accounting firm attest to the effectiveness of our internal controls until as late as our annual report for the fiscal year ending December 31, 2028. Once it is required to do so, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed, operated or reviewed. Compliance with these requirements may strain our resources, increase our costs and distract management, and we may be unable to comply with these requirements in a timely or cost-effective manner.

We believe that the out-of-pocket costs, diversion of management's attention from running the day-to-day operations and operational changes caused by the need to comply with the requirements of Section 404 of Sarbanes-Oxley could be significant. If the time and costs associated with such compliance exceed our current expectations, our results of operations could be adversely affected.

If we fail to comply with the requirements of Section 404 or if we or our independent registered public accounting firm identify and report such material weaknesses, the accuracy and timeliness of the filing of our annual and quarterly reports may be adversely affected and could cause investors to lose confidence in our reported financial information, which could have a negative effect on the stock price of our Class A common stock. In addition, a material weakness in the effectiveness of our internal control over financial reporting could result in an increased chance of fraud and the loss of customers, reduce our ability to obtain financing and require additional expenditures to comply with these requirements, each of which could have an adverse effect on our business, results of operations and financial condition.

In addition, being a public company subject to these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as executive officers.

If securities or industry analysts do not publish research or reports or publish unfavorable research about our business, the price and trading volume of our Class A common stock could decline.

The trading market for our Class A common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who covers us downgrades our securities, the price of our securities would likely decline. If one or more of these analysts ceases to cover us or fails to publish regular reports on us, interest in the purchase of our securities could decrease, which could cause the price of our Class A common stock and other securities and their trading volume to decline.

If we fail to develop or maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud. As a result, current and potential stockholders could lose confidence in our financial reporting, which would harm our business and the trading price of our Class A common stock.

Effective internal controls are necessary for us to provide reliable financial reports, prevent fraud and operate successfully as a public company. If we cannot provide reliable financial reports or prevent fraud, our reputation and operating results would be harmed. We cannot be certain that our efforts to develop and maintain our internal controls will be successful, that we will be able to maintain adequate controls over our financial processes and reporting in the future or that we will be able to comply with our obligations under Section 404 of the Sarbanes-Oxley Act. Any failure to develop or maintain effective internal controls, or difficulties encountered in implementing or improving our internal controls, could harm our operating results or cause us to fail to meet our reporting obligations. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which would likely have a negative effect on the trading price of our Class A common stock.

Natural disasters and unusual weather conditions could disrupt business and result in operational delays and otherwise have an adverse effect on our business.

The occurrence of one or more natural disasters, such as tornadoes, hurricanes, tsunamis, fires, droughts, floods and earthquakes or unusual weather conditions or temperatures in the regions in which our facilities are located could adversely result in delayed operations or repair costs. For example, in February 2021, Texas and New Mexico experienced record-setting cold temperatures from Winter Storm Uri. Proppant volumes were negatively impacted in February and March 2021 as the cold weather delayed completion schedules and pushed forecasted producer activity into the latter half of the year. Events such as this could have an adverse effect on our business and may become more frequent and/or intense as a result of climate change.

A terrorist attack or armed conflict could harm our business.

Global and domestic terrorist activities, anti-terrorist efforts and other armed conflicts involving the United States could adversely affect the U.S. and global economies and could prevent us from meeting financial and other obligations. We could experience loss of business, delays or defaults in payments from payors or disruptions of fuel supplies and markets if pipelines, production facilities, processing plants, refineries or transportation facilities are direct targets or indirect casualties of an act of terror or

war. Such activities could reduce the overall demand for oil and natural gas, which, in turn, could also reduce the demand for our proppant. Global and domestic terrorist activities and the threat of potential terrorist activities and any resulting physical damage and economic downturn could adversely affect our results of operations, impair our ability to raise capital or otherwise adversely impact our ability to realize certain business strategies.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this prospectus includes “forward-looking statements.” All statements, other than statements of historical fact included in this prospectus, regarding our strategy, future operations, financial position, estimated revenues and losses, projected costs, prospects, plans and objectives of management are forward-looking statements. When used in this prospectus, the words “could,” “would,” “believe,” “anticipate,” “intend,” “estimate,” “expect,” “project” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. These forward-looking statements are based on our current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. When considering forward-looking statements, you should keep in mind the risk factors and other cautionary statements described under the section titled “Risk Factors” included in this prospectus. By their nature, forward-looking statements involve known and unknown risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Although we believe that the forward-looking statements contained in this prospectus are based on reasonable assumptions, you should be aware that many factors could affect our actual financial results or results of operations and could cause actual results to differ materially from those in such forward-looking statements, including but not limited to:

- higher than expected costs to operate our Kermit and Monahans facilities and develop the Dune Express;
- the amount of proppant we are able to produce, which could be adversely affected by, among other things, operating difficulties and unusual or unfavorable geologic conditions;
- the volume of proppant we are able to sell and our ability to enter into supply contracts for our proppant on acceptable terms;
- the prices we are able to charge, and the margins we are able to realize, from our proppant sales;
- the demand for and price of proppant, particularly in the Permian Basin;
- the success of our e-mining transition efforts;
- fluctuations in the demand for certain grades of proppant;
- the domestic and foreign supply of and demand for oil and natural gas;
- changes in the price and availability of natural gas, diesel fuel or electricity that we use as fuel sources for our proppant production facilities and related equipment;
- the availability of capital and our liquidity;
- the level of competition from other companies;
- pending legal or environmental matters;
- changes in laws and regulations (or the interpretation thereof) or increased public scrutiny related to the proppant production and oil and natural gas industries, silica dust exposure or the environment;
- facility shutdowns in response to environmental regulatory actions;
- technical difficulties or failures;
- liability or operational disruptions due to pit-wall or pond failure, environmental hazards, fires, explosions, chemical mishandling or other industrial accidents;
- health epidemics, such as the ongoing COVID-19 pandemic, natural disasters or inclement or hazardous weather conditions, including but not limited to cold weather, droughts, flooding, tornadoes and the physical impacts of climate change;

- unanticipated ground, grade or water conditions;
- inability to obtain government approvals or acquire or maintain necessary permits or mining, access or water rights;
- changes in the price and availability of transportation services;
- inability of our customers to take delivery;
- difficulty collecting receivables;
- the level of completion activity in the oil and natural gas industry;
- inability to obtain necessary production equipment or replacement parts;
- the amount of water available for processing;
- any planned or future expansion projects or capital expenditures;
- our ability to finance equipment, working capital and capital expenditures;
- inability to successfully grow organically, including through future land acquisitions;
- inaccuracies in estimates of volumes and qualities of our frac sand reserves;
- failure to meet our minimum delivery requirements under our supply agreements;
- material nonpayment or nonperformance by any of our key customers;
- development of either effective alternative proppants or new processes that replace hydraulic fracturing;
- our ability to borrow funds and access capital markets;
- our ability to comply with covenants contained in our debt instruments;
- the severity, operational challenges and duration of the ongoing COVID-19 pandemic and efforts to mitigate the spread of the virus, including logistical challenges, protecting the health and well-being of our employees, remote work arrangements, performance of contracts and supply chain disruptions, which have caused economic slowdowns and interruptions to our and our customers' operations;
- the potential deterioration of our customers' financial condition, including defaults resulting from actual or potential insolvencies;
- changes in global political or economic conditions, including sustained inflation and associated changes in monetary policy, both generally and in the markets we serve;
- physical, electronic and cybersecurity breaches;
- the effects of litigation;
- plans, objectives, expectations and intentions contained in this prospectus that are not historical; and
- other factors discussed elsewhere in this prospectus including in the section titled "Risk Factors."

We caution you that these forward-looking statements are subject to all of the risks and uncertainties, most of which are difficult to predict and many of which are beyond our control. These risks include, but are not limited to, the risks described under "Risk Factors" in this prospectus. Should one or more of the risks or uncertainties described in this prospectus occur, or should underlying assumptions prove incorrect, our actual results and plans could differ materially from those expressed in any forward-looking statements.

All forward-looking statements, expressed or implied, included in this prospectus are expressly qualified in their entirety by this cautionary statement. This cautionary statement should also be considered in connection with any subsequent written or oral forward-looking statements that we or persons acting on our behalf may issue. Except as otherwise required by applicable law, we disclaim any duty to update any forward-looking statements, all of which are expressly qualified by the statements in this section, to reflect events or circumstances after the date of this prospectus.

USE OF PROCEEDS

We estimate that our net proceeds from this offering, based on an assumed initial public offering price of $ per share of Class A common stock (the midpoint of the price range set forth on the cover of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately $ million, or approximately $ million if the underwriters' option to purchase additional shares of Class A common stock is exercised in full.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share of Class A common stock (the midpoint of the price range set forth on the cover of this prospectus) would increase or decrease the net proceeds to us from this offering by approximately $ million (or approximately $ million if the underwriters' option to purchase additional shares of Class A common stock is exercised in full), assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of one million in the number of shares of Class A common stock offered by us would increase or decrease the net proceeds to us from this offering by approximately $ million (or approximately $ million if the underwriters' option to purchase additional shares of Class A common stock is exercised in full), assuming no change in the assumed initial public offering price of $ per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to help fund our current growth initiatives, create a public market for our Class A common stock, and facilitate our future access to the capital markets. We intend to contribute all of the net proceeds of this offering to Atlas Operating in exchange for Atlas Units, and Atlas Operating will further contribute the net proceeds received to Atlas LLC. Atlas LLC will, in turn, use:

- approximately $ million of the net proceeds of this offering to fund the construction of the Dune Express; and
- approximately $ million of the net proceeds of this offering to fund general corporate purposes.

We do not currently intend to use any of the net proceeds from this offering to make payments in connection with the Redemption Right or Call Right.

The expected use of net proceeds from this offering represents our intentions based upon our present plans and business conditions. We cannot predict with certainty all of the particular uses for the proceeds of this offering or the amounts that we will actually spend on the uses set forth above. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business.

DIVIDEND POLICY

We commenced paying cash distributions in December 2021 and, as of January 31, 2023, have paid $70.0 million in aggregate distributions to our unitholders since that time. We intend to continue to recommend to our board of directors that we regularly return capital to our stockholders in the future through a dividend framework that will be communicated to stockholders in the future. Following completion of this offering, our board of directors may elect to declare cash dividends on our Class A common stock, subject to our compliance with applicable law, and depending on, among other things, our financial condition, results of operations, projections, liquidity, earnings, legal requirements, and restrictions in the agreements governing our indebtedness (as further discussed herein). The payment of any future dividends will be at the discretion of our board of directors, which will be constituted upon completion of this offering and be comprised of a majority of independent directors, from time to time. Please see "Risk Factors—Risks Related to Our Financial Condition—*Our indebtedness could adversely affect our financial flexibility and our competitive position*."

Our ability to pay any dividends depends on our receipt of cash dividends from our operating subsidiaries, which may further restrict our ability to pay dividends as a result of the laws of their jurisdiction of organization, agreements of our subsidiaries or covenants under any existing and future outstanding indebtedness we or our subsidiaries incur.

Our ABL Credit Agreement generally permits Atlas LLC to pay distributions to us, if (i) no Event of Default (as defined in the ABL Credit Agreement) exists or would occur as a result of making a distribution, and (ii) Atlas LLC's Availability (as defined in the ABL Credit Agreement) would be in excess of the greater of (a) $12.0 million or (b) 20% of the Borrowing Base (as defined in the ABL Credit Agreement) immediately after giving pro forma effect to such distribution. If Availability is less than these levels then our ability to pay distributions is either limited or is contingent on our ability to satisfy certain conditions such as a fixed charge coverage ratio.

Our 2021 Term Loan Credit Facility generally permits Atlas LLC to pay distributions to us if (i) no Event of Default has occurred and is continuing and (ii) immediately after giving pro forma effect thereto, (a) Atlas LLC's Cash and Cash Equivalents (as defined in the 2021 Term Loan Credit Facility) is greater than or equal to $30.0 million, and (b) Atlas LLC's Annualized Leverage Ratio (as defined in the 2021 Term Loan Credit Facility) is less than 2.00x. Concurrently with any such distribution, Atlas LLC is required to make a Related Paydown (as defined in the 2021 Term Loan Credit Facility) of the Term Loan based on the pro forma Leverage Ratio (as defined in the 2021 Term Loan Credit Facility). If the Leverage Ratio on a pro forma basis immediately after giving effect to such distribution would be greater than 1.25x, then Atlas LLC is required to make a Related Paydown of the Term Loan in an amount equal to one-third (1/3) of such distribution and if the Leverage Ratio on a pro forma basis immediately after giving effect to such distribution would be less than or equal to 1.25x, then Atlas LLC is required to make a Related Paydown of the Term Loan in an amount equal to one-fourth (1/4) of such distribution. If Cash and Cash Equivalents is less than $30.0 million or the Annualized Leverage Ratio is greater than or equal to 2.00x, then our ability to pay distributions may be limited. Notwithstanding these limitations, our Term Loan Facility also permits Atlas LLC to make Permitted Payments (as defined in the 2021 Term Loan Credit Facility) and to pay distributions to us following completion of this offering in an amount per year not to exceed 10.00% of the aggregate net proceeds received from this offering and contributed to Atlas LLC.

We will be a holding company upon the completion of this offering, and will have no material assets other than our ownership of Atlas Units. As a consequence, our ability to declare and pay dividends to the holders of our Class A common stock will be subject to the ability of Atlas Operating to provide distributions to us. The ability of our subsidiaries to make distributions to Atlas Operating depends upon the amount of cash they generate from their operations and the restrictions contained in

our credit facilities and such subsidiaries' governing documents. If Atlas Operating makes such distributions, the Legacy Owners holding Atlas Units will be entitled to receive equivalent distributions from Atlas Operating on a pro rata basis. However, because Atlas Inc. must pay taxes, amounts ultimately distributed as dividends to holders of our Class A common stock are expected to be less on a per share basis than the amounts distributed by Atlas Operating to such Legacy Owners on a per unit basis. For additional information, please see "Risk Factors—Risks Related to this Offering and Our Class A Common Stock and Organizational Structure—*We are a holding company. Our sole material asset after completion of this offering and our corporate reorganization will be its equity interest in Atlas Operating, and we will accordingly be dependent upon cash distributions from Atlas Operating to cover our taxes and corporate and overhead expenses, among other expenses*."

Assuming Atlas Operating makes distributions to Atlas Inc. and the Legacy Owners holding Atlas Units in any given year, the determination to pay dividends, if any, in respect of our Class A common stock out of the portion, if any, of such distributions remaining after our payment of taxes and our expenses (any such portion, an "excess distribution") will be made by our board of directors. Because our board of directors may determine to pay or not pay dividends in respect of shares of our Class A common stock, our holders of Class A common stock may not necessarily receive dividend distributions relating to excess distributions, even if Atlas Operating makes such distributions to us.

CAPITALIZATION

The following table sets forth the consolidated cash, cash equivalents and capitalization as of December 31, 2022, as follows:

- of Atlas LLC on an actual basis;
- of Atlas Inc. on a pro forma basis to give effect to the transactions described under "Corporate Reorganization"; and
- of Atlas Inc. adjusted to give pro forma effect to (i) the transactions described under "Corporate Reorganization," (ii) the sale of shares of our Class A common stock in this offering at the assumed initial offering price of $ per share (the midpoint of the price range set forth on the cover of this prospectus) and the application of the net proceeds therefrom as described under the section titled "Use of Proceeds" and (iii) the repayment in full of the 2018 ABL Credit Facility and entrance into the 2023 ABL Credit Facility in February 2023.

The table below should be read in conjunction with, and is qualified in its entirety by reference to the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the historical condensed consolidated financial information of our Predecessor and our pro forma financial information for the periods and as of the dates indicated.

	As of December 31, 2022		
	Atlas LLC(1)	Pro Forma Atlas Inc.	Pro Forma as adjusted Atlas Inc. (2)
	(In thousands, except number of shares)		
Cash and cash equivalents	$ 82,010	$	$
Total debt:			
2018 ABL Credit Facility(3)	$ 148,995	$	$ —
2021 Term Loan Credit Facility	$ 148,995		
2023 ABL Credit Facility(3)	$		
Total debt	$ 148,995	$	$
Members' / stockholders' equity:			
Members' / stockholders' equity	$ 511,357	$	$
Class A common stock, $0.01 par value; no shares authorized, issued or outstanding (actual); shares authorized, shares issued and outstanding (as adjusted)			
Class B common stock, $0.01 par value, no shares authorized, issued or outstanding (actual); shares authorized, shares issued and outstanding (as adjusted)			
Additional paid-in capital			
Non-controlling interests			
Total members' / stockholders' equity	$	$	$
Total capitalization	$	$	$

(1) Atlas LLC was formed in April 2017. The data in this table has been derived from the historical consolidated financial statements included in this prospectus which pertain to the assets, liabilities, revenues and expenses of our accounting predecessor.

(2) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would

increase (decrease) the as adjusted additional paid-in capital, total members' / stockholders' equity and total capitalization by approximately $ million, $ million and $ million, respectively, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the estimated underwriting discounts and commissions payable by us. We may also increase (decrease) the number of shares we are offering. An increase (decrease) of one million shares offered by us at the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the as adjusted additional paid-in capital, total members'/stockholders' equity and total capitalization by approximately $ million, $ million and $ million, respectively, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) As of December 31, 2022, the 2018 ABL Credit Facility included undrawn letters of credit in the amount of $1.1 million. On February 22, 2023, the 2018 ABL Credit Facility was repaid in full, and the Company entered into the 2023 ABL Credit Facility. As of February 23, 2023, no amounts are outstanding under the 2023 ABL Credit Facility.

DILUTION

Purchasers of the Class A common stock in this offering will experience immediate and substantial dilution in the net tangible book value per share of the Class A common stock for accounting purposes. Our as adjusted net tangible book value as of December 31, 2022, after giving pro forma effect to the transactions described under the section titled "Corporate Reorganization," was approximately $ million, or $ per share of Class A common stock. Pro forma net tangible book value per share is determined by dividing our pro forma tangible net worth (tangible assets less total liabilities) by the total number of outstanding shares of Class A common stock (assuming that 100% of Atlas Units have been redeemed for Class A common stock) that will be outstanding immediately prior to the closing of this offering, including giving effect to our corporate reorganization. After giving effect to the sale of the shares in this offering and further assuming the receipt of the estimated net proceeds from this offering (after deducting estimated underwriting discounts and commissions and estimated offering expenses), our pro forma as adjusted net tangible book value as of December 31, 2022 would have been approximately $ million, or $ per share. This represents an immediate decrease in the net tangible book value of $ per share to the Legacy Owners and an immediate dilution (i.e., the difference between the offering price and the as adjusted net tangible book value after this offering) to new investors of $ per share. The following table illustrates the per share dilution to new investors (assuming that 100% of Atlas Units have been redeemed for Class A common stock):

Initial public offering price per share of Class A common stock	$
As adjusted net tangible book value per share of Class A common stock as of December 31, 2022 (after giving pro forma effect to our corporate reorganization as described above)	$
Decrease per share of Class A common stock attributable to this offering and related transactions as described above	
Pro forma as adjusted net tangible book value per share of Class A common stock (after giving further effect to this offering and related transactions as described above)	
Dilution in pro forma as adjusted net tangible book value per share of Class A common stock to new investors	$

The dilution information discussed above is illustrative only and will change based on the actual public offering price and other terms of this offering to be determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value per share by approximately $ million, or by approximately $ per share, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, an increase (decrease) of one million in the number of shares offered by us would increase (decrease) the pro forma as adjusted net tangible book value per share by approximately $ million, or approximately $ per share, assuming the assumed public offering price remains the same, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, on an as adjusted basis as of December 31, 2022, the total number of shares of Class A common stock owned by the Legacy Owners (assuming that 100% of our Class B common stock and Atlas Units have been redeemed for Class A common stock) and to be owned by new investors, the total consideration paid, and the average price per share paid by the Legacy Owners and to be paid by new investors in this offering at our initial offering price of $

per share, calculated before deduction of estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Acquired		Total Consideration		Average Price
	Number	Percent	Amount	Percent	Per Share
Legacy Owners		%	$	%	$
New investors in this offering		%		%	
Total		100.0%	$	100.0%	$

The above table and discussion are based on the number of shares of our Class A common stock and Class B common stock to be outstanding as of the closing of this offering. The table does not reflect shares of Class A common stock reserved for issuance under our LTIP, which we intend to adopt in connection with the completion of this offering.

If the underwriters' option to purchase additional shares is exercised in full, the number of shares held by new investors will be increased to , or approximately % of the total number of shares of our Class A common stock.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the section titled "Summary—Summary Historical and Pro Forma Financial and Operating Data" and the financial statements and related notes appearing elsewhere in this prospectus. This discussion contains "forward-looking statements" reflecting our current expectations, estimates and assumptions concerning events and financial trends that may affect our future operating results or financial position. Actual results and the timing of events may differ materially from those contained in these forward-looking statements due to a number of factors. Factors that could cause or contribute to such differences include, but are not limited to, market prices for oil and natural gas, capital expenditures, economic and competitive conditions, regulatory changes and other uncertainties, as well as those factors discussed below and elsewhere in this prospectus, particularly in the sections titled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements," all of which are difficult to predict. In light of these risks, uncertainties and assumptions, the forward-looking events discussed may not occur. We assume no obligation to update any of these forward-looking statements except as otherwise required by applicable law.

Overview

We are a leading provider of proppant and logistics services to the oil and natural gas industry within the Permian Basin of West Texas and New Mexico, the most active oil and natural gas basin in North America. Our core mission is to maximize value for our stockholders by generating strong cash flow and allocating our capital resources efficiently, including providing a regular and durable return of capital to our investors through industry cycles. In our pursuit of this mission, we deploy innovative techniques and technologies to develop our high-quality resource base and efficiently deliver our products to customers through leading-edge logistics solutions. We believe that our uniquely-positioned asset base and our differentiated approach are distinct competitive advantages that make us a more reliable supplier than our competitors. We believe we have developed a strong brand recognition for reliability and strong customer service that has enabled us to increase the volume of proppant sold every year since the founding of the Company in 2017.

Our unique assets and market positioning, along with our innovation and demonstrated reliability, enables us to expand our business beyond proppant sales. We are launching a transformational logistics offering that we believe will bring a step change in efficiency, safety and sustainability benefits to the Permian Basin. This will include the "Dune Express," an overland conveyor infrastructure solution, which, coupled with our fleet of fit-for-purpose trucks and trailers, we anticipate will remove a significant number of trucks from public roadways within the Permian Basin.

The Dune Express will be the first long-haul overland conveyor system to deliver proppant. We have secured the contiguous right-of-way for our initial system, which is expected to follow a 42-mile-long route from our facilities into the heart of the prolific Northern Delaware Basin. The Dune Express will significantly shorten the distance that proppant needs to travel by truck, which is expected to provide meaningful productivity gains while decreasing emissions. We expect the Dune Express to make public roadways safer by removing trucks from public roadways, thus reducing traffic, accidents and fatalities on public roadways in the region.

Our supplying partners are currently manufacturing fit-for-purpose equipment for our trucking fleet to be used in our existing logistics business. We have designed our trucking operations and delivery processes to significantly expand the daily payload capacity per truck compared to traditional assets. We believe these fit-for-purpose assets with expanded payload capacity are already driving

productivity gains since their deployment in January 2023, and will continue to do as we build our fleet. Our long-term goal is to bring autonomous wellsite delivery to the Permian Basin, which we expect to drive further productivity gains as the technology is developed over the next several years.

Each of these solutions independently represents a significant leap forward in the logistics space. Combined, we believe that our logistics offering will bring substantial benefits to our customers, investors and the local community in the Permian Basin. The relocation of commercial traffic from public roads to private roads creates a dynamic closed-loop system that is well suited for the rapid deployment and advancement of our trucking fleet, while also increasing the mobility and safety of the public roadways for the residents of the region.

According to Lium Research, Permian Basin proppant demand currently exceeds in-basin production capacity and third-party research indicates that this supply shortage has the potential to grow significantly. In 2022, while Permian operators accelerated completions, they also maintained a healthy drilled uncompleted ("DUC") well inventory at approximately 94% of the 2018–2022 average. Furthermore, Lium Research estimated that Permian operators would spend approximately $42.8 billion in 2022 with spending levels estimated to be approximately 50% higher in 2024, signaling for a significant and continued increase in completions activity. In response to this supply shortage, we are in the process of adding a facility capable of 5.0 million tons of annual production capacity at our location in Kermit, Texas, and we anticipate that construction will be completed by the end of 2023. Due to the robust levels of industry demand for our product, our existing facilities are currently sold out, our contracted volumes continue to grow, and we are both extending term and adding logistics contracts to our portfolio. The modular design of our existing facilities and the size of our resource base provide us with the ability to further expand our production footprint to meet future market demand, should we determine that the potential investment enhances our long-term profitability and free cash flow profile.

Market Conditions, Operational Trends and Outlook

Increasing global economic activity, from historic lows brought about by the COVID-19 pandemic, has supported a higher oil and natural gas price environment. As the global demand for hydrocarbons has returned to pre-pandemic levels, historically low levels of capital investment into the oil and natural gas industry over the preceding two years, has led to significant supply imbalances as the supply of oil and natural gas has not kept pace with growing global demand. Russia's invasion of Ukraine has further exacerbated the tightness in the markets for oil and natural gas.

Oil and natural gas prices experienced some volatility during the third quarter of 2022 as global oil demand continued to decelerate, weighed down by a worsening economic outlook and fears of recession; however, robust oil use for power generation in the Middle East and Europe provided a partial offset to the softening in global oil demand. Russia's invasion of Ukraine and its effects on commodity markets, supply chains, inflation and financial conditions have added uncertainty to future global economic activity and global oil demand. The price for West Texas Intermediate ("WTI") crude oil declined by more than $31.07 per barrel during the period, largely fueled by a broader equities markets sell off, before ending the period at $81.54 per barrel.

The slowdown in global oil demand has been significantly offset by critically low global oil inventories, which have been exacerbated by global Russian oil embargos and regulatory changes affecting the oil industry in certain non-OPEC countries. In addition, Saudi Arabia announced production cuts by upwards of two million barrels per day, starting in November 2022, while domestically, U.S. hydrocarbon producers remain prudent with their capital budgets and have not increased production to levels seen prior to the pandemic. As the market continues to price in these dynamics, we expect the price of WTI to remain at elevated levels.

This supply and demand imbalance has led to a higher oil and natural gas price environment which in turn has prompted Permian Basin operators to prudently increase activity levels with the Permian Basin ending the period with 328 active horizontal rigs.

As a result of the increase in drilling and completions activity in the Permian Basin, we have seen a significant tightening in the Permian Basin proppant market, where proppant demand is presently at an all-time high. While the available Permian Basin proppant supply stack has returned to pre-pandemic levels, there remains a significant undersupply which has led to strong increases in the spot price market for proppant. While Atlas has significantly benefited from the tightness in the market, as evidenced through our ability to secure several long-term fixed contracts, there remains a growing deficit in sand supply to forecasted demand levels.

In addition to increased industry activity levels, we expect to benefit from increased horizontal drilling as well as other long-term macro industry trends that improve drilling economics such as (i) greater rig efficiencies that result in more wells drilled per rig and (ii) enhanced well completion designs, including higher proppant usage per well.

Russia's invasion of Ukraine and the limitations of renewables to provide a consistent supply of energy has increased both the cost of energy and the risk of energy supply disruptions. As such, we believe there exists a significant and unique opportunity to put strategic capital to work to address these concerns. To that end, Atlas has been investing in (i) significant capital projects that will address the growing demand for proppant as shale producers look to meet the growing global oil demand and (ii) new disruptive technologies (i.e., the Dune Express and autonomous wellsite delivery) that will both provide meaningful environmental benefits but also increase oilfield efficiencies, further driving growth that we believe will generate a positive community and environmental impact.

We believe these supportive tailwinds within the industry will continue. Atlas remains focused on positively disrupting the oilfield services space through the implementation of innovative technologies and will continue to capitalize on the growing market opportunity to benefit both our stockholders over the long term.

How We Generate Revenue

We generate revenue by mining, processing and distributing proppant that our customers use in connection with their operations. We sell proppant to our customers under supply agreements or as spot sales at prevailing market rates, which is dependent upon the cost of producing proppant, the proppant volumes sold and the desired margin and prevailing market conditions.

In some instances, revenues also include charges for sand logistics services provided to our customers. Our logistics service revenue fluctuates based on several factors, including the volume of proppant transported and the distance between our facilities and our customers. Revenue is generally recognized as products are delivered in accordance with the contract.

Some of our contracts contain shortfall provisions that calculate agreed upon fees that are billed when the customer does not satisfy the minimum purchases over a period of time defined in each contract.

As of December 31, 2022, our Kermit and Monahans production facilities have a total combined annual production capacity of 10.0 million tons.

Costs of Conducting our Business

We incur operating costs primarily from direct and indirect labor, freight charges, utility costs, fuel and maintenance costs and royalties. We incur labor costs associated with employees at our Kermit

and Monahans facilities, which represent the most significant cost of converting proppant to finished product. We may incur variable freight charges from trucking companies related to our delivery of sand to customer wellsites. Our Kermit and Monahans facilities undergo maintenance to minimize unscheduled downtime and ensure the ongoing quality of our proppant and ability to meet customer demands. We may incur variable utility costs in connection with the operation of our processing facilities, primarily natural gas and electricity, which are both susceptible to market fluctuations. We lease equipment in many areas of our operations including our proppant production hauling equipment. We incur variable royalty expense and/or delay rentals related to our agreements with the owners of our reserves. In addition, other costs including overhead allocation, depreciation and depletion are capitalized as a component of inventory and are reflected in cost of goods sold when inventory is sold.

How We Evaluate Our Operations

Our management uses a variety of financial and operating metrics to evaluate and analyze the performance of our business, including Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt.

Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Margin, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt are non-GAAP supplemental financial measures used by our management and by external users of our financial statements such as investors, research analysts and others, in the case of Adjusted EBITDA, to assess our operating performance on a consistent basis across periods by removing the effects of development activities, provide views on capital resources available to organically fund growth projects and, in the case of Adjusted Free Cash Flow and Adjusted EBITDA less Capital Expenditures, assess the financial performance of our assets and their ability to sustain dividends over the long term without regard to financing methods, capital structure, levels of reinvestment or historical cost basis.

We define Adjusted EBITDA as net income (loss) before depreciation, depletion and accretion, interest expense, net, income tax expense, expense related to workforce reduction, impairment of long-lived assets, unit-based compensation, loss on disposal of property, plant and equipment, gain (loss) on extinguishment of debt and unrealized commodity derivative gain (loss). Management believes Adjusted EBITDA is useful because it allows them to more effectively evaluate our operating performance and compare the results of our operations from period to period and against our peers without regard to our financing methods or capital structure. We exclude the items listed above from net income in arriving at Adjusted EBITDA because these amounts can vary substantially from company to company within our industry depending upon accounting methods and book values of assets, capital structures and the method by which the assets were acquired.

We define Adjusted EBITDA Margin as Adjusted EBITDA divided by total sales.

We define Adjusted Free Cash Flow as Adjusted EBITDA less maintenance capital expenditures. We define Adjusted EBITDA less Capital Expenditures as Adjusted EBITDA less Net Cash Used in Investing Activities. We believe that Adjusted Free Cash Flow and Adjusted EBITDA less Capital Expenditures are useful to investors as it provides a measure to of the ability of our business to generate cash, which can be used to pay dividends, capital expenditures or debt repayment.

We define Adjusted Free Cash Flow Margin as Adjusted Free Cash Flow divided by total sales.

We define Adjusted EBITDA less Capital Expenditures Margin as Adjusted EBITDA less Capital Expenditures divided by total sales.

We define Adjusted Free Cash Flow Conversion as Adjusted Free Cash Flow divided by Adjusted EBITDA.

We define Contribution Margin as gross profit plus depreciation, depletion and accretion expense.

We define Maintenance Capital Expenditures as capital expenditures excluding growth capital expenditures.

We define Net Debt as total debt, net of discount and deferred financing costs, plus discount and deferred financing costs, plus right-of-use lease liabilities, less cash and cash equivalents.

Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt do not represent and should not be considered alternatives to, or more meaningful than, net income, income from operations, cash flows provided by operating activities or any other measure of financial performance presented in accordance with generally accepted accounting principles in the United States of America ("GAAP") as measures of our financial performance. Adjusted EBITDA, Adjusted Free Cash Flow and Adjusted EBITDA less Capital Expenditures have important limitations as analytical tools because they exclude some but not all items that affect net income, the most directly comparable GAAP financial measure. Our computation of Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures, Adjusted EBITDA less Capital Expenditures Margin, Adjusted Free Cash Flow Conversion, Contribution Margin and Net Debt may differ from computations of similarly titled measures of other companies.

Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow, Adjusted EBITDA less Capital Expenditures, Adjusted Free Cash Flow Margin, Adjusted EBITDA less Capital Expenditures Margin, and Adjusted Free Cash Flow Conversion are non-GAAP supplemental financial measures used by our management and external users of our financial statements such as investors, research analysts and others, in the case of Adjusted EBITDA, to assess the financial performance of our assets and their ability to sustain dividends over the long term without regard to financial methods, capital structure or historical cost basis, and, in the case of Adjusted Free Cash Flow and Adjusted EBITDA less Capital Expenditures, to assess our operating performance on a consistent basis across periods by removing the effects of development activities.

Factors Affecting the Comparability of Our Results of Operations

COVID-19

In March 2020, the World Health Organization categorized the outbreak of COVID-19 as a pandemic. The COVID-19 pandemic has led to significant economic disruption globally, including in the areas of the United States in which we operate. Governmental authorities took actions to limit the spread of COVID-19 through travel restrictions and stay-at-home orders, which caused many businesses to adjust, reduce or suspend activities. Concerns about global economic growth, as well as uncertainty regarding the timing, pace and extent of an economic recovery in the United States and abroad, have had a significant adverse impact on commodity prices and financial markets. COVID-19 cases in the United States have decreased from their highest levels and vaccines are being distributed, but additional uncertainty remains regarding the timing, pace and extent of an economic recovery in the United States.

Beginning in March 2020, we took action to protect the health and safety of our workers, while continuing to operate, and to maintain the safety and integrity of, our assets. Where possible, our employees have worked remotely to support our business. Where continuous remote work was not possible, we implemented strategies to reduce the likelihood of spreading the disease. In compliance with Center for Disease Control guidance, these strategies include requiring sick employees to stay home, implementing policies and practices for social distancing and wearing cloth face coverings, educating employees about steps they can take to protect themselves at work and at home, performing enhanced cleaning and disinfecting, limiting non-essential travel, and minimizing meetings and gatherings.

COVID-19 contributed to a significant downturn in oil and natural gas commodity prices, and we experienced a corresponding drop in activity levels from our customers in the Permian Basin in 2020. We took action to reduce operating and general and administrative expenses while maintaining safe and reliable performance of our systems. We anticipate that these cost improvements are sustainable and will continue to benefit us in the future. We also expect a significant recovery in operator activity levels as the impact of COVID-19 diminishes and commodity prices continue to recover. However, we are unable to predict the future impact of COVID-19, and it is possible that such impact could be negative. For more information on the risks relating to COVID-19, please read the risks under the section titled "Risk Factors", including "Risk Factors—Risks Related to Our Business and Operations— *Our business and results of operations have been adversely affected by, and may again in the future be adversely affected by, the ongoing COVID-19 pandemic*."

Long-Term Incentive Plan

In order to incentivize management members following the completion of this offering, we anticipate that our board of directors will adopt a LTIP for employees and directors prior to the completion of this offering. Our principal executive officer and our next two most highly compensated executive officers (our "Named Executive Officers") will be among those eligible to participate in this plan, which will become effective upon the consummation of this offering. We anticipate that the LTIP will provide for the grant of options, stock appreciation rights, restricted stock, restricted stock units, stock awards, dividend equivalents, other stock-based awards, cash awards, substitute awards and performance awards intended to align the interests of employees, directors and service providers with those of our stockholders. As such, our historical financial data may not present an accurate indication of what our actual results would have been if we had implemented the LTIP program prior to the periods presented within.

Income Taxes

Atlas Inc. is a corporation and will be subject to U.S. federal, state and local income taxes. Although the Predecessor is subject to franchise tax in the State of Texas (at less than 1% of modified pre-tax earnings), it is and historically has been treated as a pass-through entity for U.S. federal and other state and local income tax purposes, and as such is and was generally not subject to U.S. federal income taxes or other state or local income taxes. Rather, the tax liability with respect to the taxable income of the Predecessor is and was passed through to its owners. Accordingly, the financial data attributable to Predecessor contains no provision for U.S. federal income taxes or income taxes in any state or locality (other than franchise tax in the State of Texas). We estimate that we will be subject to U.S. federal, state and local taxes at a blended statutory rate of approximately 21.75% (plus any applicable state income tax) of pre-tax earnings, based upon the federal statutory rate of 21%, plus Texas franchise tax rate of 0.75%.

Atlas Inc. accounts for income taxes under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and

their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled pursuant to the provisions of Accounting Standards Codification ("ASC") 740, *Income Taxes*. The effect on deferred tax assets and liabilities of a change in tax rate is recognized in earnings in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts more likely than not to be realized.

We expect to record a full valuation allowance on our net deferred tax assets based on our assessment that it is more likely than not that the deferred tax asset will not be realized. A change in these assumptions could cause a decrease to the valuation allowance, which could materially impact our results of operations.

Results of Operations

	Predecessor		
	For the Year Ended December 31,		
	2022	2021	2020
	(in thousands)		
Product sales	$ 408,446	$ 142,519	$ 80,527
Service sales	74,278	29,885	31,245
Total sales	482,724	172,404	111,772
Cost of sales (excluding depreciation, depletion and accretion expense)	198,918	84,656	73,118
Depreciation, depletion and accretion expense	27,498	23,681	20,887
Gross profit	256,308	64,067	17,767
Selling, general and administrative expense	24,317	17,071	17,743
Impairment of long-lived assets	—	—	1,250
Operating income (loss)	231,991	46,996	(1,226)
Interest expense, net	(15,760)	(42,198)	(32,819)
Other income (loss)	2,631	291	(25)
Income tax expense	(1,856)	(831)	(372)
Net income (loss)	$ 217,006	$ 4,258	$ (34,442)

Year Ended December 31, 2022 Compared To Year Ended December 31, 2021

Product Sales. Product sales increased by $265.9 million to $408.4 million for the year ended December 31, 2022, as compared to $142.5 million for the year ended December 31, 2021. An increase in proppant prices between the periods contributed to a $233.1 million positive impact, while an increase in sales volume contributed a $32.8 million positive impact.

Service Sales. Services sales, which includes freight for last-mile logistics services, increased by $44.4 million to $74.3 million for the year ended December 31, 2022, as compared to $29.9 million for the year ended December 31, 2021. The increase in logistics revenue was due to higher sales volumes shipped to last-mile logistics customers.

Cost of sales (excluding depreciation, depletion and accretion expense). Cost of sales (excluding depreciation, depletion and accretion expense) increased by $114.2 million to $198.9 million for the year ended December 31, 2022, as compared to $84.7 million for the year ended December 31, 2021. Cost of sales (excluding depreciation, depletion and accretion) related to product sales increased by $73.0 million due to higher sales volumes, which increased costs for utilities, maintenance, royalties and transition costs related to purchase of dredge equipment, requiring temporary usage of traditional mining rental equipment.

Cost of sales (excluding depreciation, depletion and accretion expense) related to services increased by $41.2 million due to higher sales volumes shipped to last-mile logistics customers during the period.

Depreciation, depletion and accretion expense. Depreciation, depletion and accretion expense increased by $3.8 million to $27.5 million for the year ended December 31, 2022, as compared to $23.7 million for the year ended December 31, 2021. The increase in depreciation, depletion and accretion expense is due to increased units of production depletion due to higher sand production and additional depreciable assets placed into service when compared to the prior period.

Selling, general and administrative expense. Selling, general and administrative expense increased by $7.2 million to $24.3 million for the year ended December 31, 2022, as compared to $17.1 million for the year ended December 31, 2021. The increase is primarily due to an increase of $5.1 million of employee costs, including an increase of $0.6 million of unit-based compensation expense, and $2.1 million of travel, sales and other corporate expenses associated with increased opportunities to conduct commercial business development efforts in person during the year ended December 31, 2022, compared to the year ended December 31, 2021.

Our selling, general and administrative expenses include the non-cash expense for unit-based compensation for equity awards granted to our employees. For the year ended December 31, 2022, unit-based compensation expense was $0.7 million, as compared to $0.1 million of unit-based compensation expense for the year ended December 31, 2021.

Interest expense, net. Interest expense, net decreased by $26.4 million to $15.8 million for the year ended December 31, 2022, as compared to $42.2 million for the year ended December 31, 2021. The decrease is primarily due to the recognition of a loss on extinguishment of debt of $16.4 million resulting from the recognition of unamortized debt discount and deferred financing costs of $11.9 million and a make-whole premium of $4.5 million paid upon redemption of the 2018 Term Loan Credit Facility during the year ended December 31, 2021. This decrease was partially offset by the recognition of gain on extinguishment of debt of $4.5 million due to the forgiveness of the SBA Paycheck Protection Program Loan and the related accrued interest expense during the year ended December 31, 2021. The remaining decrease is due to the outstanding 2021 Term Loan Credit Facility, which accrued $14.0 million of interest expense and $0.7 million of amortization of debt discount and deferred financing costs during the year ended December 31, 2022, as compared to the 2018 Term Loan Credit Facility and 2021 Term Loan Facility, which accrued $22.0 million of interest expense and $7.7 million of amortization of debt discount and deferred financing costs during the year ended December 31, 2021.

Income tax expense. Income tax expense increased by $1.1 million to $1.9 million for the year ended December 31, 2022, as compared to $0.8 million for the year ended December 31, 2021. The increase is primarily due to increased revenues, which increased our liability related to Texas franchise taxes.

Year Ended December 31, 2021 Compared To Year Ended December 31, 2020

Product Sales. Product sales increased by $62.0 million to $142.5 million for the year ended December 31, 2021, as compared to $80.5 million for the year ended December 31, 2020. An increase in proppant prices between the periods contributed to a $37.0 million positive impact, while an increase in sales volume contributed a $25.0 million positive impact.

Service Sales. Services sales, which includes freight for last-mile logistics services decreased by $1.3 million to $29.9 million for the year ended December 31, 2021, as compared to $31.2 million for the year ended December 31, 2020. The decrease in logistics revenue was due to lower sales volumes shipped to last-mile logistics customers.

Cost of sales (excluding depreciation, depletion and accretion expense). Cost of sales (excluding depreciation, depletion and accretion expense) increased by $11.6 million to $84.7 million for the year ended December 31, 2021, as compared to $73.1 million for the year ended December 31, 2020. Cost of sales (excluding depreciation, depletion and accretion) related to product sales increased by $10.7 million due to increased sales volumes, which increased costs for utilities, maintenance and royalties. These increases were partially offset by decreased mining and rental equipment costs, due to dredge mining for the full year, and cost efficiencies gained during the period. Cost of sales (excluding depreciation, depletion and accretion expense) related to services increased by $0.9 million due to higher operating costs, despite lower sales volumes shipped to last-mile logistics customers during the period.

Depreciation, depletion and accretion expense. Depreciation, depletion and accretion expense increased by $2.8 million to $23.7 million for the year ended December 31, 2021, as compared to $20.9 million for the year ended December 31, 2020. The increase in depreciation, depletion and accretion expense is due to increased component depreciation for certain product belts used in the proppant production process, as well as increased units of production depletion due to higher sand production when compared to the prior period.

Selling, general and administrative expense. Selling, general and administrative expense decreased by $0.6 million to $17.1 million for the year ended December 31, 2021, as compared to $17.7 million for the year ended December 31, 2020. The decrease is primarily due to a decrease of $2.4 million in unit-based compensation expense during the year ended December 31, 2021, compared to the year ended December 31, 2020. This decrease was partially offset by an increase of $1.8 million of employee and marketing costs associated with increased economic activity, from historic lows brought about by the COVID-19 pandemic during the year ended December 31, 2021, compared to the year ended December 31, 2020.

Our selling, general and administrative expenses include the non-cash expense for unit-based compensation for equity awards granted to our employees. For the year ended December 31, 2021, unit-based compensation expense was $0.1 million, as compared to unit-based compensation expense of $2.5 million for the year ended December 31, 2020.

Impairment of Long-Lived Assets. We recognized no impairment of long-lived assets expense for the year ended December 31, 2021. We recognized $1.3 million of impairment of long-lived assets expense for the year ended December 31, 2020, due to a write off of a vendor deposit during the period.

Interest expense, net. Interest expense, net increased by $9.4 million to $42.2 million for the year ended December 31, 2021, as compared to $32.8 million for the year ended December 31, 2020. The increase is primarily due to the recognition of a loss on extinguishment of debt of $16.4 million resulting from the recognition of unamortized debt discount and deferred financing costs of $11.9 million and a make-whole premium of $4.5 million paid upon redemption of the 2018 Term Loan Credit Facility. This increase was partially offset by the recognition of gain on extinguishment of debt of $4.5 million due to the forgiveness of the SBA Paycheck Protection Program Loan and the related accrued interest expense during the period, and decreased interest expense of $1.7 million and decreased debt discount amortization of $0.8 million related to the 2021 Term Loan Credit Facility.

Income tax expense. Income tax expense increased by $0.4 million to $0.8 million for the year ended December 31, 2021, as compared to $0.4 million for the year ended December 31, 2020. The increase is primarily due to increased revenues, which increased our liability related to Texas franchise taxes.

Liquidity and Capital Resources

Overview

Our primary sources of liquidity to date have been capital contributions from our owners, cash flows from operations, and borrowings under our 2018 Term Loan Credit Facility, which was refinanced by our 2021 Term Loan Credit Facility, and our 2023 ABL Credit Facility. Our primary uses of capital have been capital expenditures for the construction of our Kermit and Monahans facilities and to support organic growth. In addition, we have routine facility upgrades and additional ancillary capital expenditures associated with, among other things, contractual obligations and working capital obligations. Funding for these cash needs may be provided by any combination of internally generated cash flow, borrowings under our 2023 ABL Credit Facility, additional capital investment from our owners, or other external financing sources. We strive to maintain financial flexibility and proactively monitor potential capital sources, including equity and debt financing, to meet our investment and target liquidity requirements and to permit us to manage the cyclicality associated with our business.

As of December 31, 2022, we had working capital, defined as current assets less current liabilities, of $90.1 million and $48.9 million of availability under the 2018 ABL Credit Facility. Our cash and cash equivalents totaled $82.0 million.

We intend to contribute all of the net proceeds of this offering to Atlas Operating in exchange for Atlas Units, and Atlas Operating will further contribute the net proceeds received to Atlas LLC. The principal purposes of this offering are to help fund our current growth initiatives, create a public market for our Class A common stock, and facilitate our future access to the capital markets. Atlas LLC will use:

- approximately $ million of the net proceeds of this offering to fund the construction of the Dune Express; and
- approximately $ million of the net proceeds of this offering to fund general corporate purposes.

We do not currently intend to use any of the net proceeds from this offering to make payments in connection with the Redemption Right or Call Right. Please see the section titled “Use of Proceeds” for more information.

Cash Flow

The following table summarizes our cash flow for the periods indicated:

	Predecessor		
	For the Year Ended December 31,		
	2022	2021	2020
	(in thousands)		
Consolidated Statement of Cash Flow Data:			
Net cash provided by operating activities	$ 206,012	$ 21,356	$ 12,486
Net cash used in investing activities	(89,592)	(19,371)	(9,532)
Net cash provided by (used in) financing activities	(74,811)	2,344	11,826
Net increase in cash	$ 41,609	$ 4,329	$ 14,780

Year Ended December 31, 2022 Compared To The Year Ended December 31, 2021

Net Cash Provided by Operating Activities

Net cash provided by operating activities was $206.0 million and $21.4 million for the years ended December 31, 2022 and 2021, respectively. The increase is primarily attributable to increased net income.

Net Cash Used in Investing Activities

Net cash used in investing activities was $89.6 million and $19.4 million for the years ended December 31, 2022 and 2021, respectively. The increase was due to an increase in capital spending at the Kermit and Monahans facilities, Dune Express and logistics assets during the year ended December 31, 2022 when compared to the year ended December 31, 2021.

Net Cash Provided by and Used in Financing Activities

Net cash used in financing activities was $74.8 million year ended December 31, 2022. Net cash provided by financing activities was $2.3 million for the year ended December 31, 2021. The change is due to a decrease of $178.2 million of proceeds from term loan borrowings related to the funding of the 2021 Term Loan Credit Facility, a decrease of $148.8 million of payments on payments on term loan borrowings and debt prepayment and extinguishment costs related to the repayment of the 2018 Term Loan Credit Facility, an increase of $35.0 million for member distributions, and a decrease in proceeds from equity issuances of $12.6 million during the year ended December 31, 2022 compared to the year ended December 31, 2021.

Year Ended December 31, 2021 Compared To The Year Ended December 31, 2020

Net Cash Provided by Operating Activities

Net cash provided by operating activities was $21.4 million and $12.5 million for the year ended December 31, 2021 and 2020, respectively. The increase is primarily attributable to increased revenues of $60.6 million. The increase was partially offset by an $11.5 million increase in cost of sales (excluding depreciation, depletion and accretion expense), a $22.2 million increase in repayment of paid-in-kind interest upon the repayment of the 2018 Term Loan Credit Facility and an $8.8 million decrease in interest paid-in-kind through the issuance of additional term loans, as we elected not to pay certain term loan interest in-kind as of June 30, 2021.

Net Cash Used in Investing Activities

Net cash used in investing activities was $19.4 million and $9.5 million for the year ended December 31, 2021 and 2020, respectively. The increase was due to the purchase of Wyatt's Lodge and an increase in capital spending at the Kermit and Monahans facilities during the year ended December 31, 2021 when compared to the year ended December 31, 2020.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $2.3 million and $11.8 million for the year ended December 31, 2021 and 2020, respectively. The decrease is primarily due to an increase of $165.6 million for the repayment of the 2018 Term Loan Credit Facility partially offset by an increase of $163.2 million from proceeds of term loan borrowings during the year ended December 31, 2021 compared to the year ended December 31, 2020.

Capital Requirements

Outside of our growth and technology initiatives, our business is not presently capital intensive in nature and only requires the maintenance of our two existing proppant production facilities. Our current level of capital expenditures is expected to remain within our internally generated cash flow as we maintain significant flexibility around the timing of capital expenditures.

We intend to fund capital requirements through our primary sources of liquidity, which include cash on hand and cash flows from operations and, if needed, our borrowing capacity under the Credit Facility.

If and to the extent our board of directors were to declare a cash distribution to our Class A common stockholders, we currently expect the dividend to be paid from free cash flow. We do not currently expect to borrow funds or to adjust planned capital expenditures to finance dividends on our Class A common stock, if any such dividends were to be declared by our board of directors. The timing, amount and financing of dividends, if any, will be subject to the discretion of our board of directors from time to time following this offering. Please see the section titled “Dividend Policy.”

Debt Agreements

2018 ABL Credit Facility

On December 14, 2018, the Company and the ABL Lenders entered into the ABL Credit Agreement pursuant to which the ABL Lenders provided revolving credit financing to the Company in an aggregate principal amount of up to $50.0 million with availability thereunder subject to a borrowing base as described in the loan agreement governing the 2018 ABL Credit Facility (the “2018 ABL Credit Agreement”). The 2018 ABL Credit Facility included a letter of credit sub-facility, which permitted issuances of letters of credit up to an aggregate amount of $10.0 million. As of December 31, 2022, the Company had an aggregate principal amount of $1.1 million in letters of credit outstanding under the 2018 ABL Credit Facility.

The 2018 ABL Credit Facility was repaid in full in February 2023 in connection with the Company’s entrance into the 2023 ABL Credit Facility.

2023 ABL Credit Facility

On February 22, 2023, the Company, Bank of America, N.A., as administrative agent, and certain financial institutions party thereto as lenders (the “ABL Lenders”) entered into a Loan, Security and Guaranty Agreement (the “ABL Credit Agreement”) pursuant to which the ABL Lenders provide revolving credit financing to the Company in an aggregate principal amount of up to $75.0 million with availability thereunder subject to a borrowing base as described in the ABL Credit Agreement. The 2023 ABL Credit Facility includes a letter of credit sub-facility, which permits issuances of letters of credit up to an aggregate amount of $25.0 million. The scheduled maturity date of the 2023 ABL Credit Facility is February 22, 2028.

Borrowings under the 2023 ABL Credit Facility bear interest, at the Company’s option, at either a base rate or Term SOFR, as applicable, plus an applicable margin based on average excess availability as set forth in the ABL Credit Agreement. Term SOFR loans bear interest at Term SOFR for the applicable interest period plus an applicable margin, which ranges from 1.50% to 2.00% per annum based on average excess availability as set forth in the ABL Credit Agreement. Base rate loans bear interest at the applicable base rate, plus an applicable margin, which ranges from 0.50% to 1.00% per annum based on average excess availability as set forth in the ABL Credit Agreement. In addition to paying interest on outstanding principal under the 2023 ABL Credit Facility, the Company is required to pay a commitment fee which ranges from 0.375% per annum to 0.500% per annum with respect to the

unutilized commitments under the 2023 ABL Credit Facility, based on the average utilization of the 2023 ABL Credit Facility. The Company is also required to pay customary letter of credit fees, to the extent that one or more letter of credit is outstanding.

The 2023 ABL Credit Facility is unconditionally guaranteed, jointly and severally, by the Company and certain of its subsidiaries and secured by substantially all of the assets of the Company and certain of its subsidiaries.

2021 Term Loan Credit Facility

On October 20, 2021, we entered into a credit agreement with Stonebriar Commercial Finance LLC (the "Term Lender") pursuant to which the Term Lender extended a $180.0 million single advance term loan credit facility (the "2021 Term Loan Credit Facility"). The term loan outstanding under the 2021 Term Loan Credit Facility is payable in seventy-two consecutive monthly installments in varying amounts as more particularly set forth in the promissory note that was executed and delivered in connection with the 2021 Term Loan Credit Facility and has a final maturity date of October 1, 2027. The amortization of the 2021 Term Loan Credit Facility carries an implied interest rate of 8.47% per annum.

At any time prior to the October 1, 2027 maturity date, we may redeem the 2021 Term Loan Credit Facility, in whole or in part, at a price equal to 100% of the principal amount plus a prepayment fee. The prepayment fee ranges from 3% on or before October 19, 2022, to 2% after October 19, 2022, and on or before October 19, 2023, and 1% thereafter. Upon maturity of the 2021 Term Loan Credit Facility, the entire unpaid principal amount, together with interest, fees and other amounts payable in connection with the facility, will be immediately due and payable without further notice or demand. Mandatory debt service (inclusive of principal repayment and interest) is $30 million per year for the first two years of the 2021 Term Loan Credit Facility, increasing to $45 million for the final four years.

The 2021 Term Loan Credit Facility includes certain non-financial covenants, including but not limited to restrictions on incurring additional debt and certain distributions. The 2021 Term Loan Credit Facility is not subject to financial covenants, but does require us to maintain a minimum average liquidity balance of not less than $20.0 million at any time there are loans of $5.0 million or more in the aggregate outstanding under our 2023 ABL Credit Facility.

Proceeds from the 2021 Term Loan Credit Facility were used to repay of outstanding indebtedness under our previous 2018 Term Loan Credit Facility with BlackGold Capital Management to make permitted distributions, and for general corporate purposes.

Quantitative and Qualitative Disclosure about Market Risk

Commodity Price Risks

The market for our services is indirectly exposed to fluctuations in the price of crude oil and natural gas, to the extent such fluctuations impact drilling and completion activity levels and thus impact the activity levels of our customers in the exploration and production and oilfield services industries. We do not currently intend to hedge our indirect exposure to commodity price risk.

Our natural gas purchases expose us to commodity price risk. Our facility operations require natural gas consumption for equipment used in the manufacturing of proppant. Pricing for natural gas has been volatile and unpredictable for several years, and this volatility is expected to continue in the future. The cost we pay for our natural gas depends on many factors outside of our control, such as the strength of the global economy and global supply and demand for the commodities we produce. To

reduce the impact of fluctuations in natural gas prices on our operational costs, we periodically enter into commodity derivative contracts with respect to certain of our forecasted natural gas usage through various transactions that reduce the impact of price volatility. We plan to continue our practice of entering into such transactions to reduce the impact of commodity price volatility on our cash flow from operations. These hedging activities are intended to manage our exposure to natural gas price fluctuations.

Interest Rate Risks

We are subject to interest rate risk on a portion of our long-term debt under the 2023 ABL Credit Facility. The amounts owed under our 2023 ABL Credit Facility use SOFR as a benchmark for establishing the rate at which interest accrues. We do not currently have any borrowings under our 2023 ABL Credit Facility and do not currently have or intend to enter into any derivative arrangements to protect against fluctuations in interest rates applicable to our outstanding indebtedness under our 2023 ABL Credit Facility.

Market Risks

The demand, pricing and terms for proppant and last-mile services provided by us are largely dependent upon the level of drilling activity in the oil and natural gas industry in the Permian Basin. These activity levels are influenced by numerous factors over which we have no control, including, but not limited to: the supply of and demand for oil and natural gas; the level of prices, and expectations about future prices of oil and natural gas; the cost of exploring for, developing, producing and delivering oil and natural gas; the expected rates of declining current production; the discovery rates of new oil and natural gas reserves; available rail and other transportation capacity; weather conditions; domestic and worldwide economic conditions; political instability in oil-producing countries; environmental regulations; technical advances affecting energy consumption; the price and availability of alternative fuels; the ability of oil and natural gas companies to raise equity capital and debt financing; and merger and divestiture activity among oil and natural gas companies.

The level of U.S. oil and natural gas drilling is volatile. Expected trends in oil and natural gas production activities may not materialize and demand for our services may not reflect the level of activity in the industry. Any prolonged and substantial reduction in oil and natural gas prices would likely affect oil and natural gas production levels and therefore affect demand for our services. A material decline in oil and natural gas prices or Permian Basin activity levels could have an adverse effect on our business, financial condition, results of operations and cash flows.

Credit Risks

We are subject to risks of loss resulting from nonpayment or nonperformance by our customers. We examine the creditworthiness of third-party customers to whom we extend credit and manage our exposure to credit risk through credit analysis, credit approval, credit limits and monitoring procedures, and for certain transactions, we may request letters of credit, prepayments or guarantees, although collateral is generally not required. For the year ended December 31, 2022, we had 39 customers, of which ten were investment grade. For the year ended December 31, 2021, we had 39 customers, of which seven were investment grade.

Inflation Risks

Inflationary factors such as increases in the cost of our products and overhead costs may adversely affect our results of operations. Although we do not believe that inflation has had a material impact on our financial position or results of operations to date, a high rate of inflation in the future may

have an adverse effect on our ability to maintain current levels of gross margin and selling, general and administrative expenses as a percentage of net revenue if the selling prices of our products do not increase with these increased costs.

Critical Accounting Policies and Estimates

The preparation of financial statements requires the use of judgments and estimates. Our critical accounting policies are described below to provide a better understanding of how we develop our assumptions and judgments about future events and related estimates and how they can impact our financial statements. A critical accounting estimate is one that requires our most difficult, subjective or complex estimates and assessments and is fundamental to our results of operations.

We base our estimates on historical experience and on various other assumptions we believe to be reasonable according to the current facts and circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We believe the following are the critical accounting policies used in the preparation of our combined financial statements, as well as the significant estimates and judgments affecting the application of these policies. This discussion and analysis should be read in conjunction with our combined financial statements and related notes included in this report.

Our significant accounting policies are described in Note 2 to our audited consolidated financial statements as of and for the years ended December 31, 2022, 2021 and 2020 included elsewhere in this prospectus. We prepare our consolidated financial statements in conformity with GAAP, which requires us to make estimates and assumptions about future events that affect the amounts reported in the consolidated financial statements and accompanying footnotes. Actual results could differ from those estimates. For additional information concerning certain estimates and assumptions, see the respective footnotes to our audited consolidated financial statements as of and for the years ended December 31, 2022, 2021 and 2020 included elsewhere in this prospectus. We believe that the following discussion addresses our most critical accounting estimates, which require management's most subjective and complex judgments.

Property, Plant and Equipment, Including Depreciation and Depletion

In order to calculate depreciation for our fixed assets, other than plant facilities and mine development costs, we use the best estimated useful lives at the time the asset is placed into service.

Mining property and development costs, including plant facilities directly associated with mining properties, are amortized using the units of production method on estimated measures of tons of in-place reserves. The impact to reserve estimates is recognized on a prospective basis. Drilling and related costs are capitalized for deposits where proven and probable reserves exist. These activities are directed at obtaining additional information on the deposit or converting non-reserve minerals to proven and probable reserves, with the benefit being realized over a period greater than one year. At a minimum, we will assess the useful lives and residual values of all long-lived assets on an annual basis to determine if adjustments are required. The actual reserve life may differ from the assumptions we have made about the estimated reserve life.

We review property, plant and equipment for impairment annually or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. If such a review should indicate that the carrying amount of long-lived assets is not recoverable, the Company will reduce the carrying amount of such assets to fair value.

Recently Issued Accounting Pronouncements

Under the JOBS Act, we expect that we will meet the definition of an "emerging growth company," which would allow us to have an extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act. We intend to take advantage of all of the reduced reporting requirements and exemptions, including the longer phase-in periods for the adoption of new or revised financial accounting standards under Section 107 of the JOBS Act until we are no longer an emerging growth company. Our election to use the phase-in periods permitted by this election may make it difficult to compare our financial statements to those of non-emerging growth companies and other emerging growth companies that have opted out of the longer phase-in periods under Section 107 of the JOBS Act and who will comply with new or revised financial accounting standards. If we were to subsequently elect instead to comply with these public company effective dates, such election would be irrevocable pursuant to Section 107 of the JOBS Act.

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting, which provides optional guidance for a limited time to ease the potential burden in accounting for reference rate reform. The new guidance provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts and hedging relationships that reference LIBOR or another reference rate expected to be discontinued due to reference rate reform. These amendments are effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. In December 2022, FASB issued ASC 2022-06, Reference Rate Reform (Topic 848), Deferral of the Subset Date of Topic 848, which deferred the sunset date to Topic 848 to December 31, 2024. The Company is evaluating the impact of this standard on its condensed consolidated financial statements and does not believe it will have a material impact on the condensed consolidated financial statements.

In June 2016, the Financial Accounting Standards Board issued ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326)*, which amends the guidance on the impairment of financial instruments. The standard adds an impairment model, referred to as current expected credit loss, which is based on expected losses rather than incurred losses. The standard applies to most debt instruments, trade receivables, lease receivables, reinsurance receivables, financial guarantees and loan commitments. Under the guidance, companies are required to disclose credit quality indicators disaggregated by year of origination for a five-year period. In May 2019, ASU 2016-13 was subsequently amended by ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments – Credit Losses, ASU 2019-05, Financial Instruments – Credit Losses (Topic 326): Targeted Transition Relief. The new guidance is effective for fiscal years beginning after December 15, 2021. The Company is currently evaluating the impact of the ASU on the consolidated financial statements and does not believe it will have a material impact on the consolidated financial statements.

On January 1, 2022, the Company adopted ASU 2016-02, Leases (Topic 842), as amended by other ASUs issued since February 2016, using the modified retrospective transition method applied at the effective date of the standard. By electing this option transition method, information prior to January 1, 2022 has not been restated and continues to be reported under the accounting standards in effect for the period (ASC Topic 840).

The Company elected the package of practical expedients permitted under the transition guidance within the new standard, including the option to carry forward the historical lease classifications and assessment of initial direct costs, account for lease and non-lease components as a single lease, and to not include leases with an initial term of less than 12 months in the lease assets and liabilities.

The adoption of ASC Topic 842 resulted in the recognition of finance lease right-of-use assets, operating lease right-of-use assets, and lease liabilities for finance and operating leases. As of January 1, 2022, the adoption of the new standard resulted in the recognition of finance lease right-of-use assets of $0.7 million, including $0.7 million reclassified from property, plant and equipment, net, and finance lease liabilities of $0.6 million. Additionally, the Company recorded operating lease right-of-use assets of $5.4 million and operating lease liabilities of $7.1 million, including $2.3 million and $4.8 million recorded to other short-term liabilities and other long-term liabilities, respectively as of January 1, 2022. There was no significant impact to the condensed consolidated statements of income, equity or cash flows. Refer to Note 5, Leases, for additional disclosures required under ASC Topic 842.

Internal Controls and Procedures

We are not currently required to comply with the SEC's rules implementing Section 404 of the Sarbanes-Oxley Act and are therefore not required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. Upon becoming a public company, we will be required to comply with the SEC's rules implementing Section 302 of the Sarbanes-Oxley Act, which will require our management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of our internal control over financial reporting. We will not be required to make our first assessment of the effectiveness of our internal control over financial reporting under Section 404 until our second annual report on Form 10-K after we become a public company.

Further, our independent registered public accounting firm is not yet required to formally attest to the effectiveness of our internal controls over financial reporting and will not be required to do so for as long as we are an "emerging growth company" pursuant to the provisions of the JOBS Act. Please see "Summary—Emerging Growth Company Status" for more information.

Off Balance Sheet Arrangements

We currently have no material off-balance sheet arrangements.

Environmental and Other Governmental Regulations

We are subject to a variety of federal, state and local regulatory environmental requirements affecting the proppant production and mineral processing industry, including among others, those relating to employee health and safety, environmental permitting and licensing, air and water emissions, GHG emissions, water pollution, waste management, remediation of soil and groundwater contamination, land use, restoration of properties, hazardous materials and natural resources. We have made, and expect to make in the future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such future expenditures.

We discuss certain environmental matters relating to our various production and other facilities, certain regulatory requirements relating to human exposure to crystalline silica and our proppant production activity under the subsection titled "Business—Environmental and Occupational Health and Safety Regulations."

INDUSTRY

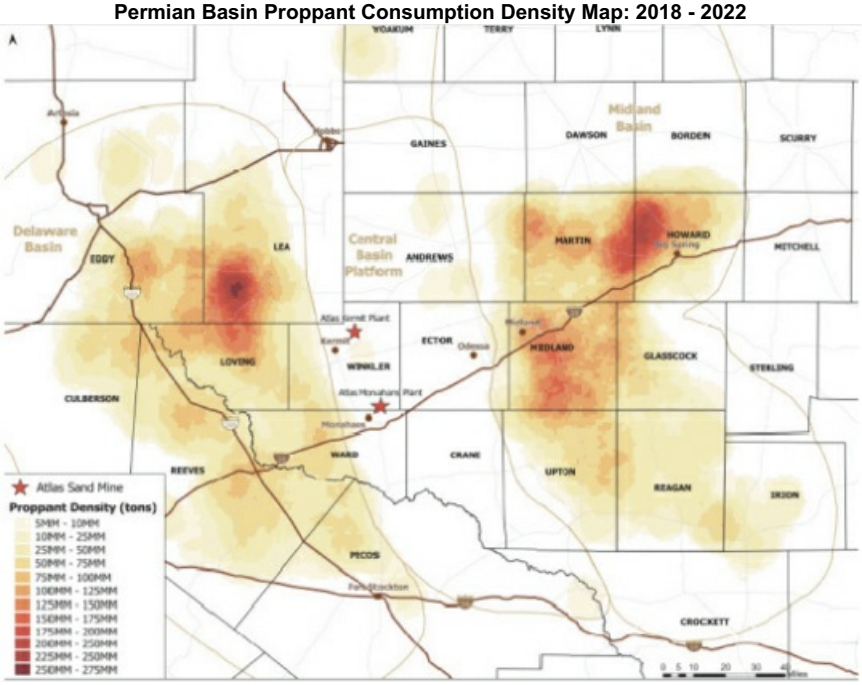
Proppant and Proppant Logistics Industry

The oil and natural gas proppant industry is comprised of businesses involved in the mining, manufacturing, distribution and sale of the propping agents used in the stimulation of hydrocarbon-bearing shale reservoirs as a method to enable production from oil and natural gas wells. During this process, proppants are blended into a fluid mixture and injected downhole into the wellbore at high pressure. This creates cracks in the resource-bearing rock allowing for proppants to become lodged in these cracks, resulting in increased permeability of the reservoir, and in turn, driving greater production of hydrocarbons over the life of the well.

The quantity of proppant used in a typical well in North America often exceeds 10,000 tons. Prior to the development of in-basin sand facilities, proppants were predominately shipped long distances in bulk from processing facilities in the midwestern United States by rail and barge to various resource basins. It was then further transferred to a truck for “last mile” wellsite delivery. This long supply chain made transportation costs a significant portion of the customer’s overall proppant cost. The discovery, and subsequent development, of in-basin proppant deposits afforded customers a significant cost saving alternative. The supply chain was shortened to remove the costly rail or barge portion of the transportation cost, and in the Permian Basin customers have effectively reached full adoption of in-basin proppants, although meaningful consumption of out of basin proppant can occur from time to time during periods when demand exceeds local production capabilities as is occurring in today’s market. As the Permian Basin does not regularly experience extended seasonal disruptions, the proppant industry has been transformed into a “just-in-time” delivery model reliant on large quantities of trucks to fulfill orders. This places a premium on in-basin proppant production facilities to maximize uptime and on trucking companies to supply a sufficient quantity of trucks to effectively and efficiently fulfill deliveries to end-users.

As customers continue to drive efficiencies and productivity in their drilling and completions programs, in turn driving the demand for more proppant, we expect increased demand of the products and services that we provide.

Permian Basin Proppant Consumption Density Map: 2018 - 2022

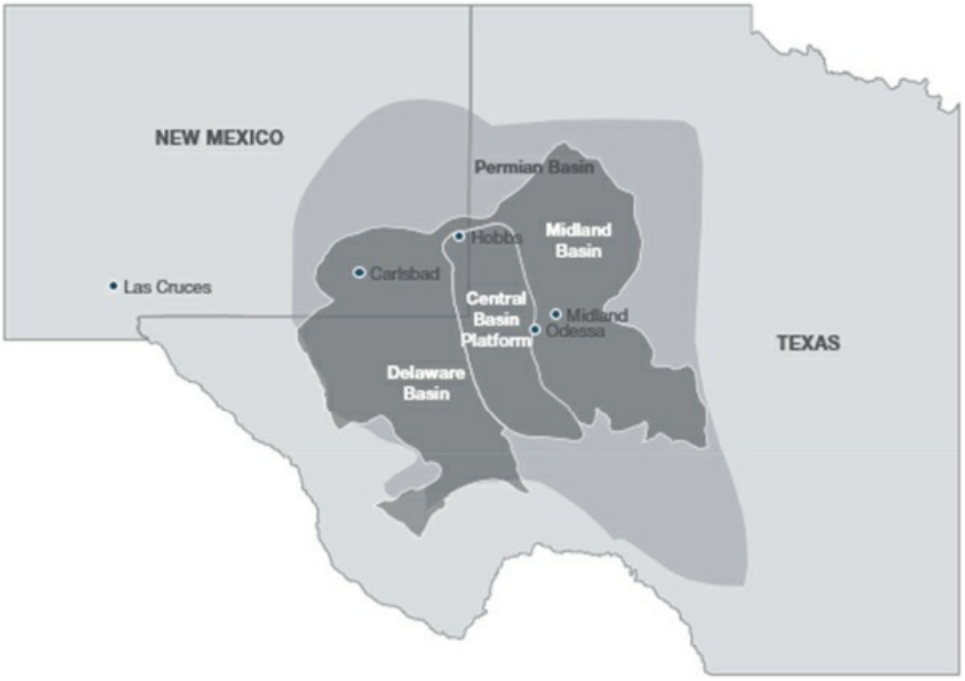


Source: Enverus and Atlas Energy Solutions

The Permian Basin

The Permian Basin is the leading onshore U.S. resource basin with respect to drilling activity and oil production. The Permian Basin is an oil-and-gas-producing area located in West Texas and the adjoining area of southeastern New Mexico and covers an area of approximately 75,000 square miles and is composed of more than 7,000 fields, according to the Railroad Commission of Texas.

The Permian Basin



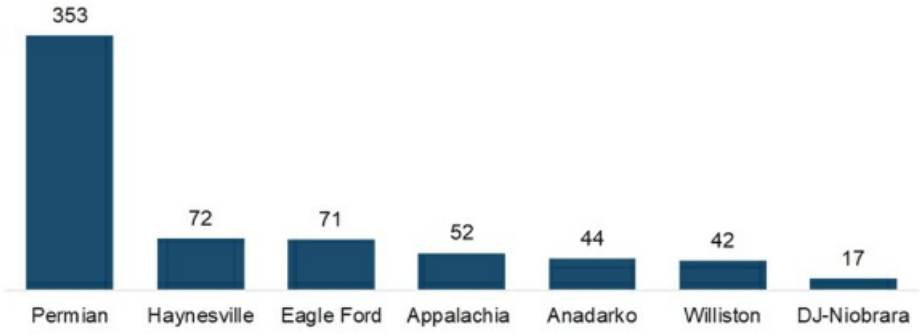
Source: *Permian Strategic Partnership*

The Permian Basin can be further delineated into sub-basins, with the Midland, Delaware, and Central Basin Platform being the major sub-basins. The significant resource base is best represented by the multiple benches, or target hydrocarbon-producing geological formations, with oil and natural gas production depths ranging from a few hundred feet to up to five miles below the surface. The recent increased use of enhanced-recovery practices in the Permian Basin has resulted in a substantial, and positive, impact on domestic oil production.

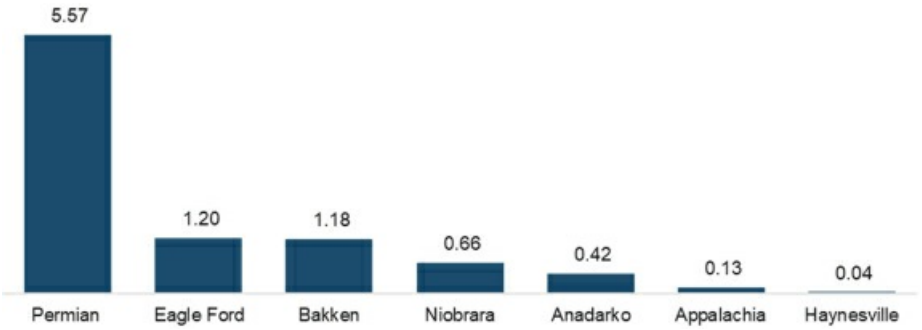
As a result of the substantial size and significant amount of estimated resource in-place in the Permian Basin, Texas not only receives an enormous economic benefit but also helps to provide energy security for the United States. In the first half of 2022 the Permian Basin accounted for nearly 43% of all domestic oil production and nearly 17% of total domestic natural gas production, according to the Federal Reserve Bank of Dallas. However, significant production growth potential remains. In 2018, the U.S. Geological Survey estimated that the Delaware Basin alone has the potential to produce 46.3 billion barrels of oil and 281 trillion cubic feet of natural gas.

The Permian Basin is the Most Active On-Shore Basin in the U.S.

Active Rig Count by Basin as of December 31, 2022



Average Production by Basin (MMBbls/d) in December 2022



Source: EIA

Overview of the Proppant Production Process

Raw silica sand is a naturally occurring material that is mined and processed for various commercial uses. While the specific extraction method utilized depends primarily on the geologic setting, most raw silica sand is mined using conventional open-pit bench extraction methods. The composition, depth and chemical purity of the sand also dictates the processing method and equipment utilized.

In West Texas, much of the reserves are accessible from buried deposits, which require the removal of some overburden. The giant open dunes, where our facilities are located, can be mined readily without the need to remove any overburden. After extraction, the raw silica sand is washed with water to remove fine impurities such as clay and organic particles, with additional procedures used when contaminants are not easily removable. The final steps in the production process involves the drying and sorting of the raw silica sand according to mesh size.

The unique size, location and depth of our large open-dune reserves provides us with a distinct advantage relative to our competitors, including the fact that in the Winkler Sand Trend we uniquely benefit from a naturally occurring water table near the surface of our deposits, providing an ample natural supply of costless water for dredge and wash plant operations, minimizing the impacts on regional aquifers. Furthermore, this has allowed us to implement e-mining, or mining via electric dredge, which significantly reduces the environmental impacts associated with mining, positively differentiating us relative to our competition.

One of Atlas Energy Solutions' Two Proppant Production Facilities (Located in Kermit, Texas)

Overview of the Trucking and Logistics Market

Transportation and logistics costs incurred in the delivery of proppant from the mine to the wellsite represents the majority of cost per ton of proppant paid by the end user. Furthermore, costs attributable to proppant sourcing and delivery represents a significant portion of the total expenses incurred by the E&P operator in completing a well.

While trucking is the default mode of wellsite delivery for proppant, the industry is currently characterized by low levels of technological differentiation between service providers, minimal barriers to entry, and high levels of price competition. As a result, the market is highly fragmented, and operating margins for incumbent service providers are typically 10%. A significant amount of wellsite delivery transportation is ultimately delivered by private owner-operators, whether providing services through their own offering, participating through a 3rd-party marketplace platform, or in partnership with an end-consumer. Most of the mileage traveled on the trip to deliver proppant to the wellsite occurs over interstate highways, state roads, and county roads, while the remaining portion of the trip occur over lease roads that are generally built and maintained by wellsite operators. For wellsite delivery, the roundtrip driving distance between the mine and wellsite is typically more than 35 miles and often exceeds 100 miles. The payload can range from 22 to 27 tons per truck depending on the selected trailer design. There are currently three main trailer designs utilized for proppant delivery, Box, Pneumatic, and Belly Dump, with average payloads of 22, 24, and 26 tons, respectively.

Once the payload has reached the wellsite it will be offloaded to an on-site storage system, or a designated storage area, before being utilized in the fracturing process.

A typical horizontal well-design in the Permian Basin can call for greater than 10,000 tons of proppant for completion, which implies greater than 425 truckloads of proppant per well, more than 50,000 miles driven per well, and more than 250 million miles driven per year according to Rystad Energy. Rystad Energy also estimates an average day in 2021 in the Permian Basin had more than 3,000 trucks transporting proppant over the surrounding network of public highways and lease roads.

Consistent with our technology focus, we are expanding our footprint in the proppant delivery logistics business and pursuing autonomous wellsite delivery. The Company will begin operations with 10 trucks, which we anticipate will be deployed by early 2023. The implementation of autonomous wellsite delivery solutions is intended to improve the reliability and consistency of proppant delivery, mitigate risks to operations and lessen the probability or impact of traffic congestion and accidents, weather events and other disruptions that frequently affect the delivery of oilfield products within the United States currently. We also believe our autonomous wellsite delivery initiative will amplify the positive impacts on the environments and communities in which we operate.

Proppant and Proppant Logistics Market Dynamics in the Permian Basin

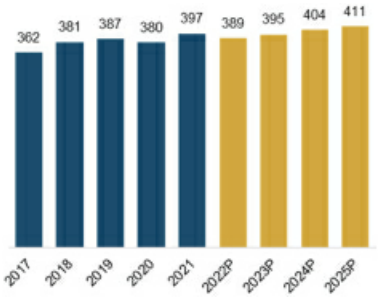
Key Demand Drivers

The demand for proppant in the Permian Basin is predominately influenced by the level of drilling and completions activity by oil and natural gas exploration and production companies operating in the region. Drilling and completion ("D&C") activity is driven by well profitability and returns, which are driven by a number of factors, including current domestic and international supply and demand for oil and natural gas, current and expected future prices for oil and natural gas, and the perceived stability and sustainability of those prices. As a result of the transition by exploration and production ("E&P") companies from vertical to horizontal drilling that occurred during the previous decade, a vast inventory of previously uneconomic resources became profitable to drill and complete. Consequently, demand for pressure pumping and the proppant used during the well completion process has increased substantially over the last ten years.

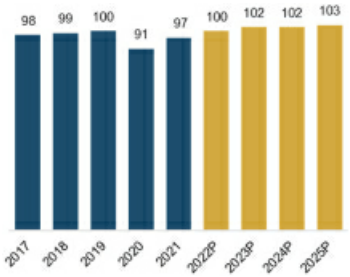
Growth in Global Energy Demand

Supported by the backdrop of improved global economic growth, global energy demand rebounded in 2021 and is forecasted to continue to increase. According to the IEA, global oil demand is expected to grow by 7% and natural gas demand by 3% from 2021 through 2025.

Global Historical and Projected Natural Gas Demand (bcf/d)



Global Historical and Projected Oil Demand (MMBbls/d)



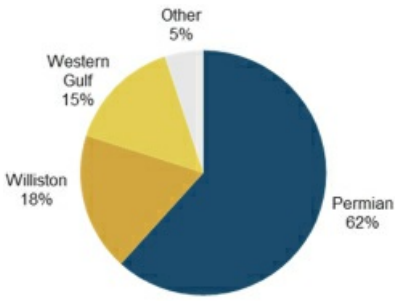
Source: IEA

Global gasoline demand is higher than it was pre-pandemic, and continued economic recovery is expected to drive oil demand beyond the pre-pandemic peak toward the end of 2022 or beginning of 2023. Additionally, building off a strong 2021, continued momentum is expected in the global natural gas markets in 2022 and beyond, certain policy movements in Europe have shown that natural gas is gaining popularity as a transition and destination fuel for a reduced emissions world. Furthermore, recent geopolitical considerations are expected to result in continued reconfiguration of oil and natural gas flows between key producing and consuming nations. Supply of these commodities from the U.S. offers increased energy security to allied nations versus reliance on producers involved in geopolitical conflict.

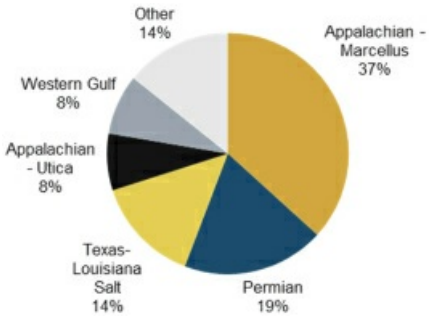
Significant Identified U.S. Oil and Natural Gas Supply Base

The U.S. represents a significant share of identified oil and natural gas supplies, with proven reserves at the end of 2020 of more than 68 billion barrels of oil and 445 trillion cubic feet of natural gas, according to the BP Statistical Review of World Energy. Furthermore, per the EIA, the Permian Basin accounts for more than 62% of oil and 16% natural gas reserves in the U.S.

U.S. Oil Reserves by Region



U.S. Natural Gas Reserves by Region

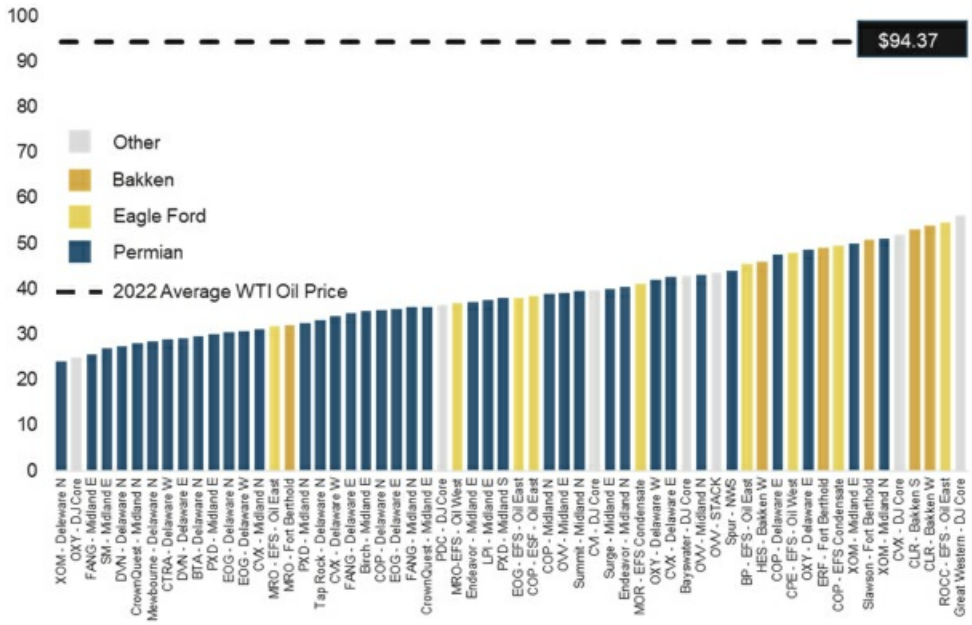


Source: EIA

Attractive Extraction Economics in the Permian Basin

The Permian Basin is North America's most active basin due to its size, geology and attractive economics. The Permian Basin consists of mature, legacy, onshore oil and liquids rich natural gas reservoirs that span from West Texas through New Mexico inclusive of large in-basin sand reserves utilized in unconventional hydraulic fracturing production techniques. The Permian Basin is divided by the Central Basin platform, creating the Midland and Delaware sub-basins, which have contributed to the growth in the Permian Basin. Furthermore, the Permian Basin is made up of more than a dozen oil-containing shale formations, with several of these formations layered atop one another, resulting in a stacking of economically viable hydrocarbon reservoirs, ultimately supporting significantly higher recoverable reserves per acre versus other regions that do not possess this geology. According to Rystad Energy, the Permian Basin accounts for reserves with among the lowest breakeven costs across unconventional oil fields in the U.S., supporting attractive profitability for operators that incentivizes increased drilling and completion activity.

Unconventional Oil Cost Curve Based on 2022 Results ($/Bbl)

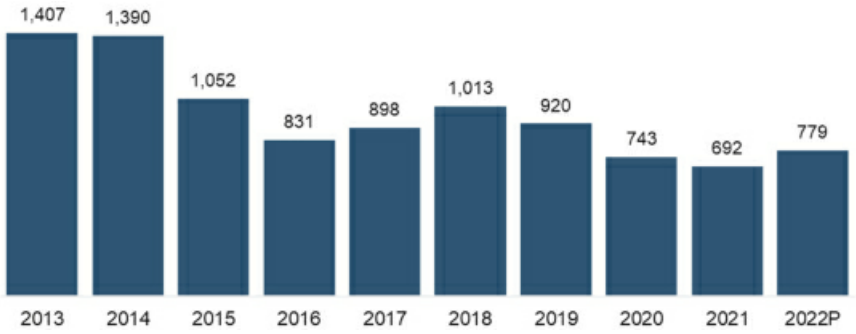


Source: Rystad Energy

Demand for proppant is predominantly influenced by the level of drilling and completions spending by E&P companies, which, in turn, depends largely on the current and anticipated profitability of developing oil and natural gas reserves. The largest unconventional operators are present in the Permian Basin and have achieved better well economics by lowering drilling and completion costs without sacrificing production performance, including by reducing costs related to proppant and last

mile logistics. To this end, the oil and natural gas industry is shifting towards more cost-effective and efficient proppants and technologies, such as sourcing in-basin proppant. Additionally, modern drilling and well completion technology and techniques, such as those related to horizontal drilling and hydraulic fracturing, coupled with in-basin proppant have made the extraction of oil and gas increasingly cost-effective in formations that historically would have been uneconomic to develop and have substantially increased the pace of demand growth for proppant. According to Rystad Energy, the cost per foot incurred by E&P companies to drill and complete a well in the Permian Basin has declined by more than 50% since 2013.

Permian Basin Drilling and Completion Cost by Year ($/Ft)



Source: Rystad Energy

In conjunction with the cost efficiencies and increased reliability driven by in-basin proppant, new, unconventional well completion continues to rise; in combination with rising well completion intensity, as evidenced by trends including longer lateral lengths, increasing proppant per well and rising adoption of zipper and simul-frac completion techniques, this is expected to result in compounding demand for proppant. Logistical constraints associated with the location of some in-basin proppant mines combined with inefficiencies in trucking provide an opportunity for strategically located, efficient and reliable producers to disproportionately benefit in the future.

Increased Spending on Drilling and Completion in the Permian Basin

We expect the positive momentum in Permian Basin drilling and completion activities to continue as oil and gas exploration and production companies increased their 2022 capital investment in the aggregate, further increasing the total rig and frac fleet count. Notwithstanding the slowdown from COVID-19 shutdowns, the portion of total U.S. drilling and completions capital expenditures spent in the Permian Basin has increased over time, and represented 50% of the total in 2021, according to Rystad Energy.

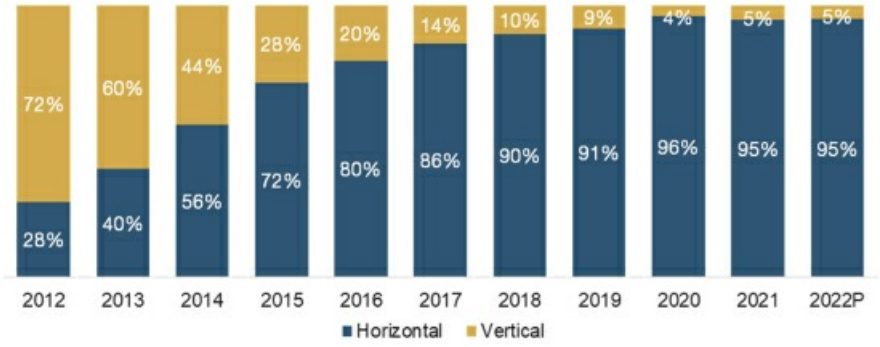
Total Spending on Drilling and Completions ($ Billions)

Source: Rystad Energy

Increased Prevalence of Horizontal Drilling

Horizontal drilling has become the default method in the industry for the economic extraction of shale resources. According to Rystad Energy, active horizontal drilling rigs as a percentage of total active drilling rigs in the Permian Basin has increased rapidly for ten consecutive years to approximately 95% at the end of 2022. We expect U.S. oil and natural gas exploration and production companies to continue to focus on the development of unconventional resources utilizing horizontal drilling techniques. The successful economic development and ultimate production of horizontal wells typically relies on advanced stimulation techniques in which proppants are a critical component.

Avg. Permian Horizontal Drilling Rig Count as a Percent of Total Avg. Permian Drilling Rig Count

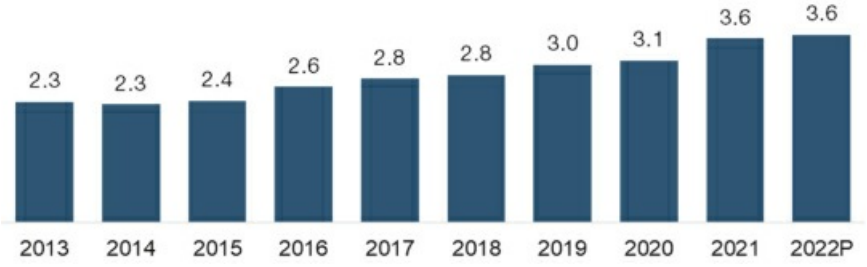


Source: Rystad Energy

Growing Adoption of Pad Drilling and Increasing Pad Sizes

Oil and gas exploration and production companies have increasingly adopted multi-well pads and zipper or simultaneous completions of unconventional oil and natural gas wells. Multi-well pads allow for the drilling of multiple wellbores from a single drilling pad, reducing drilling times. According to Rystad Energy, the average wells completed per pad in the Permian Basin has risen by 57% since 2013.

Average Wells Completed Per Pad in the Permian Basin

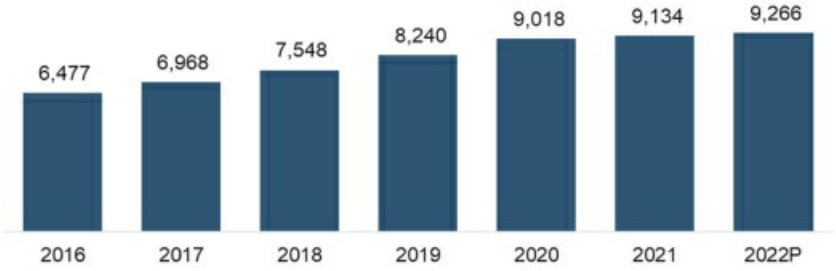


Source: Rystad Energy

Rising Lateral Lengths per Well

As Permian Basin oil and gas exploration and production companies have increased horizontal development activities, the industry has made significant efficiency gains, driving down cycle times and finding and development costs per barrel of oil equivalent. Among the more significant factors in this trend is the shift towards longer lateral lengths. These longer lateral lengths increase the surface area, or exposure, to the hydrocarbon-bearing zone, thus increasing the productivity of a well. Lateral lengths have increased by approximately 43% from an average of 6,477 feet in 2016 to an average of 9,266 feet in 2022, according to Rystad Energy. This trend is expected to continue as operators pursue continuous operational improvements. As operators have extended well lengths, the demand for proppant has also increased – we expect this trend to continue.

Lateral Length per Well (Ft)

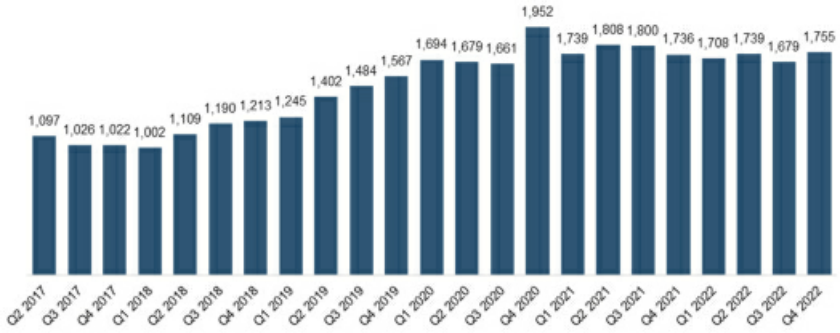


Source: Rystad Energy

Increasing Rate of Stimulation

E&P and pressure pumping companies continuing to develop methods to enhance the rate of stimulation of unconventional wells in an effort to accelerate well completion, combined with rising operating efficiencies on the part of the hydraulic fracturing service providers, has resulted in an increase in the lateral length stimulated per day of approximately 60% over the past five years, according to data from Rystad Energy. An increase in lateral feet completed per day in turn drives an increase in proppant consumption on a daily basis.

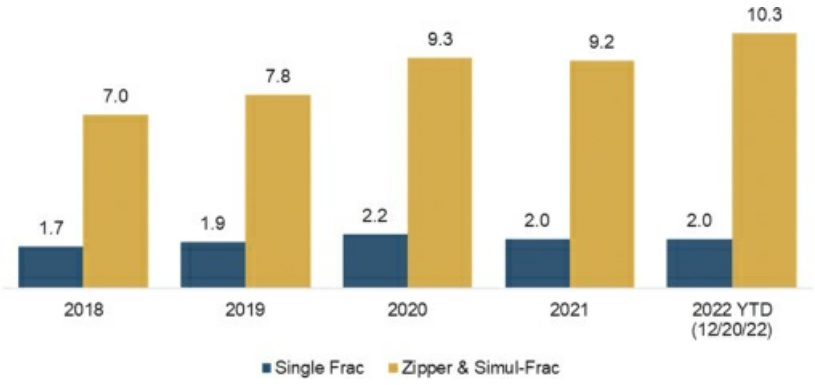
Median U.S. Shale Lateral Feet Stimulated (Ft per Day)



Source: Rystad Energy

Additionally, these same companies have increasingly adopted zipper and simul-frac completions to allow for reduced capital expenditures per well and cycle times. While these advancements have resulted in cost savings per well through the reduced duration of rentals of rigs and pressure pumping spreads, this trend is favorable for proppant providers as it results in accelerated proppant consumption, translating in increased proppant consumed per day. In 2022, zipper and simul-frac completion operations consumed approximately five times the proppant used in legacy single well completion techniques on a daily basis, according to Rystad Energy.

U.S. Land Proppant Pumped Per Day Per Completion Job (Million Lbs per Day)

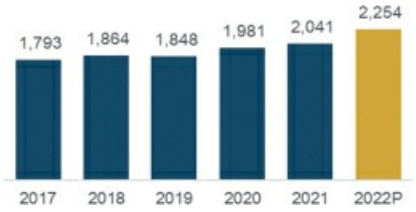


Source: Rystad Energy

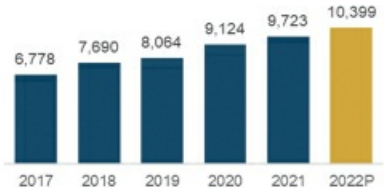
Increasing Proppant Loading per Lateral Foot

Similar to drilling efficiencies, oil and gas exploration and production companies have also focused on improving completion efficiencies. Over time, operators have increased the amount of proppant pumped per lateral foot in an effort to increase conductivity in the subsurface formation, increasing the ultimate recovery of hydrocarbons from the hydrocarbon-bearing zones. This trend is expected to continue as operators continuously aim to improve overall well returns, further driving the demand for proppant.

Average Proppant Loading (Lbs/Ft)



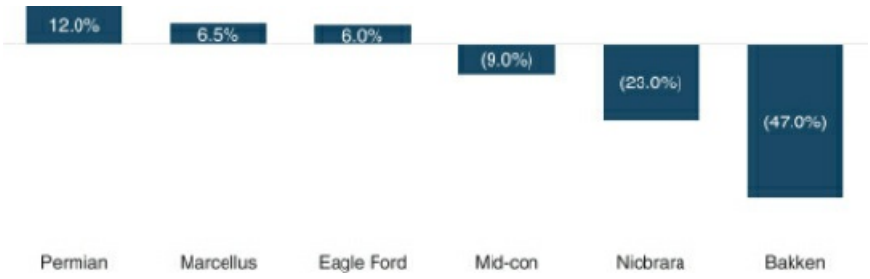
Average Permian Proppant per Well (Tons)



Source: Rystad Energy

Among the oil and natural gas producing regions, the Permian Basin features significantly higher proppant loading or sand intensity relative to other basins, according to data from Lium.

Sand Intensity Relative to U.S. Average Shale Well (0% Baseline)

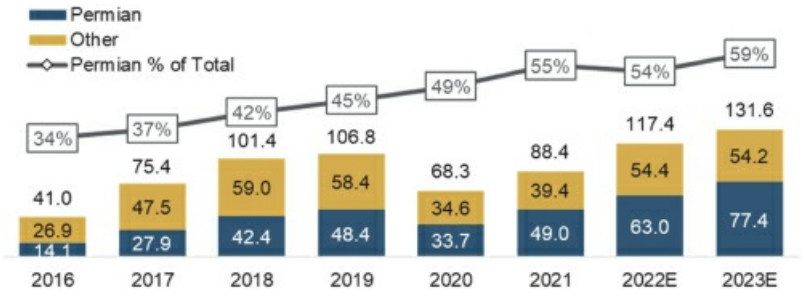


Source: Lium Research

Growth in Permian Basin Proppant Demand

According to the 4Q 2022 Lium Sheets - Frac Sand report, the Permian Basin comprises the majority of estimated proppant demand in the U.S. due to attractive extraction economics resulting in increased drilling and completion activity in combination with greater well completion intensity.

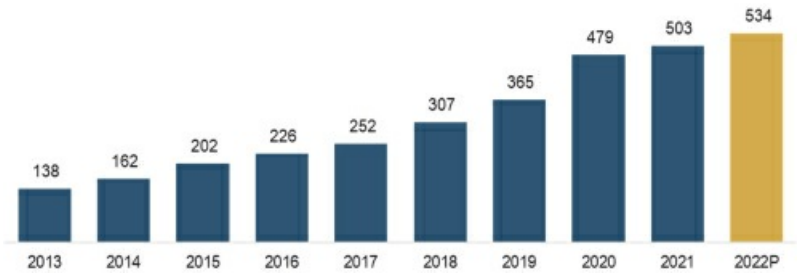
Proppant Demand by U.S. Basin (MMTPY)



Source: Lium Research

Furthermore, supported by increasing operating efficiency and unconventional well completion intensity, the annual proppant demand per operating hydraulic fracturing fleet is expected to increase by 286% in 2022 versus 2013 levels. As a result, total proppant demand is expected to grow meaningfully, and the Permian Basin is expected to continue to gain market share through 2023.

Permian Proppant Demand per Frac Fleet (Thousand Tons per Active Fleet)

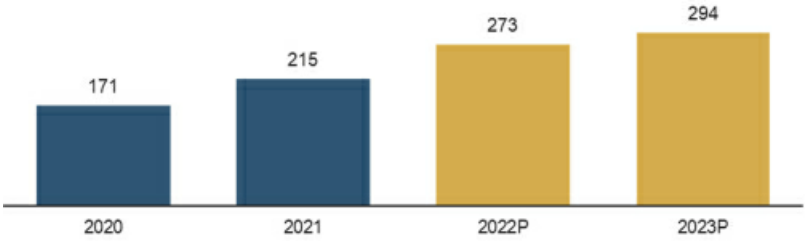


Source: Rystad Energy

Increasing Demand for Pressure Pumping and Associated Well Completion Products and Services

According to Rystad Energy the total U.S. active pressure pumping fleet count has recovered from the May 2020 trough of 77 active fleets to over 200 active fleets by the end of 2021, representing an increase of over 180%. As oil and natural gas producers have accelerated their development programs, the demand for pressure pumping fleets has significantly increased. The increase in the demand for pressure pumping fleets is expected to increase well beyond 2021 levels, to more than 290 active fleets by the end of 2023. We expect the strong demand for pressure pumping fleets to continue, which will drive additional demand for the products and services we provide.

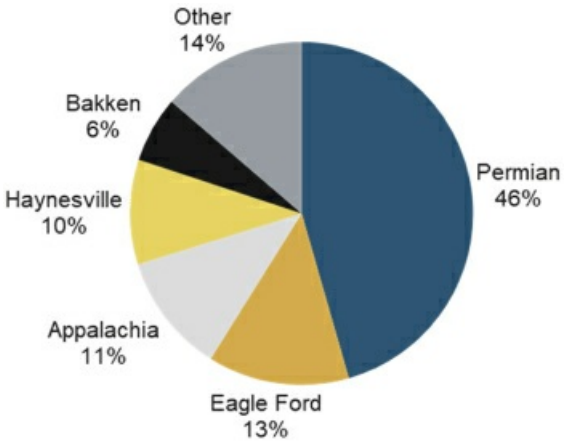
Average U.S. Historical and Projected Active Pressure Pumping Fleets (Number of Fleets)



Source: Rystad Energy

As of Q4 2022, the Permian Basin accounted for 46% of all active U.S. pressure pumping fleet activity, indicating the Permian Basin continues to see outsized completions activity.

U.S. Average Pressure Pumping Fleets by Basin



Source: Rystad Energy

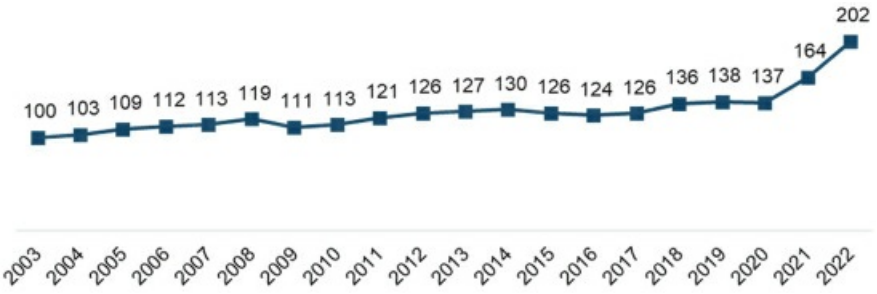
Proppant Logistics Market Drivers

End use of proppant in hydraulic fracturing operations is dependent on the transportation of proppant from the mine to the wellsite utilizing commercial trucking methods. Since the hauling capacity per truck has not increased substantially over time, proppant demand is significantly correlated with demand for last-mile transportation and logistics solutions. As a result, rising proppant demand is expected to translate into a commensurate increase in demand for proppant transportation and logistics services.

Increasing Logistics Costs for Last-Mile Delivery

As a result of long-term inflation and supply and demand imbalances following disruptions due to the global pandemic, freight costs associated with overland trucking has increased substantially. The U.S. Bureau of Labor Statistics estimates that producer price index for long-distance truckload general freight trucking has increased by almost 50% since 2020.

General Freight Trucking Producer Price Index (Indexed to 100 at 2003)



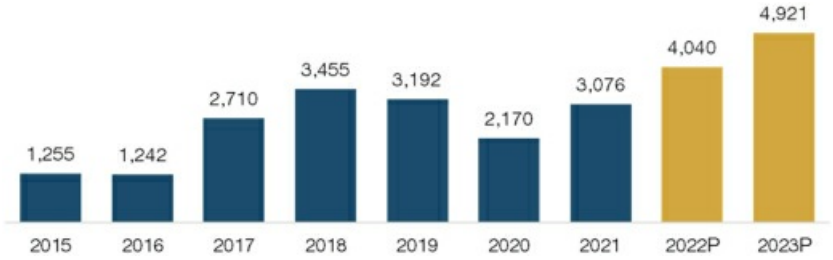
Source: U.S. Bureau of Labor Statistics

Labor costs now represent 45% of total per mile costs of operating a semi-truck, a 12% increase since 2015. Labor costs are the largest component of the cost per mile of operating a semi-truck, with the second largest cost per mile being fuel costs. These labor costs exclude additional costs that have become prevalent in the industry, such as driver training, recruiting, and retention expenses, which increase the labor costs on a fully burdened basis.

Increasing Traffic in the Permian Basin

Existing interstate highway, state highway and other road infrastructure in the Permian Basin region was originally established to serve lower total regional population and traffic. Infrastructure upgrades in the Permian Basin have progressed at a slower pace when compared to the growth in drilling and completion activity, resulting in increased congestion that drives operational delays and total cost for oilfield products. According to Rystad Energy, there were greater than 3,000 proppant trucks on the road per day on average in the Permian Basin in 2021, which is more than double the levels in 2015. Rystad Energy estimates this number to exceed 4,000 per day in 2022 and 2023. We expect our Dune Express combined with our wellsite delivery assets will alleviate trucking congestion by removing trucks from public roads.

Permian Proppant Trucks on the Road per Day Since 2015

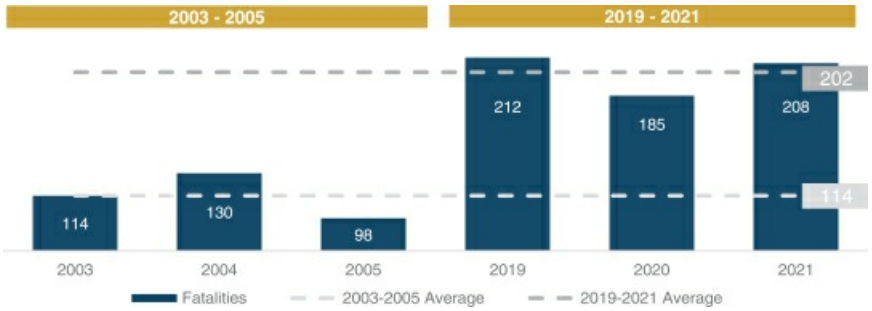


Source: Rystad Energy

Increase in Safety-Related Trucking Incidents in the Permian Basin

The significant increase in truck traffic in the Permian Basin has resulted in a meaningful increase in trucking-related safety incidents and fatalities, impacting E&P operators, service companies and local communities. The average number of trucking fatalities in the Permian Basin in 2019-2021 increased by 77% relative to the 2003-2005 average according to data from the Texas Department of Transport. We expect our autonomous wellsite delivery initiative combined with our conveyor system to reduce the total miles driven and result in fewer accidents.

Number of Trucking Fatalities in the Permian Basin



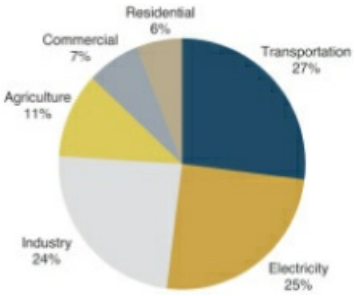
Source: Texas Department of Transportation

The U.S. Department of Transportation (USDOT) in June 2020 announced its initiative to speed up testing and widespread deployment of autonomous vehicles in order to address increased vehicle related traffic incidents. USDOT's findings on autonomous vehicles highlighted key benefits including increasing safety, economic and social benefits, efficiency, convenience and mobility. In accordance with USDOT's stated objectives, we expect our wellsite delivery assets initiative will improve profit margins and safety.

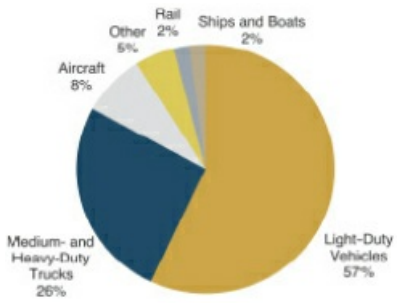
Emissions Associated with Proppant Logistics Operations

Trucking is estimated to be a significant contributor to U.S. greenhouse gas emissions. According to the U.S. Environmental Protection Agency, transportation accounted for 27% of U.S. greenhouse gas emissions in 2020. In 2020, medium and heavy-duty trucks represented 26% of transportation sector greenhouse gas emissions. In conjunction with heavy payloads associated with proppant delivery, truck traffic associated with proppant operations represents a meaningful source of greenhouse gas emissions. We expect our electric conveyor system combined with our wellsite delivery assets will reduce truck miles associated with proppant delivery, thereby resulting in a meaningful reduction in greenhouse gas emissions.

U.S. GHG Emissions by Sector



U.S. Transportation Sector GHG Emissions by Source



Source: U.S. Environmental Protection Agency

Proppant Supply Outlook

Legacy Proppant Supplies and Transition to In-Basin

Historically, the majority of the proppant used in the U.S. was supplied by mines in Wisconsin; their product, Northern White Sand ("NWS"), was preferred by operators for its reliable properties. However, once sufficient in-basin sand reserves were developed and operators were able to determine in-basin proppants as a reliable substitute for NWS, the legacy supply from Wisconsin was displaced by in-basin supply.

Permian Basin Proppant Source

Source: Lium Research

The first in-basin proppant capacity in the Permian Basin was brought online in 2017. Today, the nameplate capacity in the Permian Basin is estimated to be approximately 74 mmtpy according to Rystad Energy. The advantage of moving to a local proppant supply was primarily due to the high transportation cost associated with NWS, as Permian Basin in-basin proppant was ultimately proven to be of sufficient API specification quality for operators. Moving the proppant by rail from Wisconsin to the Permian Basin accounted for the majority of the cost of supply - it is estimated that approximately 60-80% of the cost of out-of-basin frac proppant is associated with transportation.

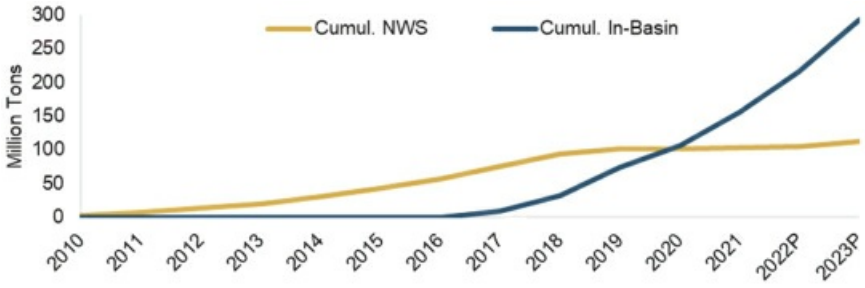
The discovery of in-basin sand deposits across several U.S. oil and gas basins led to a rush of reserve acquisitions and greenfield mine construction projects, ultimately leading to a disruption of supply dynamics with long-term, in-basin mine economics being more attractive relative to the marginal economics of existing NWS capacity. This significant increase in new, in-basin capacity accordingly led to a temporary oversupply in the market, while local proppant adoption was taking place, resulting in a significant decrease in prices. This price decrease, accompanied with the pandemic-induced decline in general oil and gas E&P-led demand, resulted in some capacity reductions and in some instances mine closures, including full abandonment and remediation.

This moderation of supply, coupled with the improved commodity price environment and full adoption of in-basin proppant in the Permian Basin, has resulted in a currently tight Permian Basin proppant market and an improved proppant pricing environment. Additionally, there can be significant capital expenditures or re-start costs associated with bringing idled capacity back online, and because most facilities were built approximately 4-5 years ago, many open sites are beginning to require significant maintenance capital expenditures.

Several factors are expected to continue to influence this market, including:

- the difficulty of finding raw silica sand reserves that meet API specifications that can be mined and processed economically;
- the difficulty of securing contiguous raw silica sand reserves large enough to justify capital investment required to develop a processing facility;
- the lack of available capital investment options;
- the added barrier of securing mining, production, water, air, refuse and other state and local operating permits from appropriate authorities;
- the long lead time required to design and construct sand processing facilities that can efficiently process large quantities of high-quality proppant;
- supply chain factors influencing availability of equipment required to set up or refurbish sand processing facilities; and
- the lower achievable capacity and lifespan of reserves for temporary, smaller, or mobile-mini mines.

Cumulative Tons of Proppant Consumed in the Permian Basin by Source since 2010



Source: Lium Frac Sand Usage

Overview of the Types of Proppant

Proppant Types

Historically, three primary types of proppant have been commonly utilized in the hydraulic fracturing process: processed silica sand, resin-coated sand, and manufactured ceramic beads. Over the last 10 years, processed silica sand has become the dominant product category in the market as the use of ceramic and resin-coated proppants has become increasingly rare in onshore unconventional completions due to their high cost.

Proppants are produced and sold at differing sizes depending on customer preferences and market availability. Over the last several years, oil and natural gas companies have shifted towards finer-mesh products as they have increasingly pursued “slickwater” completion designs. Older well designs utilized gels and other substances that aided in the delivery of proppants into the fracture network around the well. As these agents have been removed from most wells in current completion designs, slickwater designs rely only on the velocity of the fluids delivered to the fracture network to carry the proppants into place, thus making finer mesh proppants like those found in-basin more desirable as they are more easily conveyed into the fracture network unaided.

Processed Silica Sand

There are three major types of raw silica sand deposits that have historically generated the proppants most widely used in onshore oil and gas well completions in North America: (a) Northern White; (b) Brady Brown; and (c) in-basin. Northern White is a specific type of white sand mined primarily in Wisconsin, Minnesota, and Illinois, and is generally considered to be of higher quality than Brady Brown due to its crush strength, sphericity, and monocrystalline structure. Due to its quality, Northern White historically commanded premium prices relative to Brady Brown and experienced greater market demand relative to supply, although with the recent emergence of lower cost, and high quality in-basin proppant, demand in basins in which local and viable sand deposits have been discovered has materially shifted away from Northern White. This shift in proppant preference is no more prevalent than in the Permian Basin, where in-basin sand has shown to exhibit quality specifications nearly analogous to Northern White in the higher quality large open-dune deposits, similar to the reserves found at our Kermit and Monahans facilities.

The API has identified thresholds that various physical characteristics of proppants should pass, and our proppant consistently meets these thresholds. The stringent API specifications for proppants include, among others, coarseness, crush resistance, roundness and sphericity, acid solubility, turbidity (low levels of contaminants), and particle size distribution.

Proppant Mesh Size

Mesh size is used to describe the size of the proppant and is determined by sieving the proppant through screens with uniform openings corresponding to the desired size of the proppant. Each type of proppant comes in various sizes, and the various mesh sizes are used in different applications in the oil and natural gas industry. The mesh number system is a measure of the number of equally sized openings there are per square inch of screen through which the proppant is sieved. For example, a 40-mesh screen has 40 equally sized openings per linear inch. Therefore, as the mesh size increases, the granule size decreases. In order to meet API specifications, 90% of the proppant described as 40/70 mesh size proppant must consist of granules that will pass through a 40-mesh screen but not through a 70-mesh screen.

In-basin silica sand produced in West Texas predominately yields 40/70 and 100 mesh, with both the Delaware and Midland Basins consuming almost exclusively these two sizes of proppant.

Sand Pricing

In-Basin Spot Pricing

In-basin sand pricing has historically been volatile as the shift to in-basin production facilities was a disruptive event. Customers quickly aimed to realign their proppant procurement programs, although frictions to faster adoption such as legacy contracts, quality testing and new vendor evaluation created a lag in adoption and a temporary oversupply of in-basin proppant. Supply can sometimes require significant capital expenditures or re-starting costs and cannot always be brought online in time to meet rapid resurgence in demand. According to Rystad Energy, median minegate prices for proppant in the Permian Basin are forecasted to be between $35/ton to $40/ton through 2026. We expect to profitably produce high-quality proppant at such levels.

Median In-Basin Permian Sand Minegate Price Forecast ($/Ton)

Source: Rystad Energy

BUSINESS

Our Company

Overview

We are a leading provider of proppant and logistics services to the oil and natural gas industry within the Permian Basin of West Texas and New Mexico, the most active oil and natural gas basin in North America. Our core mission is to maximize value for our stockholders by generating strong cash flow and allocating our capital resources efficiently, including providing a regular and durable return of capital to our investors through industry cycles. In our pursuit of this mission, we deploy innovative techniques and technologies to develop our high-quality resource base and efficiently deliver our products to customers through leading-edge logistics solutions.

We were founded in 2017 by Ben ("Bud") Brigham, our Executive Chairman and Chief Executive Officer, and are led by an entrepreneurial team with a history of constructive disruption bringing significant and complementary experience to this enterprise, including the perspective of longtime E&P operators, which provides for an elevated understanding of the end users of our products and services. While we believe this experience and our associated knowledge base differentiates us from our competitors and facilitates our ability to identify and execute as an early mover on critical value drivers, enabling us to maximize the full potential of our business and outcomes for our stockholders and stakeholders alike, past performance is not a guarantee of our future success or similar results. You should not rely on the historical record of our management team, our directors or their affiliates as indicative of the future performance of an investment in us or the returns we will, or are likely to, generate going forward.

Our executive management team has a proven track record and over 90 years of combined industry experience with a history of generating positive returns and value creation, exemplified by Bud Brigham's significant experience leading several companies through a successful IPO, or an acquisition event:

- In 2011, Brigham Exploration, a pioneer in the use of 3-D seismic and horizontal drilling and completions techniques within the oil-rich Bakken Shale was acquired by Statoil ASA ("Statoil") for $4.7 billion. Brigham Exploration completed an IPO in 1997.
- In 2017, Brigham Resources, an innovator in Delaware Basin drilling and completions techniques (as an early adopter of e-frac technology and tested proppant loadings in excess of 5,000 pounds per foot) was acquired by Diamondback Energy, Inc. ("Diamondback") for $2.6 billion.
- In 2022, Brigham Minerals, a technically sophisticated oil and gas minerals company, combined with Sitio Royalties in an all-stock merger with a combined enterprise value of approximately $4.8 billion (representing a $2.2 billion value to Brigham Minerals, or a 108% total return since its IPO, with total return calculated as cumulative dividends plus stock price appreciation).

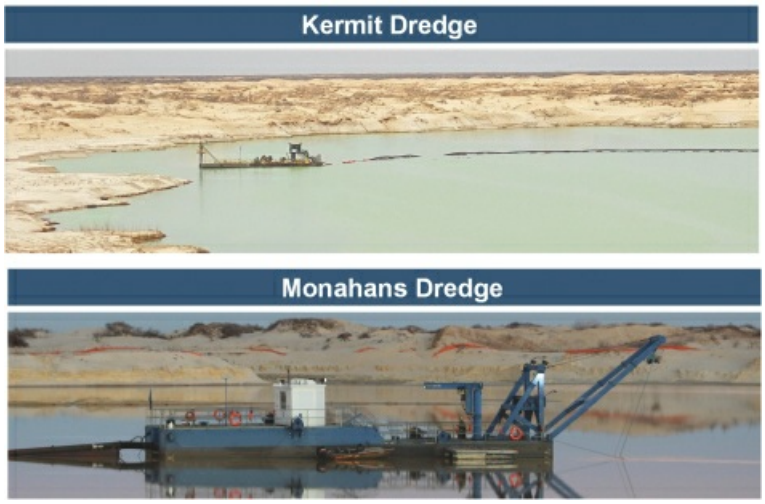
Our experience as E&P operators was instrumental to our understanding of the opportunity created by in-basin sand production and supply in the Permian Basin, which we view as North America's premier shale resource and which we believe will remain its most active through economic cycles. Though the industry has always been focused on increasing efficiencies in resource development, mission critical proppant production and related logistics were historically chaotic and inefficient, particularly given the long and inefficient legacy midwestern supply chain.

We identified the two giant open dunes of the Winkler Sand Trend as the premier sand resource in the region due to their differentiated geologic characteristics, advantaged water access and their large scale/long resource life. As the reserves of these large open dunes have not been subjected to

the same degree of soil development, organics and impurities as buried sand deposits, they tend to produce higher and more consistent mining yields relative to buried sand deposits, making the large open dunes economically superior deposits. The giant open dunes' advantaged access to water stems from the nature of the perched aquifers that have been found to form within these deposits. It is the nature of this water table that has enabled Atlas to become the first and, to our knowledge, the only proppant producer in the Permian Basin to mine by electric dredge, and we expect to transition more of our mining to electric dredging over the next twelve to twenty-four months. We control over 14,500 acres on the giant open dunes, which represents more than 70% of the total giant open dune acreage available for mining. Large open-dune reserves accounted for 100% of our produced volumes for the years ended December 31, 2022 and 2021. As the reserves of these large open dunes have not been subjected to the same degree of soil development, organics and impurities as buried sand deposits, they tend to produce better yields relative to buried sand deposits. Large open-dune reserves have also been proven to produce a higher-quality product (as measured by tests of crush strength, turbidity, etc.) more efficiently and with a smaller environmental footprint as compared to buried sand reserves throughout the Permian Basin. Furthermore, as referenced in a 2019 study attributable to Dr. Robert E. Mace of Texas State University, the large open dunes provide for advantaged access to water.

"More recently, Machenberg (1982, 1984) mentions "interdunal ponds" at Monahans Sandhills State Park and includes photographs of them. Machenberg (1982) notes that unvegetated dunes immediately absorb rainfall (there is no surface drainage in the dune field) and can store large amounts of rainfall and that the surficial sand is a locally important aquifer. She also notes that perched water tables form where the caliche is sufficiently thick. The Atlas Sand Company's north facility (Atlas North near Kermit) has a shallow dugout ("no more than 10-15 ft. deep") that they used as a source of water for construction (Triepke 2018b; Figure 3.19)."

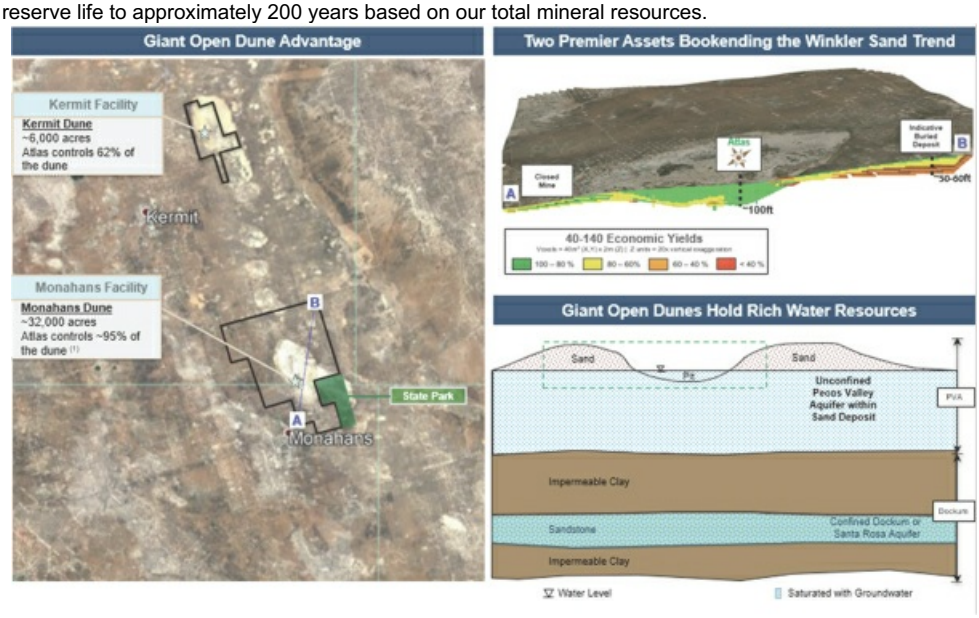
Atlas Electric Dredges



As our geologic analysis and land acquisition program was ongoing, we developed a thesis that a substantial redesign of the typical proppant plant was necessary to fit the just-in-time logistics model

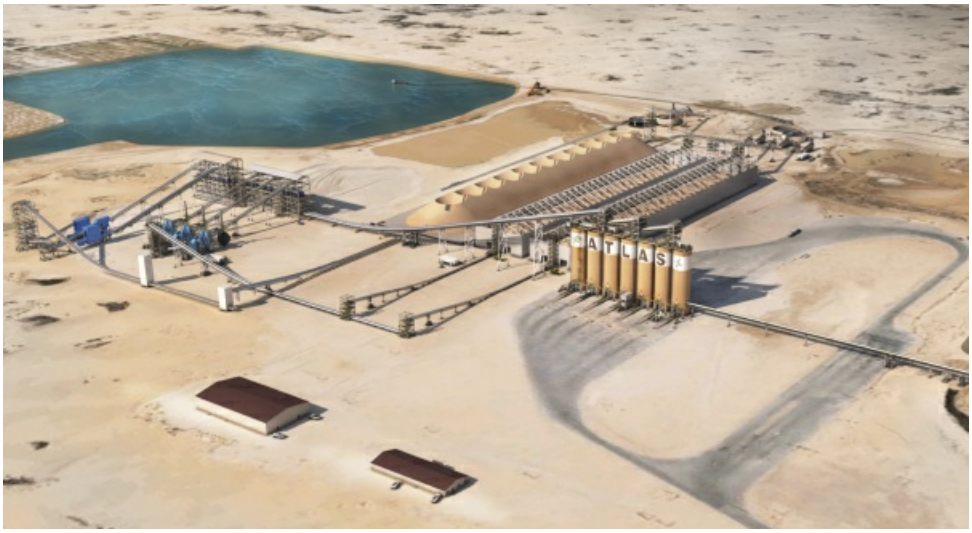
that we believed would develop in the Permian Basin due to the growing scale of proppant demand and industry's focus on efficiency gains, and began engineering our facilities to fit this model. Our final engineered design resulted in a more expensive construction project on the front-end as we invested in redundant equipment in order to maximize our potential utilization rates. Construction commenced in the second half of 2017 on our Kermit and Monahans facilities and we began selling proppant in July 2018. Once operational, the relationships we formed over many years in the industry helped us to quickly build a brand centered around quality and reliability.

Based on our current total annual production capacity of approximately 10.0 million tons, as of December 31, 2022, our properties have an aggregate expected reserve life of approximately 36 years based on the currently defined mineral reserves, with a potential extension of our reserve life to approximately 200 years based on our total mineral resources.



We believe we are the leader in meeting the evolving proppant needs of an increasingly efficiency-focused oil and natural gas industry. From our inception, our disruptive approach has met the needs of the just-in-time supply model we believed would become the best fit for the industry's increasingly efficiency-driven focus, and we engineered our facilities to fit this model. Our plants include substantial investments in redundant equipment that aim to maximize our uptime and utilization rates. We believe these are key differentiating factors from some other proppant producers serving the Permian Basin.

Atlas Plants Designed with Redundancy to Maximize Reliability



The shift to in-basin sand proved to be a disruptive event for the proppant industry, but not sufficient to provide all participants a meaningful advantage. While many companies have attempted to capture the efficiency gains promised by this relocation of the proppant production hub from the midwestern United States to an in-basin model, few have been able to optimize their efficiency with geologically superior acreage positions and properly designed facilities. It is this combination of geology, water availability and plant design that significantly differentiates our proppant production facilities and we believe makes us more reliable than our competition.

Significant Innovation Projects

The Dune Express Electric Conveyor System

The Dune Express, which will originate at our Kermit facility and stretch into the middle of the Northern Delaware Basin, will be the first long-haul proppant conveyor system in the world. While this is the first application of conveyor infrastructure to long-haul proppant, conveyors are widely used in the proppant industry for short movements of product, and are a preferred method of transporting bulk materials in many other industries due to the low transportation cost and increased safety of the accompanying decrease in truck traffic.

Upon completion, we expect the Dune Express to be 42 miles in length, capable of transporting 13 million tons of proppant annually and is designed to have more than 84,000 tons of dry storage within the system. We view the Dune Express as the premier method of moving proppant across the basin and the industry's best analog to the pipeline infrastructure that moves oil, natural gas, and water around the major producing basins in the U.S. We have secured the contiguous right-of-way, substantially completed the requisite federal and state permitting necessary for construction of the Dune Express and have signed sand supply and logistics contracts with major oil companies for the delivery of proppant by means of the Dune Express. This conveyor system will be strategically located to deliver proppant to the core of the most prolific producing region of the Delaware Basin with flexible loadout capabilities, including both permanent and mobile loadouts. We expect the Dune Express to make public roadways safer by removing trucks from public roadways, thus reducing traffic, accidents and fatalities on public roadways in the region.

The system is comprised of multiple conveyors that transfer proppant from belt to belt at various stages of the transportation process. We plan to install two permanent loadouts near the middle of the conveyor system close to the Texas side of the Texas-New Mexico state line and at the end of the Dune Express right-of-way on BLM land near the Lea-Eddy County line in New Mexico. The system will also utilize one or more “mobile” loadouts, which can be mobilized and relocated from time to time, to maximize delivery efficiencies particularly for operators prosecuting a concentrated development plan in the area that is proximate to the conveyor system but not proximate to one of the two permanent loadouts connected to the system. The acquisition of the initial Dune Express right of way took three years to complete and was finalized in 2021. All material permits, including a federal permit to construct and operate the system (which was needed due to the right of way extending onto BLM lands) have been acquired. Detailed engineering and design has also been completed, as have environmental and traffic studies, evaluation of various alternative delivery methods, detailed survey work and customer education and market sizing. The location of the Dune Express right of way provides efficient access to some of the highest rate of return well locations and deepest inventory in the Permian Basin.

Illustrative Rendering of the Dune Express

Wellsite Delivery Assets

Our existing logistics business utilizes third-party transportation contractors which we plan to supplement and bring in-house with our own trucks and trailers. As our trucks and trailers continue to be deployed, we expect to deliver significant productivity gains, as measured by tons per truck that can be delivered daily, compared to the throughput performance of traditional trucking assets. These immediate productivity gains will be made possible through a combination of process improvements and targeted investments in fit-for-purpose equipment. We have partnered with a provider of autonomy and robotic technology with experience in the field of GPS-denied off-road autonomous driving applications to procure a fleet of vehicles equipped with technology designed to test and ultimately support autonomous wellsite delivery. We expect to begin testing in the field during 2023 with the goal of developing this technology over the next several years.

Atlas Logistics Solutions Can Expand Potential Throughput per Vehicle Dramatically

Atlas Energy Solutions	Conventional Delivery	Atlas Trucks without Dune Express	Atlas Trucks with Dune Express
Shifts per Day	1	2	2
Turns per Shift	2 – 3	2 – 3	4 – 5
Tons per Turn	24	70 – 105	70 – 105
Tons per Day	48 – 72	280 – 630	560 – 1,050

Our technology partner's highly-customizable, self-driving technology can be applied to a variety of platforms – from tugs, UAVs, and shuttles, to heavy-duty transit buses and full-size logistics trucks. We chose our technology partner due to their long history of deploying autonomous vehicle technology in military and other applications, with full 360-degree wheel movement capabilities.

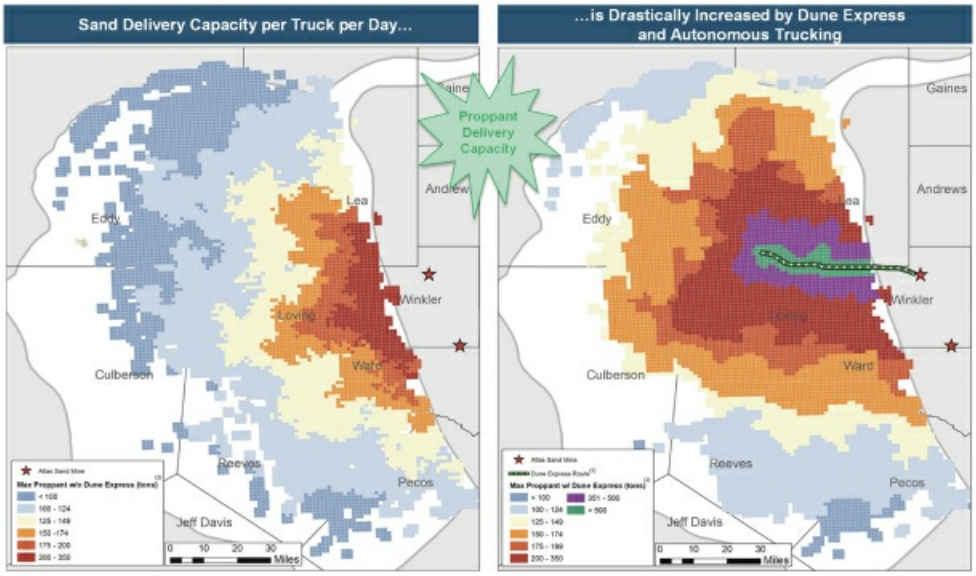
While many autonomous vehicle companies focus on slight wheel movements for long-haul applications, our technology partner pioneered solutions for use in applications that required 90-degree+ turns to be performed. Furthermore, the technology package has the capacity to record the locations of the vehicles (whether or not Wi-Fi/cellular is available) to map out the road network in preparation for the transition to increasingly less labor-intensive deliveries. We expect to receive our initial vehicles by early 2023 and will begin training shortly thereafter.

In addition to the technology enhancements that are expected to reduce the operating costs of our logistics business through the decreased labor intensity associated with autonomous delivery, we also expect to realize early productivity gains due to the expanded payloads of our deliveries and high levels of asset utilization. We plan to achieve increased payloads due to a combination of equipment design and operational planning. Our business model can potentially achieve a fourfold increase in the daily throughput of a truck as compared to conventional delivery in 2023, and when combined with the mileage reduction delivered by the Dune Express can extend that throughput advantage to 15x or greater depending on the location of the wellsite.

Together, we believe these initiatives could have a significant impact in driving future revenue and increasing cash flow, reducing emissions, improving safety and relieving traffic and other burdens produced by the existing means of last-mile delivery. Furthermore, by reducing the intermittency of proppant delivery to the wellsite – and thereby increasing the reliability of delivery and potential throughput per truck per day – we believe our delivery solutions significantly mitigate a major bottleneck to the completions supply chain that may support increased pressure-pumping efficiencies.

The graphic below shows the estimated amount of proppant, in tons, that can be delivered to Delaware Basin drilling spacing units in a day by an individual truck. Based on the current supply chain configuration, each truck is limited to very few deliveries per day for a variety of reasons, including the distance from local mines to wellsites that are distributed across a large geographic area, a limited public roadway network and the hours per day that a driver can work. Upon commercialization of the Dune Express and our wellsite delivery assets, this throughput potential expands dramatically due to the reduced delivery distance higher payload capacity and increased asset utilization.

Atlas Logistics Solutions Expand Potential Throughput per Vehicle Dramatically



Source: Enverus.

In addition to the efficiency and reliability gains that we expect to realize through our logistics solutions, we anticipate that we will also be able to deliver significant safety benefits to the communities of the Permian Basin. The public road network in the Permian Basin today is ill-equipped for the massive amounts of oilfield traffic that is required for the industry to operate. By reducing the number of trucks required to fulfill proppant deliveries and removing these trucks from public roads, we anticipate that the rate of traffic accidents and associated injuries and fatalities will be reduced. Please see the subsection titled "—Value Proposition to Our Community and Stakeholders: A Demonstration of the Harmony of Capitalism with Sustainable Environmental & Social Progress" below for additional information regarding our anticipated community impact.

Our logistics solutions have been designed to offer a further extension of our promise of reliability to our customers. We believe that customers will seek out our logistics solutions not only due to the compelling technology and infrastructure solutions we offer but also because they are tied into highly reliable production assets in our Kermit and Monahans facilities.

Value Proposition to Our Stockholders

Strong Margins and Cash Flow Generation – Our ability to generate cash flow is paramount to our value proposition, as it enables us to reinvest in growth, maintain a healthy balance sheet and regularly return capital to our stockholders. A brief summary of several of our key performance and financial metrics is provided below. Please see "Summary—Summary Historical and Pro Forma Financial and Operating Data—Non-GAAP Financial Measures" for more information.

	Predecessor		
	Year Ended December 31,		
	2022	2021	2020
	(in thousands, except percentages)		
Net Income	$217,006	$ 4,258	$(34,442)
Adjusted EBITDA(1)	$263,983	$71,954	$ 24,667
Adjusted EBITDA Margin(1)	54.7%	41.7%	22.1%
Net Cash Provided by Operating Activities	$206,012	$21,356	$ 12,486
Adjusted Free Cash Flow(1)	$228,510	$64,239	$ 19,686
Adjusted Free Cash Flow Margin(1)	47.3%	37.3%	17.6%

(1) Please read "Summary—Summary Historical and Pro Forma Financial and Operating Data—Non-GAAP Financial Measures" for the definitions of Adjusted EBITDA, Adjusted EBITDA Margin, Adjusted Free Cash Flow and Adjusted Free Cash Flow Margin and a reconciliation of these measures to our most directly comparable financial measures calculated and presented in accordance with GAAP.

Focus on Return of Capital – We commenced paying cash distributions in December 2021 and have paid $70.0 million in distributions to our unitholders since that time. We intend to continue to recommend to our board of directors that we continue to regularly return capital to our stockholders through a dividend framework that will be communicated to stockholders in the future. Furthermore, our credit agreements contain provisions that allow us to pay dividends, subject to certain covenants, including pro forma liquidity and leverage ratios. Please see the section titled "Dividend Policy" for more information.

Management & Historical Successes – We were founded by Bud Brigham, our Executive Chairman and Chief Executive Officer, and are led by an experienced team of entrepreneurs from oil and natural gas, transportation, industrial automation and proppant industry backgrounds. We believe our management team's deep industry experience, record of successful value creation and established history as entrepreneurs and positive disruptors in the energy industry are unique advantages that enable us to continually identify critical value-creation drivers that will allow us to maximize the full potential of our business and the outcomes for our stockholders and stakeholders alike. While our management team has had significant success, past performance is not a guarantee of our future success or similar results. You should not rely on the historical record of our management team, our directors or their affiliates as indicative of the future performance of an investment in us or the returns we will, or are likely to, generate going forward.

- *Brigham Exploration* - Prior to founding Atlas LLC, Bud Brigham founded Brigham Exploration, a positive disruptor and innovator in the E&P space. Brigham Exploration was an early pioneer in 3-D seismic exploration onshore, and completed its IPO in 1997. In subsequent years, Bud oversaw the identification, acquisition, delineation and development of approximately 375,000 net acres in the Williston Basin. Brigham Exploration established itself as a leading innovator in horizontal drilling and fracking, as well as oil, gas and water gathering and distribution. The company delivered industry leading operational and economic performance, leading up to Brigham Exploration's sale to Statoil in December 2011 for an enterprise value of $4.7 billion.
- *Brigham Resources* - Immediately following the sale of Brigham Exploration, Bud Brigham and others from the Brigham Exploration management team founded Brigham Resources and executed on similar strategies in the Southern Delaware Basin in West Texas. By applying rigorous geologic evaluation criteria, Brigham Resources was an early entrant in the Southern Delaware Basin in Pecos County, Texas, where it assembled an approximately 80,185 net acre leasehold position in a largely contiguous block. Like Brigham Exploration, Brigham Resources again was a leading innovator in the play, generating significant enhancements in operational and economic performance, prior to selling its assets to Diamondback in February 2017 for approximately $2.6 billion.

- *Brigham Minerals* - In 2012, Bud Brigham and other members of his management team founded Brigham Minerals, a mineral acquisition company that leverages its knowledge base and experience to acquire mineral ownership in top-tier liquids rich domestic resource plays. Subsequent to its rapid growth as a private enterprise, Brigham Minerals' management executed an upsized $300 million IPO in April 2019. Brigham Minerals aggregated a portfolio of approximately 81,800 net royalty acres across 36 counties within the Delaware and Midland Basins in West Texas and New Mexico, in the Anadarko Basin in Oklahoma, the Denver-Julesburg Basin in Colorado and Wyoming and the Williston Basin in North Dakota, prior to entering into an all-stock merger with Sitio Royalties in 2022 with a combined enterprise value of approximately $4.8 billion (representing a $2.2 billion value to Brigham Minerals, or a 108% total return since its IPO, with total return calculated as cumulative dividends plus stock price appreciation).

Value Proposition to Our Community and Stakeholders: A Demonstration of the Harmony of Capitalism with Sustainable Environmental & Social Progress

Across our past and current ventures, we have a well-established history of being good stewards of not only stockholder capital but also of the environments and communities in which we live and operate. Our core obligation is to our stockholders, and we recognize that maximizing value for our stockholders requires that we build goodwill and optimize the outcomes for our broader stakeholders, including our employees and the communities in which we operate. As a result, we deliver leadership across all aspects of Sustainable Environmental and Social Progress ("SESP"). Our aptitude on SESP benefits from our commitment to identifying and executing upon opportunities to transform our business which enhance our growth and profitability through the implementation of new technologies. Our planned Dune Express is one of several initiatives we have undertaken that exhibits our initiatives to transform our business, enhance growth and increase our profitability, while simultaneously providing substantial environmental and safety benefits. This is the harmony of capitalism – innovation can and often does drive both profitability and environmental and/or social progress through free market activity.

The graphic below summarizes our estimates of the reduction in the truck miles driven and associated traffic accidents, traffic fatalities, truck miles driven and emissions attributable to the anticipated operation of the Dune Express as compared to traditional practices.

The Potential Long-Range Environmental & Safety Benefits from The Dune Express are Significant [3]

Source: Management's internal analysis, based on results of study completed by Texas A&M Transportation Institute

Sustainable Environmental Progress ("SEP")

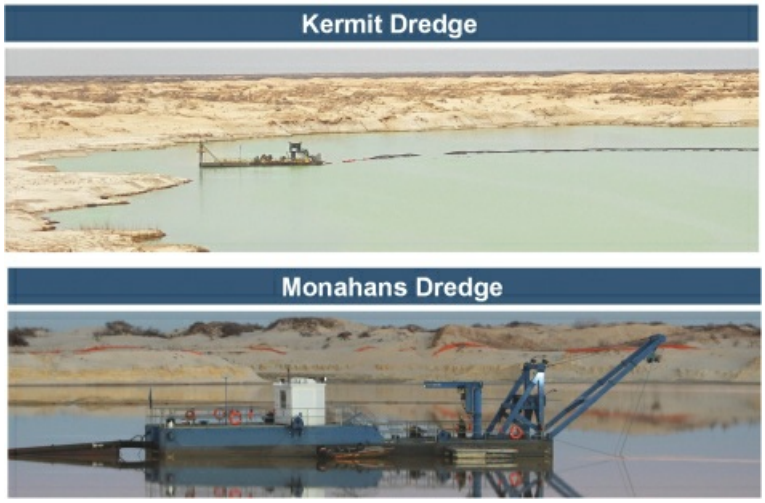
To our knowledge, we are the only proppant producer in the Permian Basin that engages in e-mining. Furthermore, we plan to continue transitioning our mining activities from diesel powered mining

[3] Chart reflects anticipated reductions over a 30-year period.

methods to electric dredging over the next twelve to twenty-four months, which generates materially lower emissions when compared to traditional sand mining. Our shift towards e-mining at both of our Kermit and Monahans facilities exemplifies the alignment of both our operational and SEP leadership, as dredge mining, based on our estimates, will materially improve safety and, reduces emissions by approximately 50% versus traditional sand mining methods due to the significant reduction in diesel, fuel usage required to mine sand traditionally, partially offset by increased electricity consumption from our electric dredges. Our dredge mining process also leads to less surface area disturbance per ton of sand produced as we mine to greater depth as compared to mining associated with buried sand deposits.

Our giant open-dune reserves, paired with the replenishing water sources from our acreage's in-ground aquifers, are the key reasons why we are able to adopt a technology more often reserved for use in rivers and other naturally occurring bodies of water for use in the desert of West Texas. Our reserves benefit from a naturally occurring water table near the surface of our mines, which is unique in the Winkler Sand Trend and provides an ample natural supply of costless water for dredge and wash plant operations.

Atlas Electric Dredges



Additionally, the results of a study commissioned by us with the Texas A&M Transportation Institute, an independent research agency (the "Transportation Study"), when integrated with our management's internal analysis, support our estimate that our planned Dune Express could significantly reduce emissions that would otherwise be produced by trucking-related activities associated with the delivery of proppant from the mines of Permian Basin providers to end users. Our estimates project that the system will result in an approximate 70% reduction in carbon dioxide emissions and other emissions, including other pollutants that are harmful to humans. Please see the subsection titled "—Significant Innovation Projects—Dune Express" above for additional information regarding the Dune Express.

Our management team has been proactive with respect to the protection of the DSL and its habitat in an effort to reduce the risk that our business and operations will be materially interrupted in the event that the DSL is listed under the ESA. We have adopted numerous best practices to promote

active conservation measures for the benefit of the DSL, including our identification of up to 17,000 acres of land for potential set asides, our pursuit of more environmentally friendly mining practices and our participation in the CCAA for the DSL. Please see the subsection titled "—Competitive Strengths—Proactive approach to the well-being of the environment and our employees" below. In January 2021, the CCAA was approved by the USFWS to provide a framework for entry into voluntary conservation agreements between the USFWS and stakeholder participants under which the parties work together to identify threats to the DSL, design and implement conservation measures to address these threats and monitor their effectiveness, among other things. Atlas has been a supporter of the CCAA since its inception and was the first proppant producer to apply for a permit under, and be accepted into, the CCAA. Due to our participation in the CCAA and other conservation measures that we have voluntarily adopted, we do not anticipate that a listing of the DSL as an endangered species would materially reduce sand production at our Kermit and Monahans facilities. We are currently only one of three companies participating in the CCAA. In the event that the DSL is listed as an endangered species under the ESA, it is possible that companies that are not participants in the CCAA at the time of a potential ESA listing would see a disruption to their operations.

Sustainable Social Progress ("SSP")

We have committed to fostering a safe environment at our worksites and we are committed to extending this culture of safety far beyond our premises. We have a rigorous safety training program with well-developed protocols. We have automated or have invested in remote operations technology to substantially reduce the amount of the activities at the plant sites that require physical interaction between human beings and industrial equipment, and in doing so have removed many of the safety hazards at our facilities.

We anticipate that our planned Dune Express will provide significant environmental benefits, while also benefitting the surrounding region, making it a safer place to live and work. Our management's analysis of the results of the Transportation Study supports our expectation that the Dune Express will contribute to a meaningful reduction in Permian Basin traffic accidents, congestion and automobile fatalities, by taking trucks off public roads and operating in a much more efficient manner than the industry has historically operated. We believe this will also benefit the community by reducing the wear and tear on local infrastructure, while making the region a safer and better place to live and work. Furthermore, by reducing the number of drivers needed per well and in the aggregate, these initiatives can meaningfully reduce trucking-related hazards on customer wellsites and mitigate future driver shortages.

We are actively engaged in the West Texas community in which we operate, as we believe that by supporting our community, our community will support us. We sponsor a number of programs benefitting schools and the youth in Winkler and Ward Counties, Texas, including supporting after-school programs for children and skill-development programs for high school students.

Our Company's culture is a product of our employees, and as such, we embrace the responsibility of promoting a diverse and inclusive meritocracy, with approximately 64% minority and/or female representation in our workforce as of December 31, 2022. We reward the hard work of our employees by compensating them well, with our median employee earning in excess of $100,000 per year as of 2022. Furthermore, we provide our employees with a high-quality benefits package including fully paid family medical, dental and vision insurance, a company 401(k) match program and substantial paid time off or rotational schedules. For our employees in West Texas, we provide convenient, safe and comfortable living facilities at Wyatt's Lodge, our distinctive alternative to the traditional, notoriously unsafe and unsanitary housing accommodations provided for many oilfield employees. Wyatt's Lodge provides employees with fully furnished housing, a full cafeteria with a chef and a diverse menu including healthy options, a workout facility, as well as a recreational room and a movie theater. The success of our efforts to create a high-quality workplace is evidenced by our low employee turnover and accolades that include the "Great Place to Work" certification from the Great Place to Work Institute, Inc. for the years ended

December 31, 2019, 2020 and 2021, as well as the “Top Work Places” Award of Recognition from Austin American-Statesman for the years ended December 31, 2021 and 2022.

We believe that the men and women who have served in the United States armed forces have earned a special place in our society. As such, at our founding we created a dedicated effort to support our veterans in our hiring. We have found our focus on recruiting veterans to work for Atlas has brought us many hardworking and outstanding employees over the years and has positively influenced our corporate values. We have received external recognition for our veteran hiring practices, including the Hire Vets Medallion from the DOL in 2019, 2020 and 2021. As of December 31, 2022, 8.4% of our employees served in the U.S. military as compared to an average of 5.6% across all employers nationally.

Governance

We believe that the alignment of our employees, our management and our board of directors with our stockholders is paramount. A few examples of the actions that we will take in connection with this offering or the characteristics that highlight the alignment of interests between our management and stockholders are as follows:

- We will establish a diverse and independent board of directors with complementary skills and backgrounds.
- We will adopt an executive compensation program that encourages return of capital to stockholders, including through the use of performance-based compensation, with performance metrics that focus business strategy and corporate objectives on total shareholder return, and equity-based long-term incentives.
- We will adopt a director compensation policy for our non-employee directors in which a significant portion of the total compensation package is equity based to further align the interests of our directors with our stockholders.
- Management will maintain significant initial ownership in the Company after completion of this offering.

Our organizational structure following the offering and corporate reorganization is commonly referred to as an Up-C structure. Pursuant to this structure, following this offering we will hold a number of Atlas Units equal to the number of shares of Class A common stock issued and outstanding, and the Atlas Unitholders (other than us) will hold a number of Atlas Units equal to the number of shares of Class B common stock issued and outstanding. The Up-C structure was selected in order to (i) allow certain Legacy Owners the option to continue to hold their direct and indirect economic ownership in Atlas LLC in “pass-through” form for U.S. federal income tax purposes through their ownership of Atlas Units, and (ii) potentially allow us to benefit from certain net cash tax savings that we might realize as a result of certain increases in tax basis that may occur as a result of Atlas Inc.’s acquisition (or deemed acquisition for U.S. federal income tax purposes) of Atlas Units pursuant to the exercise of the Redemption Right or the Call Right. In contrast to many offerings by issuers choosing an Up-C structure, we have made the decision not to enter into a tax receivable agreement with the Legacy Owners with respect to any such cash tax savings we might realize, which we believe provides for increased alignment between us and our stockholders over the long term.

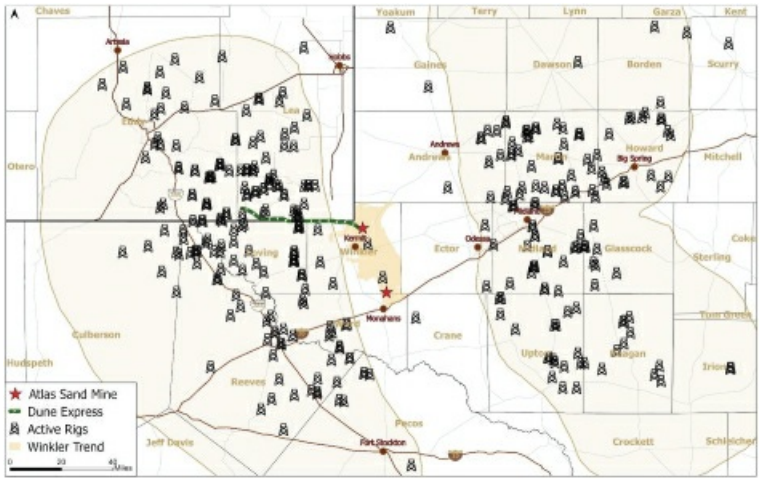
Assets and Operations

We currently control the largest and, we believe, the highest quality sand position in West Texas. We have developed our Kermit and Monahans facilities as in-basin proppant mines on approximately 38,000 surface acres that we own or lease in Winkler and Ward Counties, Texas. We control 14,575

acres of large open-dune reserves and resources, which represent more than 70% of the total giant open dune acreage in the Winkler Sand Trend available for sand mining. The Monahans Dune consists of approximately 8,750 acres of premium open-dune reserves. Additionally, we have substantial off-dune acreage at Monahans that is not included in our estimated reserves or resources but that could be mined following our removal of material, such as soil and unusable sand, that lies above the useable sand and must be removed to excavate the useable sand, which we refer to as "overburden." The Kermit Dune consists of approximately 5,826 acres of premium open-dune reserves.

The following map shows the location of our Kermit and Monahans facilities in Winkler and Ward Counties, Texas, as well as the secured right-of-way for the Dune Express alongside a recent snapshot of the rig count in the Permian Basin as of December 31, 2022:

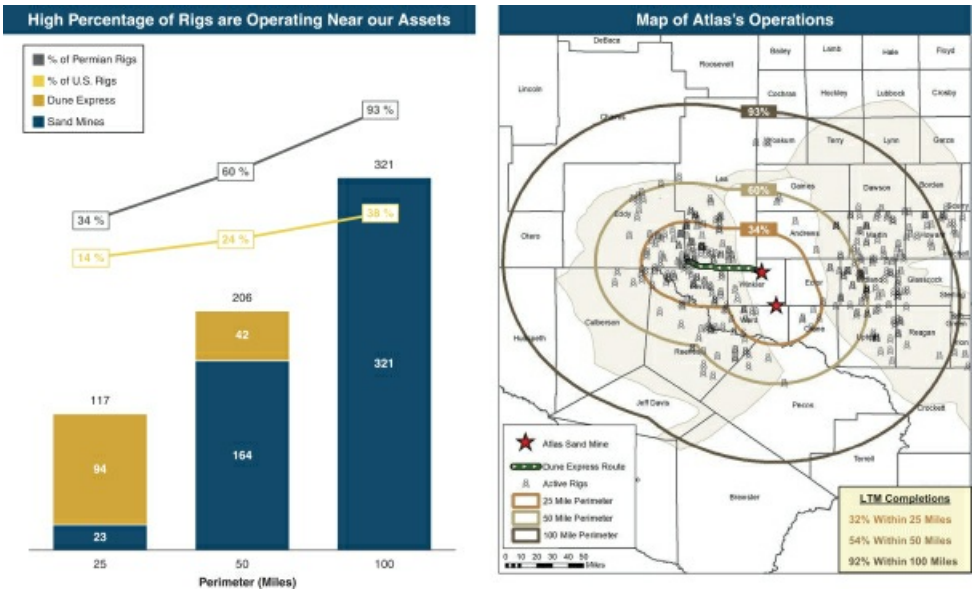
Map of Operations



Source: Enverus, Baker Hughes.

Our "twin" mines, located on the bookends of the Winkler Sand Trend, provide optimal logistics to serve both the Southern and Northern portions of the Delaware and Midland Basins and, as of December 31, 2022, have a combined annual production capacity of 10.0 million tons, 70,000 tons of dry storage, 700,000 tons of wet storage and 14 loadout lanes. Innovative plant design and large-scale operations ensure low-cost operations and continuity on site. Redundancies were designed into our facilities to remove singular points of failure that can disrupt the production process, ensuring maximum reliability of proppant production and delivery.

Atlas's Facilities are Strategically Located



Source: Enverus. Baker Hughes.

Our Kermit and Monahans facilities were built to produce high quality 40/70-mesh and 100-mesh sands, each of which are used extensively in upstream operations in the Permian Basin. As of December 31, 2022, each facility is capable of producing 5.0 million tons of proppant annually for a combined annual production capacity of 10.0 million tons.

Each facility was constructed with a modular design that provides us with the flexibility to expand one or both of the existing facilities to achieve incremental production capacity if such expansion were found to be necessary or desirable in light of customer demand, broader market conditions or other relevant considerations. The facilities are capable of operating year-round and feature advanced safety designs, onsite water supply, power infrastructure and access to low-cost natural gas through connections to interstate natural gas lines. Further, we strategically benefit from the locations of our facilities proximal to major highways at the south and north ends of the Winkler Sand Trend. Our Kermit facility is bisected by two state highways, while our Monahans facility its adjacent to two highways, one of which is Interstate 20, facilitating efficient transportation of our proppant to customers located at various points within the Permian Basin.

The operations of both sand facilities are managed and monitored in a highly automated manner from our command center in Austin, Texas. We have designed and/or adopted cutting-edge technology that we believe delivers one of the most efficient production and truck loading processes in the industry. The remote ecosystem allows our employees to simultaneously manage processes at both facilities, resulting in significant personnel productivity gains.

As of December 31, 2022, we had 357 million tons of proven and probable sand reserves at our Kermit and Monahans facilities according to estimates by John T. Boyd Company, our independent mining

engineers and geologists. Based on our current total annual expected production capacity of approximately 10.0 million tons as of December 31, 2022, our reserve life is expected to be approximately 36 years. As of December 31, 2022, our reserves are composed of approximately 59% 40/70-mesh and 41% 70/140-mesh substrate sand. We believe our reserve composition is attractive to customers that want to consolidate sourcing and positions us as a go-to provider of high quality in-basin proppant.

In response to the significant increase in market demand and also in connection with the expansion of our logistics offering, we are expanding our Kermit production capacity to add a facility capable of 5.0 million tons of annual production capacity by the end of 2023. Our plants were designed modularly to accommodate efficient expansion—maximizing the increase in production capacity while minimally increasing the facilities' footprint.

Competitive Strengths

We believe the following competitive strengths will allow us to successfully execute our business strategies, achieve our primary business objectives and generate free cash flow, including:

- ***Superior geology combined with next-generation plant design promotes efficiency & reliability.*** Our Kermit and Monahans acreage holds a unique combination of key attributes that drive our differentiated business profile, including (i) unmatched scale of reserves and acreage within the two large open-dune deposits at the northern and southern ends of the Winkler Sand Trend, (ii) the associated high quality of proppant, (iii) the associated ease of access to our reserves and resources, (iv) the depth of our deposit, which provides a smaller areal footprint per ton produced, and (v) plentiful availability of water. We are not aware of any other area in the Permian Basin that is able to replicate this combination of key attributes. As of December 31, 2022, our combined facilities have 10.0 million tons of annual production capacity, two dredges, six dryers, 70,000 tons of onsite, finished-good storage, 14 dedicated truck loadout lanes with high-speed loadout silos, a comprehensive water recycling system at each plant, which allows us to reuse approximately 95% of the water used in the production process, and 700,000 tons of damp sand storage. Our facilities are capable of operating year-round and feature advanced safety designs, onsite water supply and recycling, power infrastructure and access to low-cost natural gas through connections to interstate natural gas lines.
- ***High margins and strong balance sheet drive compelling combination of growth & yield.*** Our margin profile has been tested through industry cycles, and we have demonstrated strong performance relative to our peers in both high and low proppant price environments. We maintain modest levels of debt and intend to continue to reduce our debt over time. Pro forma for this offering, as of December 31, 2022, we will have a Net Debt/LTM Adjusted EBITDA multiple of 0.3x. We are currently pursuing attractive growth projects and have been returning capital to stockholders. We plan to offer a balanced value proposition to stockholders that we believe will include growth and yield while maintaining financial flexibility and a strong balance sheet.
- ***Unique logistics offering.*** Our Dune Express and wellsite delivery assets hold the potential to revolutionize the delivery of proppant in the Permian Basin. By leveraging technology and infrastructure, we will increase asset utilization and payload per delivery resulting in increased efficiency and reliability for our customers. This will also reduce the miles driven on public roadways in the Permian Basin, which will improve the road safety in the basin.
- ***Strategically located facilities.*** Our facilities are located on the giant open dunes near Kermit and Monahans, Texas, that bookend the Winkler Sand Trend and enable us to reliably and efficiently meet the proppant demand of our customers in both the Delaware and Midland

Basins. In addition, we strategically located our Kermit facility to be bisected by two state highways and positioned our Monahans facility adjacent to two highways to facilitate the efficient transportation of our proppant. Our Kermit facility's location also provides a strategic origination point for the initial Dune Express, which will travel across the Texas-New Mexico state line area, one of the highest development intensity sections of the Permian Basin.

- ***Strong brand recognition for reliability drives contracting and solidifies valuable relationships with a diverse group of customers.*** The success of our business has been underpinned by our relationships with some of the most respected operators and service companies in the Permian Basin. Our customers range from high-profile, public oil and natural gas and service companies to private, independent enterprises. We also have a diverse customer base, which we believe minimizes counterparty risk. During the year ended December 31, 2022, we had 39 customers, with the top 10 customers accounting for approximately 68% of our revenue for that period. During the year ended December 31, 2021, we had 39 customers, with the top 10 customers accounting for approximately 79% of our revenue for that period. Our ability to secure and maintain these robust relationships lends support to our ability to weather economic headwinds. In 2020, we continued to operate throughout the height of the pandemic, grew sales volumes year over year from 2019 to 2020, and increased our market share, as we expanded our customer base by the addition of 14 new customers since January 1, 2020. While our contracting strategy changes over time and through industry cycles, we are currently highly contracted on our existing production capacity, which provides for significant visibility in our future revenue and cash flow. We plan to continue to pursue contracts when they stand to benefit our business over the long term.
- ***Ability to leverage technology in optimizing cost structure and addressing our customer's sustainable environmental progress (SEP) goals***. Our ability to generate cash flow in various commodity price environments and through industry cycles is underpinned by our commitment to the continuous optimization of our operating and capital cost structures. The move from traditional excavation methods to e-mining reduces the need for on-site personnel, heavy equipment and diesel fuel. Further, this technology also provides us the ability to enhance our customers' SEP initiatives. Numerous employees once located on-site in the Permian Basin now work in a smaller group at our command center in Austin, Texas, monitoring and operating the facilities by video and telecom. This has led to cost reductions and also has enabled us to attract and retain an exceptionally credentialed workforce as compared to competitors with traditional operations that by nature do not provide such flexibility with respect to the location of personnel deployment.
- ***Unique equity investor capitalization of the Company.*** We are differentiated and advantaged by our unique equity investor capitalization. Rather than sourcing private equity capital, Bud Brigham funded the initial investments in us. Subsequently, we conducted a successful "friends and family" equity capital raise, which included many investors that had previously invested in Bud Brigham's prior enterprises. Importantly, approximately 40 of our equity investors are energy entrepreneurs, energy executives and sophisticated energy investors, providing both a validation of the business and facilitating our growth. As a result, we are differentiated in our space with a diverse and sophisticated investor group that is aligned and actively supportive of our shareholder value creation objectives. Furthermore, the lack of traditional private-equity ownership has enabled us to elect to forgo a tax receivable agreement, which we believe provides for increased alignment between the Company and its stockholders over the long term. This is an example of the shareholder alignment we intend to instill through corporate governance policy.
- ***Incentivized board of directors and management team with significant experience in the Permian Basin and a track record of stockholder value creation***. Our executive management team has a combined total of over 90 years of experience in the energy industry.

This experience includes two successful IPOs, three successful company sales or mergers, multiple asset monetization events and the successful building of other enterprises. Please see the subsection titled "—Value Proposition to Our Stockholders—Management & Historical Successes" above. Management benefits from extensive experience in the Permian Basin, where our founder was born and raised, and he and other management members have extensive relationships built over a long history of involvement with various businesses in the region across upstream operations, non-operated enterprises, sand mine development, mineral acquisitions and water sourcing. We believe our management team's experience managing upstream operations in the Permian Basin lends a unique perspective that provides us with a network of key potential customers, suppliers, vendors and employees, contributes to our ability to provide a high-quality customer experience and serves as a strong foundation for our role as a collaborative partner in meeting the advanced completion needs of our customers. Further, our management team has extensive experience in identifying attractive operating areas and evaluating resource potential through a variety of means, including extensive geologic studies; we believe this experience will continue to allow us to expand our operations by selectively pursuing organic development opportunities and innovations in the Permian Basin.

- ***Proactive approach to the well-being of the environment and our employees***. Our voluntary agreement under the CCAA ensures that the USFWS will not require us to comply with conservation measures or impose any restrictions on our use of resources beyond those which we have already agreed. Our large acreage position also provides us with the flexibility to set aside as much as 17,000 acres of high suitability DSL habitat for conservation protection, which would exempt us from certain enrollment fees otherwise required under the CCAA. The smaller acreage position of many of our Permian Basin competitors may make similar set-asides commercially challenging for them. We believe that our voluntary participation under the CCAA will help to safeguard our assets and operations against adverse effects that could result from non-participation or any future listing of the DSL as an endangered species. We believe potential customers, focused on improving the sustainability profile of their own operations, value our proactive stance towards environmental risk management. As we focus on the well-being of the environment we operate in, we also focus on the well-being of our employees through initiatives such as our compensation and benefits package and Wyatt's Lodge. We believe that this differentiated investment in our employees creates a culture of pride and ownership that fosters the positive disruptions and innovations our business successes are built on.

Business Strategies

Our principal business objective is to drive improvements to critical products and services in the Permian Basin through innovation which may reduce environmental impacts and optimize our cost structure, while driving notable value creation for our stockholders and stakeholders alike.

- ***Continuously optimize cost structure in order to deliver free cash flow across commodity cycles.*** Demand for services used in the development of unconventional resources in the United States varies notably based on the pace and intensity of such development, which is driven in large part by the prevailing commodity price environment. Since the beginning of 2020 through December 31, 2022, per-barrel prices of WTI crude oil exhibited substantial volatility ranging from $16.55 to $114.84, and we expect commodity prices to continue to be unpredictable going forward; as such, since our inception, we have continuously strived to optimize our cost structure and we believe we are able to provide our stockholders with a return of capital through cycles. For instance, substantial up-front investments were made in our Kermit and Monahans facilities and associated equipment in

order for their design to maximize uptime and reliability. Our access to a natural water table near the surface of our deposit has allowed us to significantly lower our production costs through dredge mining. Our transition to e-mining, when fully completed is expected to result in reduced production costs, as we have seen historically when we have been able to use electric dredging as our primary mining method. In the future, the modular designs of our facilities will accommodate future expansions at a significantly reduced expense as compared to the conventionally designed facilities of our Permian Basin competitors.

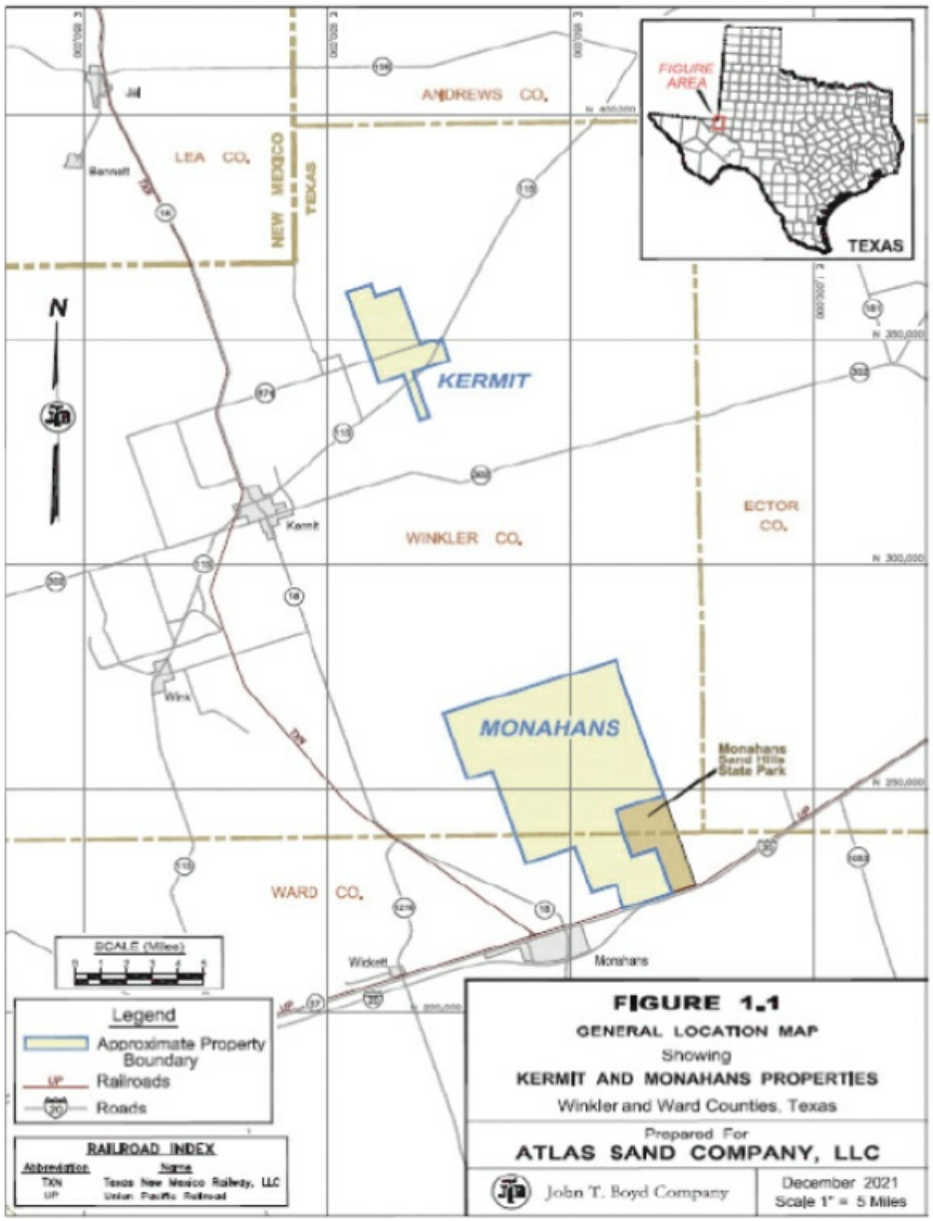
- ***Seek out opportunities to positively disrupt the market for products and services critical to unconventional resource development projects.*** Innovation is central to our corporate culture, as it has been since the leadership role of certain members of our management team in the Bakken Formation's evolution via Brigham Exploration, and we continuously strive to holistically improve unconventional resource development in the United States, particularly in the Permian Basin. We were a leader in the disruption in the proppant supply chain as early entrants into "in-basin" sand which eliminated the need for in excess of 1,000-mile train hauls from the midwestern United States and in excess of 250-mile truck hauls from central Texas, providing substantial economic and environmental benefits. More recently, we were the first to bring e-mining to the Permian Basin, and we are advancing our initiative to meaningfully electrify sand delivery operations in the Permian Basin through our Dune Express and autonomous wellsite delivery initiatives.
- ***Use our unmatched scale to amplify innovation and disruptive technology to improve the unconventional resource supply chain.*** Our Kermit and Monahans facilities represent a complete reinvention of the more traditional proppant production facility. Most proppant production facilities were historically located far from the point of consumption and therefore had long supply lines. Generally speaking, these facilities frequently experienced downtime on an unpredictable schedule. With the onset of in-basin sand, we recognized the need for our facilities to operate on a just-in-time delivery basis and took to redesigning the traditional facility to ensure that redundancy was built in at critical junctures to mitigate the effects of unplanned equipment downtime. Additional early measures included investments into the automation of our loadout lanes to drive down load times and the automation of many of our operations activities to improve efficiency and safety. More recently, we were the first, and currently the only, Permian Basin miner to partially electrify the mining of proppant through the use of electric dredges, and we plan to increase our electric dredge volumes over the next twelve to twenty-four months. Our Dune Express and wellsite delivery assets are the next positive major disruptions that we are bringing to the Permian Basin. As a positive disruptive industry technology, the Dune Express replaces much of the trucking haul with electric, conveyor-based transportation, which is likely to provide substantial SESP benefits, including a significant reduction in the emissions generated, relative to the traditional delivery of sand to customer wellsites due to the reduction in miles driven per ton of payload delivered. These strategic initiatives and other innovations are clear demonstrations of our commitment to evaluate and pursue strategies and technologies that positively disrupt our industry and continue to establish, maintain and optimize aspects of our business that provide distinct advantages over our competitors.
- ***Grow business around anchor contracts with high quality counterparties***. Innovation and the pursuit of additional projects like the Dune Express are central to our strategy, but they are only made possible by our relationships with high-quality, top-tier companies that operate in the Permian Basin. We have supply contracts in place with a variety of leading oil and natural gas and oilfield services companies, many of which are high-credit quality customers. The quality of our customer base is reflected in our collections rate over the year ended December 31, 2022, which exceeded 99.9%. We had similar collection rates for the years ended December 31, 2021, 2020 and 2019, which also exceeded 99.9%. We have signed sand supply and logistics

contracts with major oil companies that includes the delivery of proppant by means of the Dune Express. While many factors influence the selection of proppant providers, we believe that our differentiated environmental profile, resulting from our major electrification projects, paired with our ability to reliably provide large volumes of quality proppant at attractive rates makes us a preferred partner for customers similarly prioritizing enhanced sustainability of operations and cost structure optimization.

- ***Drive stockholder value creation by prioritizing our other stakeholders through sustainable environmental and social progress***. We have recognized, from our founding, that long-term profitability for our stockholders can be achieved only by delivering positive outcomes for our other stakeholders—treating our employees well, executing as good stewards in the communities and the environments we do business in, and operating with the highest governance and diligence standards. Though many of our stakeholders are not owners of our business, they do have a meaningful influence in the success of our business. Therefore, to optimize value creation for our stockholders, we strive to provide attractive outcomes for our stakeholders.
- ***Maintain a conservative financial profile in order to provide durable capital returns in a cyclical industry***. The energy services business is historically cyclical, and we believe that a strong balance sheet and substantial liquidity are key, not only for the long-term health of the Company, but also for its ability to continuously return capital to its stockholders through-cycles. On a pro forma basis after giving effect to this offering, we expect to have approximately $ million of cash on hand, $ million available under the 2023 ABL Credit Facility, and $ outstanding under our 2021 Term Loan Credit Facility. Further, we plan to continue making regular stockholder distributions as we transition into a public company, likely in the form of regular base dividends and potentially a combination of special dividends and share repurchases. Please see “Summary—Recent Developments—Cash Distribution” and the section titled “Dividend Policy.”

Our Facilities

We currently operate our Kermit and Monahans facilities in Winkler and Ward Counties, Texas. The following map shows the location of both facilities:



Kermit, Texas

As of December 31, 2022, our Kermit mine had production capacity of 5.0 million tons and is located on 5,826 gross acres of land (of which 5,341 net acres are controlled by us either through lease or fee ownership) in Winkler County, Texas, with onsite processing and truck loading facilities. We commenced construction of our Kermit mine in October of 2017, and commenced operations in June 2018. Geographically, our Kermit facility is located at approximately 31° 58' 6.29"N latitude and 103° O' 39.46" W longitude and is situated approximately 7 miles northeast of Kermit, Texas, and is accessible via Texas State Highway 18. The Midland International Air and Space Port is located approximated 45 miles southeast of the facility. The facility's primary utilities include three phase power, natural gas from an interstate transmission line and groundwater from onsite wells, all of which are present in sufficient quantities to sustainably support a facility producing in excess of 10 million tons annually. The facility was designed with redundancies to provide enhanced reliability and minimize the potential for bottlenecks throughout the processing and loadout operation.

The Kermit facility has 188.0 million tons of associated proven reserves as of December 31, 2022. The sand deposits generally range from 60 to over 100 feet thick and consist of 40/70-mesh and 100-mesh sand, with an anticipated production mix of approximately 30% 40/70-mesh and approximately 70% 100-mesh. The crush strength of the sand mined at the facility is between 7,000 to 8,000 pounds-per-square-inch ("PSI") for 40/70-mesh and between 10,000 to 11,000 PSI for 100-mesh. Given the open-dune reserves and natural aquifer, sand is generally extracted from the mine through surface excavation through mining by electric dredge. The facility was constructed with a modular design that facilitates future expansion opportunities. The Kermit facility and has onsite transportation infrastructure capable of loading more than 35 trucks per hour on average.

We lease a portion of the reserves associated with our Kermit facility. In December 2017, we also entered into the Kermit Royalty Agreement providing Permian Dunes with an overriding royalty interest in revenues we receive from the sale of proppant mined from the reserves associated with our Kermit facility. Under the terms of the Kermit Royalty Agreement, the agreement would terminate in connection with the consummation of this offering. In contrast, the Monahans Lease, including the royalty payment obligations thereunder, will survive the consummation of this offering or any other Capital Event. See Please see "Certain Relationships and Related Party Transactions–Historical Transactions with Affiliates–Permian Dunes Holding Company, LLC" and "—Our Lease and Royalty Arrangements" for more information. We have received the material permits required to operate our Kermit facility from the Air Permits Division of the Texas Commission on Environmental Quality (the "TCEQ"), Winkler County, the MSHA and TxDOT. Please see "—Our Permits" for more information.

Monahans, Texas

As of December 31, 2022, our Monahans mine had production capacity of 5.0 million tons and is located on approximately 32,224 gross acres of land in Ward County, Texas, with onsite processing and truck loading facilities. We commenced construction of our Monahans mine in February of 2018 and commenced operations in October 2018. Geographically, our Monahans facility is located at approximately 31° 39' 32.53" N latitude and 102° 52' 55.46" W longitude and is situated approximately 3 miles northeast of Monahans, Texas, and is accessible via Texas State Highway 115 and Interstate 20. The Midland International Air and Space Port is located approximated 40 miles east of the facility. The facility's primary utilities include three phase power from natural gas from an interstate transmission line and groundwater from onsite wells, all of which are present in sufficient quantities to sustainably support a facility producing in excess of 10 million tons annually. The facility was designed with redundancies to provide enhanced reliability and minimize the potential for bottlenecks throughout the processing and loadout operation.

The Monahans facility has 113.5 million tons of associated proven reserves as of December 31, 2022. The sand deposits generally range from 60 to over 100 feet thick and consist of 40/70-mesh and 100-mesh sand, with an anticipated production mix of approximately 50% 40/70-mesh and approximately 50% 100-mesh. The crush strength of the sand mined at the facility is 7,000 to 8,000 PSI for 40/70-mesh and between 10,000 to 11,000 PSI for 100-mesh. Given the open-dune reserves and natural aquifer, sand is generally extracted from the mine through surface excavation through mining by electric dredge. The facility was constructed with a modular design that facilitates future expansion opportunities. The Monahans facility has onsite transportation infrastructure capable of loading more than 35 trucks per hour on average.

The rights and access to the mineral reserves associated with our Monahans operations are secured under the Monahans Lease with Permian Dunes. Please see "—Our Lease and Royalty Arrangements" for more information. We have received the material permits required to operate our Monahans facility from the TCEQ Air Permits Division, Ward County, MSHA and TxDOT. Please see "—Our Permits" for more information.

Our Products

We serve the oil and gas end markets, and our sand reserves contain deposits of fine grade 40/70-mesh and 100-mesh sizes that API specifies for use in wellsite fracturing operations. We believe that this mix of finer grade sand reserves is in higher demand and meets current industry preferences. Proppant from our Kermit and Monahans facilities is in our onsite silos before transport and delivery by truck to customers' well sites located primarily in the Delaware and Midland Basins.

Our proppant is offered to our customers at the mine or as an integrated mine-to-wellhead solution. By providing access to an integrated logistics infrastructure, we are able to provide our customers with a solution-based approach.

Our Reserves

Information concerning our material mining properties in this prospectus has been prepared in accordance with the requirements of Subpart 1300 of Regulation S-K, which first became applicable to us for the fiscal year ended December 31, 2021. As used in this prospectus, the terms "mineral resource," "mineral reserve," "proven mineral reserve" and "probable mineral reserve" are defined and used in accordance with Subpart 1300 of Regulation S-K.

We categorize our mineral reserves as proven or probable based on the standards set by our independent mining engineers and geologists, John T. Boyd Company. We estimate that we had a total of approximately 357.4 million tons of proven and probable mineral reserves as of December 31, 2022. As of December 31, 2022, we had approximately 188.0 million tons of proven mineral reserves and 4.8 million tons of probable recoverable mineral reserves associated with our Kermit facility and approximately 113.5 million tons of proven mineral reserves and 51.1 million tons of probable recoverable mineral reserves associated with our Monahans facility. The quantity and nature of the mineral reserves at each of our properties are estimated by our internal geology department. We use drone surveys and three dimensional models to regularly update our reserve estimates, making necessary adjustments for operations and mine plans at each location during the year. Our internal reserve estimates are provided to John T. Boyd Company for review annually so that third-party approved additions or reductions can be made to our mineral reserves and mineral resource calculations due to ore extraction, additional drilling and delineation, property acquisitions and dispositions or quality adjustments. Before acquiring new mineral reserves, we perform surveying, drill core analysis and other tests to confirm the quantity and quality of the acquired mineral reserves.

John T. Boyd Company has reviewed our December 31, 2022 mineral reserves, and we intend to continue retaining third-party engineers to review our mineral reserves on an annual basis.

We lease a portion of the mineral reserves associated with our Kermit facility and all of the mineral reserves associated with our Monahans facilities. As of December 31, 2022, we owned approximately 70% of our mineral reserves and leased approximately 30% of our mineral reserves from third-party landowners at our Kermit facility. To opine as to the economic viability of our mineral reserves, John T. Boyd Company reviewed our operating cost and revenue per ton data at the time of the proven reserve determination. The sand deposits at our facilities do not require crushing or extensive processing to eliminate clays or other contaminants, enabling us to cost-effectively produce high-quality proppant meeting API specifications.

Summary of Reserves

The following tables provide the tonnage and mesh size characteristics of the proven and probable mineral reserves associated with our Kermit and Monahans facilities as of December 31, 2022, based on $30.00 per ton. Since the commissioning of our wet plants in 2018 through the end of 2022, the actual process yield for both plants is approximately 90%. In general, for every 100 tons of run-of-mine material fed into the plant, 90 tons of saleable product is produced. It should be noted that these actual process yields are slightly different than the overall process yields used to estimate our mineral reserves and our mineral resources. Our mineral reserve estimates utilized the average of all of the core-hole laboratory analysis data for each of our Kermit and Monahans facilities, respectively.

Kermit Facility

	Tons By Classification and Mesh Size (In thousands)								
	Proven			Probable			By Mesh Size		
Control	40/70	70/140	Total	40/70	70/140	Total	40/70	70/140	Total
Owned	78,433	56,554	**134,987**	—	—	**—**	78,433	56,554	**134,987**
Leased	28,580	24,433	**53,013**	2,599	2,232	**4,831**	31,179	26,665	**57,844**
Total	107,013	80,987	**188,000**	2,599	2,232	**4,831**	109,612	83,219	**192,831**

Monahans Facility

	Tons By Classification and Mesh Size (In thousands)								
	Proven			Probable			By Mesh Size		
Control	40/70	70/140	Total	40/70	70/140	Total	40/70	70/140	Total
Leased	70,053	43,454	**113,507**	32,041	19,057	**51,098**	102,094	62,511	**164,605**

Combined Kermit and Monahans Facilities

The following table provides the tonnage and mesh size characteristics of the proven and probable mineral reserves associated with our Kermit and Monahans operations as of December 31, 2022, based on $30.00 per ton, presented on a combined basis.

	Tons By Classification and Mesh Size (In thousands)								
	Proven			Probable			Total		
Facility	40/70	70/140	Total	40/70	70/140	Total	40/70	70/140	Total
Kermit	107,013	80,987	**188,000**	2,599	2,232	**4,831**	109,612	83,219	**192,831**

	Tons By Classification and Mesh Size (In thousands)								
	Proven			Probable			Total		
Facility	40/70	70/140	Total	40/70	70/140	Total	40/70	70/140	Total
Monahans	70,053	43,454	**113,507**	32,041	19,057	**51,098**	102,094	62,511	**164,605**
Total	177,066	124,441	**301,507**	34,640	21,289	**55,929**	211,706	145,730	**357,436**

Drilling density utilized by us to determine proven versus probable mineral reserves is based upon the relative characteristics of the mineral resource field evaluated, including the consistency and density of the mineral resource within the drilling core sample. The target drill-hole spacing utilized by our independent mining engineers and geologists, John T. Boyd Company, to estimate proven and probable mineral reserves are as follows:

- Proven—less than or equal to 1,500 feet
- Probable—less than or equal to 2,500 feet

Material Assumptions:

Estimates of frac sand reserves for our Kermit and Monahans operations were derived contemporaneously with estimates of frac sand resources. To derive an estimate of saleable product tons (proven and probable frac sand reserves), the following modifying factors were applied to the in-place measured and indicated frac sand resources underlying the respective mine plan areas:

- A 95% mining recovery factor which assumes that 5% of the mineable (in-place) frac sand resource will not be recovered for various reasons. Applying this recovery factor to the in-place resource results in the estimated run-of-mine sand tonnage that will be delivered to the wet process plant.
- Overall processing recoveries, based on exploration sample gradation testing, are 80.9% for the Kermit operation, and 87.6% for the Monahans operation. These recovery factors account for removal of out-sized (i.e. larger than 40-mesh and smaller than 140-mesh) sand and losses in the wet processing plant, and minor dry processing plant inefficiencies.

Further information can be found in Section 6.3.1 of our technical report summary prepared by John T. Boyd Company, which is filed as Exhibit 99.1 to the registration statement of which this prospectus forms a part.

Our Resources

A “mineral resource” is defined by Subpart 1300 of Regulation S-K as a concentration or occurrence of material of economic interest in or on the Earth’s crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. Further, mineral resource is a reasonable estimate of mineralization, taking into account relevant factors such as cut-off grade, likely mining dimensions, location or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. Subpart 1300 of Regulation S-K divides resources between “measured mineral resources” and “indicated mineral resources” and “inferred mineral resources,” which are defined as follows:

- *Measured mineral resources*. Resources for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine

planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

- *Indicated mineral resources*. Resources for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.
- *Inferred mineral resources*. Resources for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.

The target drill-hole spacing utilized by our independent mining engineers and geologists, John T. Boyd Company, to estimate measured, indicated and inferred resources are as follows:

- Measured – less than or equal to 1,500 feet
- Indicated – greater than 1,500 feet, but less than or equal to 2,500 feet
- Inferred – greater than 2,500 feet, but less than or equal to 5,000 feet

The following tables set forth the mineral resource estimates, exclusive of mineral reserves, associated with our Kermit and Monahans facilities as of December 31, 2021, based on $30.00 per ton. Since the commissioning of our wet plants in 2018 through the end of 2021, the actual process yield for both plants is approximately 90%. In general, for every 100 tons of run-of-mine (“ROM”) material fed into the plant, 90 tons of saleable product is produced. It should be noted that these actual process yields are slightly different than the overall process yields used to estimate our mineral reserves and our mineral resources. Our mineral reserve estimates utilized the average of all of the core-hole laboratory analysis data for each of our Kermit and Monahans facilities, respectively.

Kermit Facility

Resource Category	Acres	Average Sand Thickness (ft)	Estimated In-Place Frac Sand Tons (in thousands)			
			Owned	Leased	Adverse	Total
Measured	65		—	9,700	—	9,700
Indicated	603		—	95,390	—	95,390
Measured + Indicated	668		—	105,090	—	105,090
Inferred	1,719		38,904	197,750	56,636	293,290
Total	**2,387**	**79**	**38,904**	**302,840**	**56,636**	**398,380**

Monahans Facility

Resource Category	Acres	Average Sand Thickness (ft)	Estimated In-Place Frac Sand Tons (in thousands)		
			Owned	Leased	Total
Measured	454		—	64,144	64,144
Indicated	809		—	108,726	108,726
Measured + Indicated	1,263		—	172,870	172,870
Inferred	8,906		—	1,093,869	1,093,869
Total	**10,169**	**60**	**—**	**1,266,739**	**1,266,739**

As of December 31, 2021, our mineral resources are estimated at 1.665 billion tons (398 million tons at the Kermit facility and 1.267 billion tons at the Monahans facility). As of December 31, 2021, we leased a portion of the resources associated with our Kermit facility and all of the resources associated with our Monahans facility.

Material Assumptions:

Estimates of in-place frac sand resources for the Kermit and Monahans operations were prepared by performing the following tasks:

- Available drilling logs and laboratory testing results were compiled and reviewed to check for accuracy and to support development of each operation's geologic model. The geologic databases utilized for modeling and estimation consist of results from 61 drill holes completed on the Kermit property, and 80 drill holes completed on the Monahans property. The geologic data was imported into Carlson Software, a geologic modeling and mine planning software suite that is widely used and accepted by the mining industry.
- A geologic model of each deposit was created in Carlson Software using industry-standard grid modeling methods well-suited for simple stratigraphic deposits. Each geologic model delineates the top and bottom of the mineable sand horizon and the distribution of the product size fractions across the deposits. The top and bottom of the mineable frac sand interval were established as follows:
  - As there is minimal overburden material across the subject properties, the top of the mineable sand interval was defined as the current ground surface, as provided by a combination of originally flown aerial topographic surveys and recently surveyed active mining pits.
  - The bottom of the mineable sand interval on both properties was determined by Westward geologists and geological technicians present during the various exploration and sampling campaigns. Westward defined the bottom of the mineable sand interval as the depth at which a drilled interval no longer contained sand as either the first or second most abundant material present.
- After reviewing the continuity and variability of the deposit, suitable resource classification criteria were developed and applied.
- Our Independent Mining Engineers then reviewed the proposed initial mining regions identified by Atlas Inc. management. Estimation of the in-place frac sand resources for the Kermit and Monahans properties assumes mining operations using a combination of standard surface excavation equipment for the near-surface initial operations and dredging equipment once initial excavation had reached appropriate depths. This sequence of operating is widely utilized

for mining of similar deposit types. As such, the estimates were subject to the following setbacks and slope requirements:

- 50 ft inside of property lines.
- 100 ft from pipelines.
- 50 ft around the wet and dry process plant areas and main access road/right of way.
- An overall pit wall slope of 3:1 (approximately 19 degrees).

- In-place volumes for each property were estimated from the geologic model within Carlson Software. A dry, in-place, bulk density of 100 pounds per cubic foot was used to calculate the in-place tonnage of frac sand.

Further information can be found in Section 6.2.1 of our technical report summary prepared by John T. Boyd Company, which is filed as Exhibit 99.1 to the registration statement of which this prospectus forms a part.

Our Lease and Royalty Arrangements

We lease a portion of the mineral reserves associated with our Kermit operations and all of the mineral reserves associated with our Monahans operations. The rights and access to the mineral reserves associated with our Monahans operations are secured under a lease agreement (the "Monahans Lease") with Permian Dunes Holding Company, LLC ("Permian Dunes"), a related party and our largest unitholder. In December 2017, we also entered into an agreement (the "Kermit Royalty Agreement") providing Permian Dunes with an overriding royalty interest in revenues we receive from the sale of proppant mined from the mineral reserves associated with our Kermit facility.

Under the Monahans Lease and the Kermit Royalty Agreement, we make monthly royalty payments to Permian Dunes based on a percentage of our of gross monthly sales of proppant. The lease also includes an annual minimum royalty payment in any year of the term following the occurrence of certain specified transactions (a "Capital Event"). Our royalty payments are included in our cost of sales.

Under the terms of the Kermit Royalty Agreement, the agreement would terminate in connection with the consummation of this offering. In contrast, the Monahans Lease, including the royalty payment obligations thereunder, will survive the consummation of this offering or any other Capital Event.

Our Transportation Logistics and Infrastructure

We have established a last-mile logistics network that we believe positions us to be highly responsive to our customers' needs. We believe providing a reliable mine-to-wellhead solution is important because it is the only way to assure customers certainty of supply and efficient delivered cost. Our focus on locating our Kermit and Monahans facilities within close proximity to prolific well activity enables us to deliver proppant directly to our customers' wellheads using traditional pneumatic assets, portable silos, boxes or portable conveyance systems and significantly reduces handling costs and delivery lead times. The integrated nature of our logistics operations allows us to better serve oil and natural gas companies seeking more control over their well completion schedules and overall well performance by directly sourcing sand and limiting operational delays and wellhead costs.

Our Permits

We have obtained numerous federal, state and local permits required for operations at our Kermit and Monahans facilities. The Kermit and Monahans operations are predominantly regulated by the

TCEQ with respect to environmental compliance. The predominant permitting requirement is an active NSR permit for air pollution control. Both of our operations have a current NSR permit which is renewable next in 2028. Other permits held by our operations include Stormwater, Above Ground Storage Tank, Aggregate Production Operation, and a septic permit. A spill prevention plan is also active at both operations.

While resources invested in securing permits are significant, this cost has not had a material adverse effect on our results of operations or financial condition. We cannot assure that existing environmental laws and regulations will not be reinterpreted or revised or that new environmental laws and regulations will not be adopted or become applicable to us. Revised or additional environmental requirements that result in increased compliance costs or additional operating restrictions could have a material adverse effect on our business.

Our Customers and Contracts

Customers

Our core customers include some of the most active and well capitalized oil and natural gas and oilfield services companies in the Permian Basin. We have signed several supply agreements, which mitigates our risk of non-performance by such customers. We provide our products and services to other customers on the spot market.

Contracts

We sell a portion of our produced volumes under supply agreements. As of December 31, 2022, on a volume basis, approximately % of our production capacity for fiscal year 2022 was sold or is contracted under supply agreements during the year ended December 31, 2022. Certain of these agreements require the customer to purchase a specified percentage of its proppant requirements from us. Other agreements require the customer to purchase a minimum volume of proppant from us.

Certain of the Company's contracts contain shortfall provisions that calculate agreed upon fees that are billed when the customer does not meet the minimum purchases over a period of time defined in each contract.

Our proppant is generally sold F.O.B. at our facilities, with title and risk of loss transferring to the customer when we load the proppant onto a truck for delivery to the customer. However, we frequently manage the distribution logistics for our customers and pass on the transportation and related logistics costs to them. Generally, our supply agreements contain customary termination provisions for matters such as bankruptcy-related events and uncured breaches of the applicable agreement.

We also enter into spot contract arrangements whereby we can elect to sell proppant to customers to the extent we have capacity available on our systems at the time of request. We refer to these volumes as spot volumes.

Competition

The market in which we operate is highly competitive. We compete with both public and private regional, local in-basin proppant providers, such as Covia Corp., High Roller Sand, Black Mountain Sand, Freedom Proppants, Hi-Crush Inc., U.S. Silica Inc., Signal Peak Silica, Alpine Silica, Badger Mining Corporation, Vista Proppants and Logistics and Capital Sand Company, among others. Competition in the proppant production industry is based on the geographic location of facilities,

business reputation, operating reliability, available capacity and pricing arrangements for services rendered, among other factors. As we continue to grow our business and provide our services to new customers, we expect to continue to face increasing levels of competition. Our last-mile logistics business also competes with traditional providers of delivery services by truck.

Although some of our competitors may have a broader geographic scope and greater financial and other resources than we may have, we believe that we are competitively well positioned due to our reliability of supply, customer relationships, plant design, premium geology, sustainable environmental and social progress leadership and the proximity of our facilities to customers in the Permian Basin.

Cyclical Nature of Industry

We operate in a highly cyclical industry. The key factor driving demand for our services is the level of drilling activity by oil and natural gas companies, which in turn depends largely on current and anticipated future crude oil and natural gas prices and production depletion rates. Global supply and demand for oil and the domestic supply and demand for natural gas are critical in assessing industry outlook. Demand for oil and natural gas is cyclical and subject to large, rapid fluctuations. Producers tend to increase capital expenditures in response to increases in oil and natural gas prices, which generally results in greater revenues and profits for oilfield service companies such as ours. Increased capital expenditures also ultimately lead to greater production, which historically has resulted in increased supplies and reduced prices which in turn tend to reduce demand for oilfield services. For these reasons, the results of our operations may fluctuate from quarter to quarter and from year to year, and these fluctuations may distort comparisons of results across periods.

Seasonality

In general, seasonal factors do not have a significant and direct effect on our business. However, extreme weather conditions during parts of the year could adversely impact the well-completion activities of our customers, who are oil and natural gas operators, thereby reducing the amount of proppant sold. Our most notable decline in the demand of our product and services occurred in February 2021 as a result of the impact of Winter Storm Uri.

Insurance

We believe that our insurance coverage is customary for the industry in which we operate and adequate for our business. As is customary in the proppant industry, we review our safety equipment and procedures and carry insurance against most, but not all, risks of our business. Losses and liabilities not covered by insurance would increase our costs. To address the hazards inherent in our business, we maintain insurance coverage that includes physical damage coverage, third-party general liability insurance, employer's liability, environmental and pollution and other coverage, although coverage for environmental and pollution-related losses is subject to significant limitations.

Environmental and Occupational Health and Safety Regulations

We are subject to stringent and complex federal, state and local laws and regulations governing the discharge of materials into the environment or otherwise relating to protection of worker health, safety and the environment and natural resources (including threatened and endangered species). Compliance with these laws and regulations may expose us to significant costs and liabilities and cause us to incur significant capital expenditures in our operations. Any failure to comply with these laws and regulations may result in the assessment of administrative, civil and criminal penalties,

imposition of remedial obligations and the issuance of injunctions delaying or prohibiting operations. Private parties may also have the right to pursue legal actions to enforce compliance as well as to seek damages for non-compliance with environmental laws and regulations or for personal injury or property damage. In addition, the trend in environmental regulation has been to place more restrictions on activities that may affect the environment, and thus, any changes in, or more stringent enforcement of, these laws and regulations that result in more stringent and costly pollution control equipment, the occurrence of delays in the permitting or performance of projects, or waste handling, storage, transport, disposal or remediation requirements could have an adverse effect on our operations and financial position.

We do not believe that compliance by us and our customers with federal, state or local environmental laws and regulations will have an adverse effect on our business, financial position or results of operations or cash flows. We cannot assure you, however, that future events, such as changes in existing laws or enforcement policies, the enactment or promulgation of new laws or regulations or the development or discovery of new facts or conditions adverse to our operations will not cause us to incur significant costs. The following is a discussion of material environmental and worker health and safety laws, as amended from time to time, that relate to our operations or those of our customers that could have an adverse effect on our business.

Worker Health and Safety

We are subject to the requirements of the OSHA, and comparable state statutes that regulate the protection of the health and safety of workers. In addition, the OSHA hazard communication standard requires that information be maintained about hazardous materials used or produced in operations and that this information be provided to employees, state and local government authorities and the public. These laws and regulations are subject to frequent changes and any failure to comply with these laws could lead to the assertion of third-party claims against us, civil or criminal fines and changes in the way we operate our facilities, which one or more events could have an adverse effect on our financial position. Historically, our environmental compliance costs have not had an adverse effect on our results of operations.

Air Emissions

Our operations and the operations of our customers are subject to the CAA and related state and local laws, which restrict the emission of air pollutants and impose permitting, monitoring and reporting requirements on various sources. These regulatory programs may require preconstruction permitting, best available control technology analysis, the installation of emissions abatement equipment, modification of operational practices and obtaining permits or similar authorizations for our operations. Obtaining air emissions permits has the potential to delay the development or continued performance of our operations. Over the next several years, we may be required to incur certain capital expenditures for air pollution control equipment or to address air emissions-related issues as we expand our facilities or develop new ones. Changing and increasingly stricter requirements, future non-compliance or failure to maintain necessary permits or other authorizations could require us to incur substantial costs or suspend or terminate our operations. We could be subject to administrative, civil and criminal penalties as well as injunctive relief for noncompliance with air permits or other requirements of the CAA and comparable state laws and regulations.

Climate Change

In the United States, no comprehensive climate change legislation has been implemented at the federal level. However, following the U.S. Supreme Court finding that GHG emissions constitute a pollutant under the CAA, the EPA has adopted regulations that, among other things, establish

construction and operating permit reviews for emissions from certain large stationary sources, require the monitoring and annual reporting of GHG emissions from certain petroleum and natural gas system sources in the United States, and together with the DOT, implement GHG emissions limits on vehicles manufactured for operation in the United States. It presently appears unlikely that comprehensive climate legislation will be passed by either house of Congress in the near future, although energy legislation and other regulatory initiatives are expected to be proposed that may be relevant to GHG emissions issues. For example in August 2022, U.S. Congress passed, and President Biden signed into law, the Inflation Reduction Act of 2022 which appropriates significant federal funding for renewable energy initiatives and, for the first time ever, imposes a fee on GHG emissions from certain facilities. The emissions fee and funding provisions of the law could increase the operating costs of our customers and accelerate the transition away from fossil fuels, which could in turn adversely affect our business and results of operations.

Additionally, various states and groups of states have adopted or are considering adopting legislation, regulations or other regulatory initiatives that are focused on such areas as GHG cap and trade programs, carbon taxes, reporting and tracking programs, and restriction of emissions. Internationally, the Paris Agreement requires member states to individually determine and submit non-binding emissions reduction targets every five years after 2020. President Biden has recommitted the United States to the Paris Agreement and, in April 2021, announced a goal of reducing the United States' emissions by 50-52% below 2005 levels by 2030. In November 2021, the international community gathered again in Glasgow at COP26, during which multiple announcements were made, including a call for parties to eliminate certain fossil fuel subsidies and pursue further action on non-CO2 GHGs. Relatedly, while at COP26, the United States and European Union jointly announced the launch of the "Global Methane Pledge," which aims to cut global methane pollution at least 30% by 2030 relative to 2020 levels, including "all feasible reductions" in the energy sector. Since its formal launch at COP26, over 150 countries have joined the pledge. The impacts of these orders, pledges, agreements and any legislation or regulation promulgated to fulfill the United States' commitments under the Paris Agreement or other international climate conventions cannot be predicted at this time.

Governmental, scientific, and public concern over the threat of climate change arising from GHG emissions has resulted in increasing political risks in the United States, including climate change related pledges made by certain candidates elected to public office. President Biden has issued several executive orders focused on addressing climate change, including items that may impact our costs to produce, or demand for, oil and natural gas. Additionally, in November 2021, the Biden Administration released "The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050," which establishes a roadmap to net zero emissions in the United States by 2050 through, among other things, improving energy efficiency; decarbonizing energy sources via electricity, hydrogen, and sustainable biofuels; and reducing non-CO2 GHG emissions, such as methane and nitrous oxide. Relatedly, in November 2021, the EPA issued a proposed rule under the CAA that was intended to reduce methane and VOC emissions from the oil and natural gas industry, and in particular the crude oil and natural gas source category, which includes crude oil and natural gas production, as well as natural gas processing, transmission, and storage facilities. In November 2022, the EPA announced a supplemental proposed rulemaking intended to strengthen and expand its November 2021 proposed rule, and to impose more stringent requirements on the natural gas and oil industry. The proposed rule is expected to be finalized in 2023. We cannot predict whether and in what form EPA will finalize these amendments; however, any additional regulation of air emissions from the crude oil and natural gas sector could result in increased expenditures for pollution control equipment, which could impact our customers' operations and negatively impact our business. The Biden Administration is also considering revisions to the leasing and permitting programs for oil and natural gas development on federal lands. For more information, please see "Risk Factors—Risks Related to Environmental, Mining and Other Regulations—*Any restrictions on oil and natural gas development on federal lands has the potential to adversely impact our operations and the operations*

of our customers." Other actions that could be pursued may include the imposition of more restrictive requirements for the establishment of pipeline infrastructure or the permitting of LNG export facilities, as well as more strict GHG emission limitations for oil and natural gas facilities. Litigation risks are also increasing, as a number of entities have sought to bring suit against oil and natural gas companies in state or federal court, alleging, among other things, that such companies created public nuisances by producing fuels that contributed to climate change. Suits have also been brought against such companies under stockholder and consumer protection laws, alleging that companies have been aware of the adverse effects of climate change but failed to adequately disclose those impacts. To the extent these risks materially impact our customers, demand for our products may be reduced.

There are also increasing financial risks for fossil fuel producers as stockholders currently invested in fossil fuel energy companies may elect in the future to shift some or all of their investments into other sectors. Institutional lenders who provide financing to fossil fuel energy companies also have become more attentive to sustainable lending practices and some of them may elect not to provide funding for fossil fuel energy companies. For example, at COP26, GFANZ announced that commitments from over 550 firms around the world had resulted in over $130 trillion in capital committed to net zero goals. The various sub-alliances of GFANZ generally require participants to set short-term, sector-specific targets to transition their financing, investing, and/or underwriting activities to net zero emissions by 2050. There is also a risk that financial institutions will be required to adopt policies that have the effect of reducing the funding provided to the fossil fuel sector. Recently, President Biden signed an executive order calling for the development of a "climate finance plan" and, separately, the Federal Reserve has joined the Network for Greening the Financial System, a consortium of financial regulators focused on addressing climate-related risks in the financial sector. In November 2021, the Federal Reserve issued a statement in support of the efforts of the NGFS to identify key issues and potential solutions for the climate-related challenges most relevant to central banks and supervisory authorities. Limitation of investments in and financings for fossil fuel energy companies could result in the restriction, delay or cancellation of our customers' drilling programs or development and production activities, as well as our own ability to access capital for our projects.

Additionally, in March 2022, the SEC proposed new rules relating to the disclosure of climate-related data, risks and opportunities, including financial impacts, physical and transition risks, related governance and strategy and GHG emissions, for certain public companies. We are currently assessing this rule but at this time we cannot predict the ultimate impact of the rule on our business or those of our customers. To the extent this rule is finalized as proposed, we or our customers could incur increased costs related to the assessment and disclosure of climate-related risks and certain emissions metrics. In addition, enhanced climate disclosure requirements could accelerate the trend of certain stakeholders and lenders restricting or seeking more stringent conditions with respect to their investments in certain carbon intensive sectors.

The adoption and implementation of new or more stringent international, federal or state legislation, regulations or other regulatory initiatives that impose more stringent standards for GHG emissions from the oil and natural gas sector or otherwise restrict the areas in which this sector may produce oil and natural gas or generate GHG emissions could result in increased costs of compliance or costs of consuming, and thereby reduce demand for, oil and natural gas. Additionally, political, litigation and financial risks may result in us or our customers' restricting or cancelling production activities, incurring liability for infrastructure damages as a result of climatic changes, or having an impaired ability to continue to operate in an economic manner. One or more of these developments could have an adverse effect on our and our customers' business, financial condition and results of operations.

As a final note, climate change could have an effect on the severity of weather (including hurricanes, droughts and floods), sea levels, the arability of farmland, water availability and quality, and meteorological patterns. If such effects were to occur, our operations and our customers' development

and production operations have the potential to be adversely affected. Potential adverse effects could include damages to our facilities from powerful winds or flooding in low lying areas, disruption of our and our customers' operations either because of climate related damages to our facilities or in our costs of operation potentially arising from such climatic effects, less efficient or non- routine operating practices necessitated by climate effects or increased costs for insurance coverage in the aftermath of such effects.

Water Discharges

The CWA and analogous state laws impose restrictions and strict controls with respect to the discharge of pollutants, including spills and leaks of oil and other substances, into waters of the United States. The discharge of pollutants into regulated waters, including jurisdictional wetlands, is prohibited, except in accordance with the terms of a permit issued by the EPA or an analogous state agency. The CWA also prohibits the discharge of dredge and fill material in regulated waters, including wetlands, unless authorized by a permit issued by the U.S. Army Corps of Engineers (the "Corps"). Federal and state regulatory agencies can impose administrative, civil and criminal penalties, as well as require remedial or mitigation measures, for non-compliance with discharge permits or other requirements of the CWA and analogous state laws and regulations. In the event of an unauthorized discharge of wastes, we may be liable for penalties and costs.

The scope of regulated waters under the CWA has been subject to substantial controversy. In June 2015, the EPA and the Corps published a final rule attempting to clarify the federal jurisdictional reach over waters of the United States ("WOTUS"); however, following the change in U.S. presidential administrations, there have been several attempts to modify or eliminate this rule. For example, in January 2020, the EPA and the Corps finalized the Navigable Waters Protection Rule, which narrows the definition of "waters of the United States" relative to the WOTUS rule. However, legal challenges to both rules remain pending. In addition, the Biden administration has announced plans to develop its own definition of such waters, and the EPA and the Corps issued a proposed rule in November 2021 to revoke the Navigable Waters Protection Rule ("NWPR") in favor of a pre-2015 definition until a new definition is proposed. In addition, in an April 2020 decision defining the scope of the CWA that was handed down just days after the NWPR was published, the U.S. Supreme Court held that, in certain cases, discharges from a point source to groundwater could fall within the scope of the CWA and require a permit. The Court rejected the EPA's and Corps' assertion that groundwater should be totally excluded from the CWA. The Court heard arguments on further litigation regarding the WOTUS definition in October 2022, with a decision expected in 2023. Therefore, the scope of jurisdiction under the CWA is uncertain at this time, and any increase in scope could result in increased costs or delays with respect to obtaining permits for such activities as dredge and fill operations in wetland areas. The process for obtaining permits has the potential to delay our operations. Spill prevention, control and countermeasure requirements of federal laws require appropriate containment berms and similar structures to help prevent the contamination of navigable waters by a petroleum hydrocarbon tank spill, rupture or leak. In addition, the CWA and analogous state laws require individual permits or coverage under general permits for discharges of storm water runoff from certain types of facilities. Federal and state regulatory agencies can impose administrative, civil and criminal penalties as well as other enforcement mechanisms for non-compliance with discharge permits or other requirements of the CWA and analogous state laws and regulations. The CWA and analogous state laws provide for administrative, civil and criminal penalties for unauthorized discharges and, impose rigorous requirements for spill prevention and response planning, as well as substantial potential liability for the costs of removal, remediation, and damages in connection with any unauthorized discharges.

Hydraulic Fracturing

We supply proppant to the oil and natural gas industry. Hydraulic fracturing is an important common practice that is used to stimulate production of oil and natural gas from low permeability

hydrocarbon bearing subsurface rock formations. The hydraulic fracturing process involves the injection of water, proppant and chemicals under pressure into the formation to fracture the surrounding rock, increase permeability and stimulate production. Although we do not directly engage in hydraulic fracturing activities, our customers purchase our proppant for use in their hydraulic fracturing activities. Hydraulic fracturing is typically regulated by state oil and natural gas commissions and similar agencies; however, the EPA has asserted jurisdiction over hydraulic fracturing activities in some circumstances. The EPA has also promulgated air emission performance standards for production, processing, and transmission equipment in the oil and natural gas sector. The EPA also released a final report in December 2016 assessing the potential adverse impact of hydraulic fracturing to water resources, concluding that activities relating to water consumption, use and disposal associated with hydraulic fracturing may impact drinking water resources under certain circumstances. To date, EPA has taken no further action in response to the December 2016 report. Some states have adopted, and other states are considering adopting, regulations that could impose new or more stringent permitting, disclosure or well construction requirements on hydraulic fracturing operations. State and federal regulatory agencies have also recently focused on a possible connection between the operation of injection wells used for oil and natural gas waste disposal and seismic activity. Similar concerns have been raised that hydraulic fracturing may also contribute to seismic activity. Aside from state laws, local land use restrictions may restrict drilling in general or hydraulic fracturing in particular. Municipalities may adopt local ordinances attempting to prohibit hydraulic fracturing altogether or, at a minimum, allow such fracturing processes within their jurisdictions to proceed but regulating the time, place and manner of those processes. At the same time, certain environmental groups have suggested that additional laws may be needed to more closely and uniformly limit or otherwise regulate the hydraulic fracturing process, and legislation has been proposed by some members of Congress to provide for such regulation.

The adoption of new laws or regulations at the federal or state levels imposing reporting obligations on, or otherwise limiting or delaying, the hydraulic fracturing process could make it more difficult to complete natural gas wells, increase our customers' costs of compliance and doing business and otherwise adversely affect the hydraulic fracturing services they perform, which could negatively impact demand for our proppant. In addition, heightened political, regulatory and public scrutiny of hydraulic fracturing practices could expose us or our customers to increased legal and regulatory proceedings, which could be time-consuming, costly or result in substantial legal liability or significant reputational harm. We could be directly affected by adverse litigation involving us, or indirectly affected if the cost of compliance limits the ability of our customers to operate. Such costs and scrutiny could directly or indirectly, through reduced demand for our proppant, have an adverse effect on our business, financial condition and results of operations.

Non-Hazardous and Hazardous Wastes

The Resource Conservation and Recovery Act ("RCRA") and comparable state laws control the management and disposal of hazardous and non-hazardous waste. These laws and regulations govern the generation, storage, treatment, transfer and disposal of wastes that we generate. In the course of our operations, we generate waste that are regulated as non-hazardous wastes and hazardous wastes, obligating us to comply with applicable standards relating to the management and disposal of such wastes. In addition, drilling fluids, produced waters and most of the other wastes associated with the exploration, development and production of oil or natural gas, if properly handled, are currently exempt from regulation as hazardous waste under RCRA and, instead, are regulated under RCRA's less stringent non-hazardous waste provisions, state laws or other federal laws. However, it is possible that certain oil and natural gas drilling and production wastes now classified as non-hazardous could be classified as hazardous wastes in the future. A loss of the RCRA exclusion for drilling fluids, produced waters and related wastes could result in an increase in our customers' costs to manage and dispose of generated wastes and a corresponding decrease in their drilling operations, which developments could have an adverse effect on our business.

Site Remediation

CERCLA and comparable state laws impose strict, joint and several liability on certain classes of persons that contributed to the release of a hazardous substance into the environment without regard to fault or the legality of the original conduct. These persons include the owner and operator of a disposal site where a hazardous substance release occurred and any company that transported, disposed of or arranged for the transport or disposal of hazardous substances released at the site. Under CERCLA, such persons may be liable for the costs of remediating the hazardous substances that have been released into the environment, for damages to natural resources and for the costs of certain health studies. In addition, where contamination may be present, it is not uncommon for the neighboring landowners and other third parties to file claims for personal injury, property damage and recovery of response costs. We have not received notification that we may be potentially responsible for cleanup costs under CERCLA at any site.

Endangered Species

The ESA restricts activities that may affect endangered or threatened species or their habitats. Similar protections are offered to migratory birds under the MBTA. New or proposed listings of threatened or endangered species has the potential to adversely impact our future operations. For example, the DSL, which is found only in the active and semi-stable shinnery oak dunes of southeastern New Mexico and adjacent portions of Texas (including areas where our proppant production facilities are located), was a candidate species for listing under the ESA by the USFWS for many years. In 2010, the USFWS proposed listing the DSL as an endangered species under the ESA. In response, the Texas Comptroller's office created the Texas Conservation Plan in 2012 to minimize disturbances to the DSL's habitat. In June 2012, the USFWS declined to list the species as endangered under the ESA in part due to oil and natural gas operators and private landowners in the Permian Basin entering into CCAs, whereby parties voluntarily agree to implement mitigation measures, such as habitat avoidance or time and manner operating restrictions so as not to adversely impact the DSL habitat. Recently, however, as a result of increased proppant mining by parties who are not currently parties to CCAs, the Texas Comptroller's Office, USFWS, and environmental groups have voiced concerns about the potential destruction of DSL habitat and harm to the species. This ultimately led to renewed calls to USFWS to list the DSL under the ESA and a twelve-month review is currently pending to determine whether the DSL should be listed. On November 17, 2021, one environmental organization delivered a Sixty-day Notice of Intent to Sue to the DOI and the USFWS for failing to timely list the DSL as endangered. Then, in August 2022, the USFWS agreed, via a stipulated settlement agreement in a federal district court, to make an endangerment or threatened listing determination for the DSL by June 29, 2023. If the DSL is ultimately listed as an endangered or threatened species, our operations and the operations of our customers could be further limited, delayed or, in some circumstances, prohibited altogether, as a result of the imposition of additional restrictions designed to protect the DSL imposed at the time of any listing, and we and our customers could be required to comply with expensive mitigation measures intended to protect the DSL and its habitat. However, in January 2021, USFWS approved a CCAA for the DSL. We were a contributor to and supporter of the CCAA since its inception and have since been accepted into the program. Our participation in the CCAA and our other voluntary conservation measures for the benefit of the DSL reduces the risk of disruptions to our business and operations in the event the DSL is listed. Another species whose recent listing could impact the operations of our customers is the Lesser Prairie-Chicken. In November 2022, the USFWS formally listed two DPSs of the lesser prairie-chicken under the ESA. The Southern DPS, the habitat of which includes portions of southeast New Mexico and western Texas, was listed as endangered, while the Northern DPS, the habitat of which spans from northern Texas, through eastern Oklahoma, and intro southeastern Colorado and southwester Nebraska, was listed as threatened. The listed territory of the Southern DPS could overlap with the operating areas of some our customers, who in turn may be adversely affected by any restrictions

which arose as a result of the endangerment determination. To the extent species are listed under the ESA or similar state laws, or are protected under the MBTA, or previously unprotected species are designated as threatened or endangered in areas where we or our customers operate, this could cause us or our customers to incur increased costs arising from species protection measures and could result in delays or limitations in our or our customers' performance of operations, which could adversely affect or reduce demand for our proppant solutions.

Mining and Workplace Safety

Our proppant production operations will be subject to mining safety regulation. MSHA is the primary regulatory organization governing proppant mining and processing. Accordingly, MSHA regulates quarries, surface mines, underground mines and the industrial mineral processing facilities associated with and located at quarries and mines. The mission of MSHA is to administer the provisions of the Federal Mine Safety and Health Act of 1977 and to enforce compliance with mandatory miner safety and health standards. As part of MSHA's oversight, representatives perform at least two unannounced inspections annually for each above-ground facility. Failure to comply with MSHA's regulations could result in the imposition of civil or criminal penalties and fines.

In addition, our operations are subject to a number of federal and state laws and regulations, including the OSHA and comparable state statutes, whose purpose is to protect the health and safety of workers. Also, OSHA hazard communication standard, the EPA community right-to-know regulations under Title III of the federal Superfund Amendment and Reauthorization Act and comparable state statutes require that information be maintained concerning hazardous materials used or produced in operations and that this information be provided to employees, state and local government authorities and citizens. Violations of OSHA can result in OSHA civil and criminal enforcement. Moreover, the inhalation of respirable crystalline silica is associated with the lung disease silicosis. There is recent evidence of an association between crystalline silica exposure or silicosis and lung cancer and a possible association with other diseases, including immune system disorders such as scleroderma. These health risks have been, and may continue to be, a significant issue confronting the silica industry. In response to these potential concerns, OSHA promulgated a new rule seeking to lower work exposure to crystalline silica. The rule became effective for general industry in 2018. In June 2022, MSHA launched a new enforcement initiative to better protect U.S. miners from health hazards resulting from repeated overexposure to respirable crystalline silica. For more information, please see our Risk Factor titled "Silica-related health issues and legislation, including compliance with existing or future regulations relating to respirable crystalline silica, or litigation could have an adverse effect on our business, reputation or results of operations."

In addition, concerns over silicosis and other potential adverse health effects, as well as concerns regarding potential liability from the use of silica, may have the effect of discouraging our customers' use of our silica products and discouraging our insurers from risk. The actual or perceived health risks of mining, processing and handling silica could adversely affect silica producers, including us, through reduced use of silica products, the threat of product liability or employee lawsuits, increased scrutiny by federal, state and local regulatory authorities of us and our customers or reduced financing sources available to the silica industry.

Environmental Reviews

If permits or other authorizations from the federal government are required, our future operations may be subject to broad environmental review under the National Environmental Policy Act, as amended ("NEPA"). NEPA requires federal agencies to evaluate the environmental impact of all "major federal actions" significantly affecting the quality of the human environment. The granting of a federal permit for a major development project, such as a proppant production operations, may be considered

a “major federal action” that requires review under NEPA. As part of this evaluation, the federal agency considers a broad array of environmental impacts, including, among other things, impacts on air quality, water quality, wildlife (including threatened and endangered species), historic and archeological resources, geology, socioeconomics and aesthetics. NEPA also requires the consideration of alternatives to the project. The NEPA review process, especially the preparation of a full environmental impact statement, can be time consuming and expensive. The purpose of the NEPA review process is to inform federal agencies’ decision-making on whether federal approval should be granted for a project and to provide the public with an opportunity to comment on the environmental impacts of a proposed project. Though NEPA requires only that an environmental evaluation be conducted and does not mandate a particular result, a federal agency could decide to deny a permit or impose certain conditions on its approval, based on its environmental review under NEPA, or a third party could challenge the adequacy of a NEPA review and thereby delay the issuance of a federal permit or approval, which could have an adverse effect on our business. For more information, please see Risk Factors—“Risks Related to Environmental, Mining and Other Regulations—Any restrictions on oil and natural gas development on federal lands has the potential to adversely impact our operations and the operations of our customers.”

Motor Carrier Operations

Among the services we provide, we operate as a motor carrier and therefore are subject to regulation by DOT and various state agencies. These regulatory authorities exercise broad powers, governing activities such as the authorization to engage in motor carrier operations; regulatory safety; hazardous materials labeling, placarding and marking; financial reporting; and certain mergers, consolidations and acquisitions. There are additional regulations specifically relating to the trucking industry, including testing and specification of equipment and product handling requirements. The trucking industry is subject to possible regulatory and legislative changes that may affect the economics of the industry by requiring changes in operating practices or by changing the demand for common or contract carrier services or the cost of providing truckload services. Some of these possible changes include increasingly stringent environmental regulations, changes in the hours of service regulations which govern the amount of time a driver may drive in any specific period and requiring onboard black box recorder devices or limits on vehicle weight and size.

Interstate motor carrier operations are subject to safety requirements prescribed by DOT. Intrastate motor carrier operations are subject to safety regulations that often mirror federal regulations. Such matters as weight and dimension of equipment are also subject to federal and state regulations. DOT regulations also mandate drug testing of drivers. From time to time, various legislative proposals are introduced, including proposals to increase federal, state or local taxes, including taxes on motor fuels, which may increase our costs or adversely impact the recruitment of drivers. We cannot predict whether, or in what form, any increase in such taxes applicable to us will be enacted.

State and Local Regulation

We are subject to a variety of state and local environmental review and permitting requirements. In some cases, the state environmental review may be more stringent than the federal review. Our operations may require state-law based permits in addition to federal permits, requiring state agencies to consider a range of issues, many the same as federal agencies, including, among other things, a project’s impact on wildlife and their habitats, historic and archaeological sites, aesthetics, agricultural operations and scenic areas. The development of new sites and our existing operations also are subject to a variety of local environmental and regulatory requirements, including land use, zoning, building and transportation requirements.

Demand for proppant in the oil and natural gas industry drove a significant increase in the production of proppant. As a result, some local communities expressed concern regarding silica sand mining operations. These concerns have generally included exposure to ambient silica sand dust, truck traffic, water usage and blasting. In response, certain state and local communities have developed or are in the process of developing regulations or zoning restrictions intended to minimize dust from becoming airborne, control the flow of truck traffic, significantly curtail the amount of practicable area for proppant production activities, provide compensation to local residents for potential impacts of proppant production activities and, in some cases, ban issuance of new permits for proppant production activities. To date, we have not experienced any material impact to the development of our proppant production facilities and do not anticipate an impact on future operations as a result of these types of concerns. We would expect this trend to continue as oil and natural gas production increases.

Occupational Safety and Health and other Legal Requirements

We are subject to the requirements of the OSHA and comparable state statutes whose purpose is to protect the health and safety of workers. In addition, the OSHA's hazard communication standard, the EPA's Emergency Planning and Community Right-to-Know Act and comparable state regulations and any implementing regulations require that we organize and/or disclose information about hazardous materials used or produced in our operations and that this information be provided to employees, state and local governmental authorities and citizens. We have an internal program of inspection designed to monitor and enforce compliance with worker safety requirements.

Human Capital and Employees

Our employees are a critical asset which are key to our innovative culture and overall success. We are focused on our high-performance culture through attracting, engaging, developing, retaining and rewarding top talent. We strive to enhance the economic and social well-being of our employees and the communities in which we operate. We are committed to providing a welcoming, inclusive environment for our workforce, with best-in-class training and career development opportunities to enable employees to thrive and achieve their career goals.

As of December 31, 2022, we had a total of 371 employees, of which 108 service our corporate function headquarters and 263 work in field locations. We foster a culture of diversity and inclusivity, and greater than approximately 64% of our workforce is minority and/or female as of December 31, 2022. None of our employees are represented by labor unions or subject to collective bargaining agreements. We consider our employee relations to be good.

Health and Safety

The health, safety, and well-being of our employees is of the utmost importance. We are an industry leader with a proven track record in safety.

We provide employees the option to participate in health and welfare plans, including medical, dental, life, accidental death and dismemberment and short-term and long-term disability insurance plans. We also offer a number of health and wellness programs, including telemedicine, health screens and fitness reimbursement as well as access to the Employee Assistance Program which provides employees and their family members access to professional providers to help navigate challenging life events 24 hours a day/365 days a year.

In response to COVID-19, we adopted enhanced safety measures and practices to protect employee health and safety and continue to follow guidelines from the Centers for Disease Control to protect our employees and minimize the risk of business disruption.

Legal Proceedings

From time to time we may be involved in litigation relating to claims arising out of our operations in the normal course of business. We are not currently a party to any legal proceedings that we believe would have an adverse effect on our financial position, results of operations or cash flows and are not aware of any material legal proceedings contemplated by governmental authorities.

MANAGEMENT

Set forth below are the names, positions and descriptions of the business experience of our executive officers, directors and director nominees:

Name	Age	Position with Atlas Energy Solutions Inc.
Ben M. “Bud” Brigham	63	Executive Chairman, Chief Executive Officer and Director
John Turner	51	President and Chief Financial Officer
Chris Scholla	39	Chief Supply Chain Officer
Dathan C. Voelter	51	General Counsel and Secretary
Jeffrey Allison	59	Executive Vice President, Sales & Marketing
Gayle Burleson	57	Director Nominee
Stephen C. Cole	62	Director Nominee
Stacy Hock	45	Director Nominee
A. Lance Langford	60	Director Nominee
Mark P. Mills	70	Director Nominee
Douglas Rogers	63	Director Nominee
Robb L. Voyles	65	Director Nominee

Directors and Executive Officers

Ben M. “Bud” Brigham—Executive Chairman, Chief Executive Officer and Director. Ben M. “Bud” Brigham is our founder and has served as the Executive Chairman of our board of directors since our inception and as our Chief Executive Officer since August 2022. Mr. Brigham has founded several upstream energy enterprises, including Brigham Exploration in 1990, which completed its IPO in 1997. Mr. Brigham served as its President, Chief Executive Officer and Chairman of the board of directors until its sale to Statoil in December 2011.

In 2012 Mr. Brigham founded Anthem Ventures, LLC, a family office. In that same year he and others founded Brigham Resources, which was subsequently sold to Diamondback (NASDAQ: FANG) in 2017. In 2012 he also co-founded Brigham Minerals to pursue mineral acquisitions in top-tier domestic shale resource plays. Brigham Minerals completed its IPO in 2019, and Mr. Brigham served as its Executive Chairman until its merger with Sitio Royalties (NYSE: STR) in 2022.

In 2017 Mr. Brigham founded Brigham Exploration Company, LLC (the second entity founded by Mr. Brigham with such name) (“Brigham Exploration LLC”), a non-operating company focused on the Permian Basin. BEXP I, LP (“BEXP I”) was initially funded with Mr. Brigham’s capital, with subsequent investments by friends and family and a large institution. In the fourth quarter of 2021, new acreage and working interest acquisitions ceased in BEXP I, and BEXP II, LP commenced acreage and working interest acquisitions, with a larger capitalization including most of the BEXP 1 participants as well as additional institutions.

In 2022 he was a co-founder of Langford Energy Partners LLC, which pursues the acquisition, development and optimization of operated oil and gas properties in top-tier shale resource plays.

Prior to founding Brigham Exploration in 1990, Mr. Brigham served for six years as an exploration geophysicist with Rosewood Resources, Inc., an independent oil and natural gas exploration and production company, and as a seismic data processing geophysicist for Western Geophysical, a provider of 3-D seismic services. Mr. Brigham earned a Bachelor of Science in Geophysics from the University of Texas at Austin. Mr. Brigham is a member of the National Petroleum Council, The Bureau of Economic Geology Visiting Committee and the University of Texas Chancellor’s Council Executive Committee. Mr. Brigham was inducted into the All American Wildcatters in April 2012.

Mr. Brigham was selected to serve on the board of directors due to his knowledge in the industry and leadership of our Company since its inception.

John Turner—President and Chief Financial Officer. John Turner has served as our Chief Financial Officer since April 2017 and our President since November 2022. Mr. Turner has over 20 years of oil and natural gas industry experience. Prior to assuming his current role, Mr. Turner worked in various capacities for both public and private entities, with a focus on corporate finance, business development and strategic planning, including as Chief Financial Officer of Brigham Exploration LLC, Chief Financial Officer of Mediterranean Resources, LLC and Vice President of Brigham Exploration Company. Collectively, Mr. Turner has participated and advised on over $2.0 billion of capital market transactions, including mergers, restructurings and special situations. Mr. Turner received a Bachelor of Business Administration and a Masters of Business Administration from the McCombs School of Business at the University of Texas at Austin.

Chris Scholla—Chief Supply Chain Officer. Chris Scholla currently serves as our Chief Supply Chain Officer and served previously as our Vice President of Supply Chain and Logistics from November 2017 until his promotion to his current role in November of 2022. Mr. Scholla is responsible for our end-to-end supply chain operations, as well as customer service and support. Mr. Scholla led our entry into the oilfield logistics market in 2019 and oversees our strategic logistics growth initiatives. Prior to joining us in 2017, Mr. Scholla worked at Hexion Inc. and DuPont de Nemours, Inc. (NYSE: DD) in a number of business strategy, supply chain, procurement and operations roles. Mr. Scholla has over a decade of proppant experience and almost 20 years of global supply chain experience. He holds a bachelor's degree in Supply Chain & Information Systems from The Pennsylvania State University and a Master of Business Administration with concentrations in operations and finance from the College of William & Mary. He also currently serves on the Board of Directors of the Permian Road Safety Coalition.

Dathan C. Voelter—General Counsel and Secretary. Dathan C. Voelter currently serves as our General Counsel and Secretary and served previously as our Deputy General Counsel and Secretary from April 2019 until his promotion to his current role in December 2021. Prior to joining us, Mr. Voelter served as Managing Counsel and Assistant Secretary of Andeavor and its midstream subsidiary Andeavor Logistics LP from September 2017 until February 2019, shortly after they were acquired by Marathon Petroleum Corp. (NYSE: MPC). Mr. Voelter also served as Associate General Counsel and Chief Compliance Officer of Itron, Inc. (NASD: ITRI) from 2016 to 2017 and held various executive leadership roles at Freescale Semiconductor Ltd. (NYSE: FSL) including Vice President and Chief Securities, Ethics and Compliance Counsel from 2005 until 2016, shortly after Freescale was acquired by NXP Semiconductors N.V. (NASDAQ: NXPI). Previously, Mr. Voelter was an attorney with Vinson & Elkins L.L.P. and he started his professional career as a public accountant with Coopers & Lybrand, L.L.P. Mr. Voelter received a Bachelor of Business Administration in International Business from the University of Texas at Austin and a Doctor of Jurisprudence summa cum laude from Baylor University School of Law.

Jeffrey Allison—Executive Vice President, Sales & Marketing. Jeffrey Allison has served as our Executive Vice President, Sales & Marketing since May 2022. Prior to joining us, Mr. Allison served as President of Allison Energy Consulting, LLC from July 2020 until May 2022. Mr. Allison also served in various roles with Halliburton Company (NYSE: HAL) over a 20-year period, including Mid-Continent Area Vice President from May 2018 until March 2020, where he led Halliburton Company' business delivery in the area with accountability over business development (sales), operations, financial performance, HSE, capital execution and personnel development, and Executive Account Vice President from June 2010 until April 2018, where he provided oversight of strategic clients and accountability of all geographies, products & services, technology and commercial growth. Previously, Mr. Allison held various leadership and strategic roles with Baker Hughes INTEQ GmbH, Afognak

Native Corporation and ConocoPhillips (NYSE: COP) both domestically and internationally and served on several industry advisory boards throughout his career. Mr. Allison currently sits on the Industry Advisory Board of Directors for the University of Oklahoma, and has sat on several industry advisory boards, including the Petroleum Alliance of Oklahoma and the Petroleum Equipment & Services Association of Oklahoma. Mr. Allison received a Bachelor of Science in Petroleum Engineering from the Colorado School of Mines.

Gayle Burleson—Director Nominee. Gayle Burleson will be appointed to serve as a director of our board of directors in connection with this offering. Ms. Burleson served as a director of Brigham Minerals from January 2022 until its merger with Sitio Royalties (NYSE: STR) in December 2022, where she currently serves on the board of directors. Ms. Burleson has served as a director for Select Energy Services, Inc. since 2021, and previously served as a director for privately held Chisholm Energy Holdings, LLC from May 2021 until its acquisition by Earthstone Energy, Inc. (NYSE: ESTE) in February 2022. Ms. Burleson was most recently with Concho Resources Inc. (NYSE: CXO) ("Concho") as the Senior Vice President of Business Development and Land and held that position from May 2017 until Concho's acquisition by ConocoPhillips in January 2021. She was employed for 15 years at Concho in various roles and capacities with ever-increasing leadership responsibilities. Prior to joining Concho , Ms. Burleson served in a number of engineering and operations positions with BTA Oil Producers, LLC, Mobil Oil Corporation, Parker & Parsley Petroleum Company and Exxon Corporation. Ms. Burleson received her B.S. in Chemical Engineering from Texas Tech University. Ms. Burleson was selected to serve on our board of directors in light of her knowledge of the energy industry.

Stephen C. Cole—Director Nominee. Stephen C. Cole will be appointed to serve as a director of our board of directors in connection with this offering. Mr. Cole is an entrepreneur who has led and managed his own businesses in the oil and gas industry since 1982. These businesses include CXC Operating, LLC and Champion Exploration, LP, private energy-exploration companies specializing in the Barnett Shale and 3D seismic throughout Texas and Louisiana, where he has served as President since 2001, Champion Lone Star, LLC, a private exploration & production company operating in Central Basin Platform and Delaware Basin, where he has served as President since 2004, and S. Cole Holdings, LP, where he has served as President since 2014. Mr. Cole pursued his bachelor's degree in Business Administration from Texas Tech University. Mr. Cole was selected to serve on our board of directors in light of his knowledge of the energy industry and familiarity with our predecessor, Atlas LLC.

Stacy Hock—Director Nominee. Stacy Hock will be appointed to serve as a director of our board of directors in connection with this offering. Since 2008, Ms. Hock has been a private investor and philanthropist. Ms. Hock served on the board of directors for Brigham Minerals from January 2022 until its merger with Sitio Royalties (NYSE: STR) in December 2022. Since 2015, Ms. Hock has served on the boards of Aminex Therapeutics, a privately held clinical stage drug development company, and the Texas Public Policy Foundation. She has also served for the last ten years on the board of the African Dream Initiative. Since 2016, she has served on multiple boards associated with the University of Texas, including the Blanton Museum of Art National Leadership Board and The University of Texas at Austin McCombs MBA Advisory Board. In 2021, Ms. Hock joined the University of Austin Board of Advisors. Ms. Hock previously held senior management positions in the software industry, including IBM's WebSphere Software Services business. Ms. Hock received her B.S. in Computer Science and Electrical Engineering from the Massachusetts Institute of Technology, and her M.B.A from the University of Texas in Austin. Ms. Hock was selected to serve on the Board due to her finance and investment experience as a private investor.

A. Lance Langford—Director Nominee. A. Lance Langford will be appointed to serve as a director of our board of directors in connection with this offering. Mr. Langford has served as a director of our predecessor, Atlas LLC, since 2018, and previously served as a director of Brigham Minerals

from August 2020 until its merger with Sitio Royalties (NYSE: STR) in December 2022. Mr. Langford has over 30 years of oil and gas industry experience. He has served as the Chief Executive Officer of Langford Energy Partners I, LLC since 2020. Previously, he was the Chief Executive Officer, Co-Founder, and director of Luxe Energy LLC and Luxe Minerals LLC from 2015 to 2020. Prior to that, Mr. Langford served as Senior Vice President for Equinor ASA (formerly named Statoil ASA) from 2011 to 2015. From 1995 to 2011, Mr. Langford built and led Brigham Exploration's engineering, operations, marketing and midstream departments, ultimately serving as Executive Vice President—Operations at the time the company was purchased by Statoil. He started his engineering career with Burlington Resources Inc. from 1987 to 1995. Mr. Langford earned a Bachelor of Science in Petroleum Engineering from Texas Tech University. Mr. Langford was selected to serve on our board of directors in light of his knowledge of the energy industry and familiarity and experience with our predecessor, Atlas LLC.

Mark P. Mills—Director Nominee. Mark P. Mills will be appointed to serve as a director of our board of directors in connection with this offering. Mr. Mills has been a senior fellow at the Manhattan Institute, an economics and policy research institute, since 2013, and a faculty fellow at Northwestern University's McCormick School of Engineering and Applied Science since 2014. He has also served as a strategic non-operating partner with Montrose Lane (an energy-tech venture fund) since 2017, and Chief Executive Officer of Digital Power Capital LLC, a boutique venture fund he co-founded in 2001 (ceased operation in 2009). Previously, Mr. Mills was chairman and Chief Technology Officer of ICx Technologies, Inc., from 2005 to 2008, aiding in its public offering in 2007. Mr. Mills served in the White House Science Office under President Reagan and subsequently provided science and technology policy counsel to a variety of private-sector firms, the Department of Energy and U.S. research laboratories. Mr. Mills was a technology advisor for Bank of America Securities, Inc. and coauthor of the Huber-Mills Digital Power Report, a tech investment newsletter. Early in his career, Mr. Mills was an experimental physicist and development engineer at Bell Northern Research (Canada's Bell Labs) and at the RCA David Sarnoff Research Center on microprocessors, fiber optics, missile guidance, earning several patents for his work. In 2016, Mr. Mills was named Energy Writer of the Year" by the American Energy Society. Mr. Mills holds a degree in physics from Queen's University, Ontario, Canada. Mr. Mills was selected to serve on our board of directors in light of his management skills and knowledge of the energy and the technology industries.

Douglas G. Rogers—Director Nominee. Douglas G. Rogers will be appointed to serve as a director of our board of directors in connection with this offering. Since 2015, Mr. Rogers has served as the Executive Director and Secretary/Treasurer of The Sealy & Smith Foundation, a charitable organization that has provided John Sealy Hospital and the University of Texas Medical Branch with over $1 billion in funding in furtherance of its mission to provide healthcare on Galveston Island, Texas. Mr. Rogers is also a member of the board of directors of The Sealy & Smith Foundation. Mr. Rogers holds a Bachelor of Business Administration degree from Texas A&M University. Mr. Rogers was selected to serve on our board of directors as a representative of The Sealy & Smith Foundation and because of his background in banking, real estate and investments.

Robb L. Voyles—Director Nominee. Robb L. Voyles will be appointed to serve as a director of our board of directors in connection with this offering. Mr. Voyles has served as a Mediator, Arbitrator and Referee/Special Master with JAMS, the largest private provider of alternative dispute resolution services worldwide since 2021. Mr. Voyles previously served as Executive Vice President, Secretary and Chief Legal Officer at Halliburton Company (NYSE: HAL) ("Halliburton") from 2014 through 2021, where he led the company's litigation, commercial law, mergers and acquisitions, intellectual property, labor and employment and ethics and compliance departments. He was also responsible for Halliburton's corporate governance, directed its enterprise risk management program and guided the company's sustainability and ESG design, practices and reporting. Mr. Voyles also served as Halliburton's interim Chief Financial Officer in 2017. Prior to his tenure at Halliburton, Mr. Voyles spent

26 years with Baker Botts L.L.P., where he was a senior partner and the global chair of the litigation department. Mr. Voyles earned a Juris Doctor degree from the University of Michigan Law School and a Bachelor of Business Administration in accounting from the University of Dayton. Mr. Voyles was selected to serve on our board of directors in light of his experiences in the oil field services industry, and with corporate governance and legal matters.

Status as a Controlled Company

Upon completion of this offering, the Principal Stockholders will initially indirectly own shares of Class A common stock and shares of Class B common stock, representing approximately % of the voting power of our Common Stock (or shares of Class A common stock and shares of Class B common stock if the underwriters' option to purchase additional shares is exercised in full, representing approximately % of the voting power of our Common Stock). Pursuant to the terms of the stockholders' agreement, the Principal Stockholders have agreed to vote their respective shares of Class A and Class B common stock in favor of the election of each of the director nominees designated by Mr. Brigham or his affiliates. See "Certain Relationships and Related Party Transactions—Stockholders' Agreement." As a result, we expect to be a controlled company within the meaning of the NYSE's corporate governance standards. Under the rules of the NYSE, a controlled company is not required to have a majority of independent directors or to maintain an independent compensation or nominating and governance committee. We expect to have seven (7) independent directors upon the closing of this offering, which constitutes a majority of the directors on our board.

If at any time we cease to be a controlled company, we will take all action necessary to comply the rules of the NYSE.

Composition of Our Board of Directors

Our board of directors currently consists of one member. Upon the closing of this offering, it is anticipated that we will have eight directors, and we plan to appoint one additional director within one year of the listing of our common stock on the NYSE.

In connection with this offering, we will enter into a stockholders' agreement with the Principal Stockholders. The stockholders' agreement provides Mr. Brigham or his affiliates with the right to designate certain numbers of nominees to our board of directors so long as such Principal Stockholders and their affiliates collectively beneficially own specified percentages of the outstanding shares of our Class A and Class B common stock. Additionally, the stockholders' agreement provides that the Principal Stockholders agree to cause their respective shares of Class A and Class B common stock to be voted in favor of the election of each of the director nominees designated by Mr. Brigham or his affiliates. See "Certain Relationships and Related Party Transactions—Stockholders' Agreement." Each of the eight initial director nominees expected to serve on our board of directors have been nominated pursuant to the Stockholders' Agreement.

In evaluating director candidates, we will assess whether a candidate possesses the integrity, judgment, knowledge, experience, skills and expertise that are likely to enhance the board's ability to manage and direct our affairs and business, including, when applicable, to enhance the ability of committees of the board to fulfill their duties. We are in the process of identifying individuals who meet these standards and the relevant independence requirements.

Our directors will be divided into three classes serving staggered three-year terms. Class I, Class II and Class III directors will serve until our annual meetings of stockholders in 2024, 2025 and

2026, respectively. Messrs. Brigham and Cole will be assigned to Class I, Messrs. Rogers, Mills and Langford will be assigned to Class II and Mses. Burleson and Hock and Mr. Voyles will be assigned to Class III. At each annual meeting of stockholders held after the initial classification, directors will be elected to succeed the class of directors whose terms have expired. This classification of our board of directors could have the effect of increasing the length of time necessary to change the composition of a majority of the board of directors. In general, at least two annual meetings of stockholders will be necessary for stockholders to effect a change in a majority of the members of the board of directors.

Director Independence

The board of directors is in the process of reviewing the independence of our directors using the independence standards of the NYSE and the SEC. Currently, we anticipate that our board of directors will determine that Messrs. Cole, Langford, Mills and Voyles and Mses. Burleson and Hock are independent within the meaning of NYSE listing standards currently in effect and within the meaning of Section 10A-3 of the Exchange Act.

Committees of the Board of Directors

Following the completion of this offering, the committees of the board of directors will include an audit committee, a compensation committee and a nominating and corporate governance committee.

Audit Committee

We will establish an audit committee prior to the completion of this offering. Rules implemented by the NYSE and the SEC require us to have an audit committee comprised of at least three directors who meet the independence and experience standards established by the NYSE and the Exchange Act, subject to transitional relief during the one-year period following the completion of this offering. Our audit committee will initially consist of Messrs. Voyles and Mills and Ms. Burleson, who are independent under the rules of the SEC. Mr. Voyles will serve as chairman of the Audit Committee. As required by the rules of the SEC and listing standards of the NYSE, the audit committee will consist solely of independent directors. SEC rules also require that a public company disclose whether or not its audit committee has an "audit committee financial expert" as a member. An "audit committee financial expert" is defined as a person who, based on his or her expertise, possesses the attributes outlined in such rules. We anticipate that Mr. Voyles will satisfy the definition of "audit committee financial expert."

This committee will oversee, review, act on and report on various auditing and accounting matters to our board of directors, including the selection of our independent accountants, the scope of our annual audits, fees to be paid to the independent accountants, the performance of our independent accountants and our accounting practices. In addition, the audit committee will oversee our compliance programs relating to legal and regulatory requirements. We expect to adopt an audit committee charter defining the committee's primary duties in a manner consistent with the rules of the SEC and the NYSE or market standards.

Compensation Committee

We will establish a compensation committee of our board of directors prior to the completion of this offering. The members of our compensation committee will be Messrs. Langford and Mills and Mses. Burleson and Hock. Ms. Burleson will serve as chairman of the compensation committee.

Our board of directors has determined that each of Messrs. Langford and Mills and Mses. Burleson and Hock are independent. We will adopt a compensation committee charter, which will detail the principal functions of the compensation committee, including:

- reviewing and approving on an annual basis the corporate goals and objectives relevant to our Chief Executive Officer's compensation, evaluating our Chief Executive Officer's performance in light of such goals and objectives and determining and approving the remuneration (if any) of our Chief Executive Officer based on such evaluation;
- reviewing and approving the compensation of all of our other Section 16 executive officers; reviewing our executive compensation policies and plans;
- implementing and administering our incentive compensation equity-based remuneration plans;
- assisting management in complying with our proxy statement and annual report disclosure requirements;
- approving all special perquisites, special cash payments and other special compensation and benefit arrangements for our executive officers and employees; and
- producing a report on executive compensation to be included in our annual proxy statement; and reviewing, evaluating and recommending changes, if appropriate, to the remuneration for directors.

The charter will also provide that the compensation committee may, in its sole discretion, retain or obtain the advice of a compensation consultant, legal counsel or other adviser and will be directly responsible for the appointment, compensation and oversight of the work of any such adviser. However, before engaging or receiving advice from a compensation consultant, external legal counsel or any other adviser, the compensation committee will consider the independence of each such adviser, including the factors required by NYSE and the SEC.

Nominating and Corporate Governance Committee

We will establish a nominating and corporate governance committee of our board of directors prior to the completion of this offering. The members of our nominating and corporate governance committee will be Messrs. Cole and Langford and Ms. Hock. Mr. Langford will serve as chairman of the nominating and corporate governance committee. Our board of directors has determined that each of Messrs. Cole and Langford and Ms. Hock are independent.

The nominating and corporate governance committee is responsible for overseeing the selection of persons to be nominated to serve on our board of directors. The nominating and corporate governance committee considers persons identified by its members, management, stockholders, investment bankers and others.

Guidelines for Selecting Director Nominees

The guidelines for selecting nominees, which will be specified in a charter to be adopted by us, generally provide that persons to be nominated:

- should have demonstrated notable or significant achievements in business, education or public service;
- should possess the requisite intelligence, education and experience to make a significant contribution to the board of directors and bring a range of skills, diverse perspectives and backgrounds to its deliberations; and

- should have the highest ethical standards, a strong sense of professionalism and intense dedication to serving the interests of the stockholders.

The nominating and corporate governance committee will consider a number of qualifications relating to management and leadership experience, background and integrity and professionalism in evaluating a person's candidacy for membership on the board of directors. The nominating and corporate governance committee may require certain skills or attributes, such as financial or accounting experience, to meet specific board needs that arise from time to time and will also consider the overall experience and makeup of its members to obtain a broad and diverse mix of board members. The nominating and corporate governance committee does not distinguish among nominees recommended by stockholders and other persons.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serve on the board of directors or compensation committee of a company that has an executive officer that serves on our board or compensation committee. No member of our board is an executive officer of a company in which one of our executive officers serves as a member of the board of directors or compensation committee of that company.

Corporate Code of Business Conduct and Ethics

Prior to the completion of this offering, our board of directors will adopt a code of conduct applicable to our employees, directors and officers, in accordance with applicable U.S. federal securities laws and the corporate governance rules of the NYSE. Any waiver of this code may be made only by our board of directors and will be promptly disclosed as required by applicable U.S. federal securities laws and the corporate governance rules of the NYSE.

Corporate Governance Guidelines

Prior to the completion of this offering, our board of directors will adopt corporate governance guidelines in accordance with the corporate governance rules of the NYSE.

EXECUTIVE COMPENSATION

We are currently considered an "emerging growth company," within the meaning of the Securities Act, for purposes of the SEC's executive compensation disclosure rules. In accordance with such rules, we are required to provide a Summary Compensation Table and an Outstanding Equity Awards at Fiscal Year End Table, as well as limited narrative disclosures regarding executive compensation for our last completed fiscal year. Further, our reporting obligations extend only to our Named Executive Officers.

2022 Summary Compensation Table

The following table summarizes the compensation awarded to, earned by or paid to our Named Executive Officers for the fiscal year ended December 31, 2022.

Name and Principal Position	Year	Salary($)	Bonus ($)(1)	All Other Compensation ($)(2)	Total ($)
Ben M. "Bud" Brigham					
Executive Chairman and Chief Executive Officer	2022	$ 0	$ 0	$ 0	$ 0
John Turner					
President and Chief Financial Officer	2022	$ 393,847	$490,000	$ 0	$883,847
Jeffrey Allison (2)					
Executive Vice President, Sales & Marketing	2022	$ 203,885	$103,617	$ 229,411	$536,912
Hunter Wallace (3)					
Former Chief Operating Officer	2022	$ 380,000	$ 60,000	$ 429,150	$869,150

(1) The bonuses disclosed in this column reflect discretionary amounts that were earned by the applicable Named Executive Officers during the 2022 calendar year and paid in the 2022 calendar year.

(2) Amounts reflected in the Salary column for Mr. Allison include his regular base salary as well as holiday pay in the amount of $11,923. The amounts within the All Other Compensation column are comprised of (i) $221,251 in relocation bonuses and expenses; (ii) an automobile allowance of $7,846; and (iii) a phone allowance of $313.

(3) Mr. Wallace transitioned into a consultant role during the 2022 year, as described further below. Amounts reflected within the Salary column for Mr. Wallace include his regular base salary as well as holiday and paid time off in the amount of $65,385 . The amounts within the All Other Compensation column are comprised of a $20,000 in payments made in connection with his consultant transition during 2022, the Company's matching contribution of $9,150 to his 401(k) plan account and both of the $200,000 installments of separation pay, which is described in more detail below.

Outstanding Equity Awards at 2022 Fiscal Year-End

The following table reflects information regarding outstanding equity-based awards held by our Named Executive Officers as of December 31, 2022. Atlas LLC has historically maintained the Atlas Sand Company, LLC Long-Term Incentive Plan (the "ASC Incentive Plan") and Atlas Sand Management Company, LLC has historically maintained the Atlas Sand Management Company, LLC Long Term Incentive Plan (the "ASMC Incentive Plan" and together with the ASC Incentive Plan, the "Incentive Plans"). Our Named Executive Officers were eligible to receive grants of Class P Units under each of the Incentive Plans and the respective LLC Agreements for Atlas LLC and Atlas Sand Management Company, LLC, respectively, which were granted in 2018. The Class P Units were initially granted to the Named Executive Officers for their services to Atlas LLC, Atlas Sand Management Company, LLC and their affiliates at that time, but all service-based requirements that the executives were required to meet in order to receive those potential incentive interests have been satisfied in previous years. The Class P Units operate as profits interests awards, rather than capital interests, and have no voting rights. Mr. Allison was not an employee at the time of the original 2018 grants and, as of December 31, 2022, did not hold any outstanding equity-based compensation awards.

		Option Awards (1)			
Name	Governing Plan	Number of Securities Underlying Unexercised Options (#) Exercisable (2)	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Ben M. “Bud” Brigham	ASC Incentive Plan	25,000	—	N/A	N/A
	ASMC Incentive Plan	25,000	—	N/A	N/A
John Turner	ASC Incentive Plan	10,000	—	N/A	N/A
	ASMC Incentive Plan	10,000	—	N/A	N/A
Hunter Wallace	ASC Incentive Plan	15,000	—	N/A	N/A
	ASMC Incentive Plan	15,000	—	N/A	N/A

(1) We believe that, despite the fact that the Class P Units do not require the payment of an exercise price, they are most similar economically to stock options, and as such, they are properly classified as “options” under the definition provided in Item 402(a)(6)(i) of Regulation S-K as an instrument with an “option-like feature.” Each Class P Unit is granted with a specific hurdle amount, or distribution threshold, and will only provide value to the holder based upon our growth above that hurdle amount.

(2) The Class P Unit awards are reflected as “exercisable” because they were vested as of December 31, 2022, although not yet settled. None of the Named Executive Officers held unvested Class P Units as of the end of the 2022 year.

Additional Narrative Disclosure

Base Salary, Bonus, Welfare and Separation Benefits

We did not maintain employment agreements, severance or change in control agreements with our Named Executive Officers during the 2022 year. The contractual severance benefits that could have been provided to our Named Executive Officers were provided within the Class P Unit arrangements described below. Base salaries were determined by our Executive Chairman based upon the responsibilities of each officer’s role, duties and experience. Annual bonuses are determined at the discretion of our Executive Chairman based upon the success of our operations and the impact of each officer’s service on our success during any given year.

We do not provide our executive officers with material perquisites or benefits that are not provided to our employee population generally, with the exception of an executive level relocation program in the event that we request a new hire to relocate on our behalf. The amounts in the Summary Compensation Table above for Mr. Allison reflect our payments to him under this program in the 2022 year in connection with his entry into our employment. We maintain a 401(k) retirement plan for all eligible employees, including our Named Executive Officers, but do not maintain deferred compensation or pension plan arrangements.

On November 8, 2022, Mr. Wallace began providing services to us in the capacity as a consultant rather than as a full-time employee. In connection with that transition we entered into a separation and release agreement with him. This agreement confirms Mr. Wallace’s entitlement to the cash salary continuation payment previously provided pursuant to the Incentive Plans award agreements described above, which is equal to $400,000, payable in equal installments commensurate with the our normal payroll practices, and to a separation payment of $400,000, payable in two installments on December 1, 2022 and December 31, 2023, which were both paid in December 2022. Further, the Company shall provide Mr. Wallace with monthly payments required to maintain COBRA benefits through December 31, 2024 (unless terminated earlier due to his employment with a new employer). The foregoing are conditioned on Mr. Wallace’s execution of a general release of claims in favor of the Company. In addition, in exchange for his agreement to act as an independent contractor and strategic advisor, the Company has agreed to pay Mr. Wallace a retainer of $5,000 per month until the earlier of December 31, 2024 or the end of the month in which Mr. Wallace is employed by a third-party.

Equity-Based Compensation Awards

The Class P Units reflected in the Outstanding Equity Awards table above were initially granted with a three year vesting schedule, which was fully satisfied for each named executive officer over the first three years following the 2018 grant date, therefore none of the executives above held an unvested or unearned award as of the end of the 2022 calendar year. The Class P Units reflected above were each granted with a hurdle amount, or distribution threshold, which was set at a value that would make the awards a profits interest award under applicable US tax laws. The hurdle amount is calculated at the time of grant as the aggregate amount that could be distributed to the Class P units pursuant to the governing LLC agreement distribution provisions if the applicable granting entity sold all of its assets for fair market value and immediately liquidated, with all debts and liabilities being satisfied in connection with such a liquidation. In other words, if the applicable entity had liquidated on the date of grant of the Class P Units listed above, each holder would have received $0. Each of the Class P Units held by the Named Executive Officers that was granted under the ASC Incentive Plan in 2018 was designed to participate in the return to all classes of units that are required to share profits with the Class P Units, and each Class P Units held by the Named Executive Officers that was granted under the ASMC Incentive Plan in 2018 was designed to participate in the return to all class of units that are required to share profits with the Class P Units. Because the vesting requirements were met in 2020 and the value of the all units at the IPO will exceed the amount of the initial investment made by all unitholders, the Class P Units will receive Exchanged Rights as described below. Therefore the Named Executive Officers now solely hold a right to receive the value of their vested interests when the applicable entities determine to make a distribution.

Under the terms of the award agreements, upon a termination of an officer's employment due to cause, the officer would forfeit all Class P Units held at the time of that termination, whether vested or unvested, for no consideration. If the officer's employment terminated for any other reason, including death or disability, any unvested Class P Units would be forfeited without consideration, while any vested Class P Units would be subject to our right of repurchase. If we exercised a repurchase right, the vested Class P Units would be repurchased from the holder at a purchase price equal to the fair market value of the units on the date of the officer's termination of employment. The fair market value would be determined by us and the officer, although in the event that an agreement of value could not be reached between the parties, an independent appraiser would be engaged to determine the appropriate value. In addition, if the holder of a Class P Unit incurred a termination of employment for any reason other than cause or a voluntary resignation, the officer would receive one year's base salary and benefits that are commensurate with the regular payroll practices of our Company as of the date of the termination of employment.

If a Class P Unit holder engages in certain restricted activities or violates any non-solicitation or noncompetition arrangements at any time during their employment, or within a two year period following the termination of their employment, all Class P Units, whether vested or unvested, may be cancelled without consideration, at the discretion of the administrator of the Incentive Plans.

In connection with this offering, the Class P Units will continue to be held by our Named Executive Officers. As a result of our corporate reorganization more fully described under the heading of "Corporate Reorganization" below, our applicable Named Executive Officers will receive, in exchange for their Class P Units, substantially equivalent securities in one or more of our affiliates (the "Exchanged Rights"). Those affiliate entities will then become responsible for settling and financially satisfying the Exchanged Rights with the applicable Named Executive Officers. The relevant affiliate entities may choose to settle the Exchanged Rights by issuing the Named Executive Officers shares of our common stock, which those entities will hold as a result of our corporate reorganization, but at no time following this offering will we be financially responsible for the settlement of the Exchanged Rights.

Director Compensation

We did not maintain a director compensation program with respect to the 2022 calendar year. As noted above, we expect that the director compensation program for non-employee directors will include a significant element of equity-based compensation awards from the LTIP described below, in order to align the interests of our directors and our stockholders. However, we are currently in discussions regarding the design of the director compensation program that will become effective upon completion of this offering, and have not made any final decisions regarding the details of such a program.

Long Term Incentive Plan

In order to incentivize management members following the completion of this offering, we anticipate that our board of directors will adopt the LTIP for employees, consultants and directors prior to the completion of this offering. Our Named Executive Officers will be eligible to participate in this plan, which will become effective upon the consummation of this offering. We anticipate that the LTIP will provide for the grant of options, stock appreciation rights, restricted stock, restricted stock units, stock awards, dividend equivalents, other stock-based awards, cash awards, substitute awards and performance awards intended to align the interests of service providers (including the Named Executive Officers) with those of our shareholders. The description of the LTIP set forth below is a summary of the material anticipated features of the LTIP. Our board of directors is still in the process of developing, approving and implementing the LTIP and, accordingly, this summary is subject to change. Further, this summary does not purport to be a complete description of all of the anticipated provisions of the LTIP and is qualified in its entirety by reference to the LTIP, the form of which will be filed as an exhibit to this registration statement.

LTIP Share Limits. Subject to adjustment in the event of certain transactions or changes of capitalization in accordance with the LTIP, a total of shares of our common stock will initially be reserved for issuance pursuant to awards under the LTIP. The total number of shares reserved for issuance under the LTIP may be issued pursuant to incentive stock options (which generally are stock options that meet the requirements of Section 422 of the Code). Common stock subject to an award that expires or is canceled, forfeited, exchanged, settled in cash or otherwise terminated without delivery of shares an award will be available for delivery pursuant to other awards under the LTIP.

Individual Share Limits. In a single calendar year, non-employee directors may not be granted awards under the LTIP having a value determined on the date of grant in excess of $750,000; provided that with respect to the first year in which the non-employee director serves on the board, serves on any special committee or acts as a lead director or chairman, awards in excess of that value may be granted to the director.

Administration. The LTIP will be administered by our board of directors, except to the extent our board of directors elects a committee of directors to administer the LTIP, such as our compensation committee (as applicable, the “administrator”). The administrator will have broad discretion to administer the LTIP, including the power to determine the eligible individuals to whom awards will be granted, the number and type of awards to be granted and the terms and conditions of awards. The administrator may also accelerate the vesting or exercise of any award and make all other determinations and to take all other actions necessary or advisable for the administration of the LTIP.

Eligibility. Any individual who is our officer or employee or an officer or employee of any of our affiliates, and any other person who provides services to us or our affiliates, including members of our board of directors, are eligible to receive awards under the LTIP at the discretion of the administrator.

Stock Options. The administrator may grant incentive stock options and options that do not qualify as incentive stock options, except that incentive stock options may only be granted to persons

who are our employees or employees of one of our subsidiaries, in accordance with Section 422 of the Code. The exercise price of a stock option generally cannot be less than 100% of the fair market value of a share of our common stock on the date on which the option is granted and the option must not be exercisable for longer than ten years following the date of grant. In the case of an incentive stock option granted to an individual who owns (or is deemed to own) at least 10% of the total combined voting power of all classes of our capital stock, the exercise price of the stock option must be at least 110% of the fair market value of a share of our common stock on the date of grant and the option must not be exercisable more than five years from the date of grant.

Stock Appreciation Rights ("*SARs*"). A SAR is the right to receive an amount equal to the excess of the fair market value of one share of our common stock on the date of exercise over the grant price of the SAR. The grant price of a SAR generally cannot be less than 100% of the fair market value of a share of our common stock on the date on which the SAR is granted. The term of a SAR may not exceed ten years. SARs may be granted in connection with, or independent of, a stock option. SARs may be paid in cash, common stock or a combination of cash and common stock, as determined by the administrator.

Restricted Stock. Restricted stock is a grant of shares of common stock subject to the restrictions on transferability and risk of forfeiture imposed by the administrator. Dividends accrued prior to vesting will be subject to the same restrictions and risk of forfeiture as the restricted stock with respect to which the dividend was made.

Restricted Stock Units. A restricted stock unit is a right to receive cash, common stock or a combination of cash and common stock at the end of a specified period equal to the fair market value of one share of our common stock on the date of vesting. Restricted stock units may be subject to the restrictions, including a risk of forfeiture, imposed by the administrator.

Stock Awards. A stock award is a transfer of unrestricted shares of our common stock on terms and conditions determined by the administrator.

Dividend Equivalents. Dividend equivalents entitle an individual to receive cash, shares of common stock, other awards, or other property equal in value to dividends or other distributions paid with respect to a specified number of shares of our common stock. Dividend equivalents may be awarded on a free-standing basis or in connection with another award (other than an award of stock options, SARs, restricted stock or a stock award). The administrator may provide that dividend equivalents will be paid or distributed when accrued or at a later specified date, including at the same time and subject to the same restrictions and risk of forfeiture as the award with respect to which the dividends accrue if they are granted in tandem with another award.

Other Stock-Based Awards. Subject to limitations under applicable law and the terms of the LTIP, the administrator may grant other awards related to our common stock. Such awards may include, without limitation, awards that are convertible or exchangeable debt securities, other rights convertible or exchangeable into our common stock, purchase rights for common stock, awards with value and payment contingent upon our performance or any other factors designated by the administrator, and awards valued by reference to the book value of our common stock or the value of securities of, or the performance of, our affiliates.

Cash Awards. The LTIP will permit the grant of awards denominated in and settled in cash as an element of or supplement to, or independent of, any award under the LTIP.

Substitute Awards. Awards may be granted in substitution or exchange for any other award granted under the LTIP or any other right of an eligible person to receive payment from us. Awards may also be granted under the LTIP in substitution for similar awards held by individuals who become eligible persons as a result of a merger, consolidation or acquisition of another entity or the assets of another entity by or with us or one of our affiliates.

Performance Awards. Performance awards represent awards with respect to which a participant's right to receive cash, shares of our common stock, or a combination of both, is contingent upon the attainment of one or more specified performance measures during a specified period. The administrator will determine the applicable performance period, the performance goals and such other conditions that apply to each performance award. The administrator may use any business criteria and other measures of performance it deems appropriate in establishing the performance goals applicable to a performance award.

Recapitalization. In the event of any change in our capital structure or business or other corporate transaction or event that would be considered an equity restructuring, the administrator shall or may (as required by applicable accounting rules) equitably adjust the (i) aggregate number or kind of shares that may be delivered under the LTIP, (ii) the number or kind of shares or amount of cash subject to an award, (iii) the terms and conditions of awards, including the purchase price or exercise price of awards and performance goals, and (iv) the applicable share-based limitations with respect to awards provided in the LTIP, in each case to equitably reflect such event.

Change in Control. Except to the extent otherwise provided in any applicable award agreement, awards will vest upon the occurrence of a change in control. In addition, the event of a change in control or other changes to us or our common stock, the administrator may, in its discretion, (i) accelerate the time of exercisability of an award, (ii) require awards to be surrendered in exchange for a cash payment (including canceling a stock option or SAR for no consideration if it has an exercise price or the grant price less than the value paid in the transaction), or (iii) make any other adjustments to awards that the administrator deems appropriate to reflect the applicable transaction or event.

No Repricing. Except in connection with (i) the issuance of substitute awards granted to new service providers in connection with a transaction or (ii) in connection with adjustments to awards granted under the LTIP as a result of a transaction or recapitalization involving us, without the approval of the stockholders of the Company, the terms of outstanding option or SAR may not be amended to reduce the exercise price or grant price or to take any similar action that would have the same economic result.

Clawback. All awards granted under the LTIP are subject to reduction, cancelation or recoupment under any written clawback policy that we may adopt and that we determine should apply to awards under the LTIP.

Amendment and Termination. The LTIP will automatically expire on the tenth anniversary of its effective date. The administrator may amend or terminate the LTIP at any time, subject to stockholder approval if required by applicable law, rule or regulation, including the rules of the stock exchange on which our shares of common stock are listed. The administrator may amend the terms of any outstanding award granted under the LTIP at any time so long as the amendment would not materially and adversely affect the rights of a participant under a previously granted award without the participant's consent.

Anti-Hedging Policies

We expect to adopt a policy that will prohibit our employees, including all executive officers, and members of our board of directors from engaging in transactions that are considered to hedge or offset the financial impact of holding our common stock.

CORPORATE REORGANIZATION

Atlas LLC was formed on April 20, 2017 for the purpose of being an in-basin, pure-play producer and provider of proppant primarily in the Permian Basin.

Atlas Inc. was incorporated as a Delaware corporation in February 2022. Following this offering and the corporate reorganization described below, (i) Atlas Inc. will be a holding company whose sole material asset will consist of membership interests in Atlas Operating, (ii) Atlas Operating will be a holding company whose sole material asset will be 100% of the membership interests in Atlas LLC and (iii) Atlas LLC will own, directly or indirectly, all of our operating assets. After the consummation of this offering and the corporate reorganization described below, Atlas Inc. will be the managing member of Atlas Operating, will be responsible for all operational, management and administrative decisions relating to Atlas LLC's business and will consolidate the financial results of Atlas LLC and its subsidiaries.

In connection with the completion of this offering, we will engage in the following transactions, which we refer to as the "corporate reorganization":

- a merger will be effected in which Atlas LLC will survive as a wholly owned subsidiary of Atlas Operating;
- HoldCos will hold the Legacy Owners' membership interests in Atlas Operating, which membership interests will be represented by Atlas Units;
- the Legacy Owners will indirectly, through the new holding companies, transfer all or a portion of their Atlas Units and voting rights, as applicable, in Atlas Operating to Atlas Inc. in exchange for shares of Class A common stock and, in the case of Legacy Owners continuing to hold Atlas Units, through the HoldCos shares of Class B common stock (so that such Legacy Owners continuing to hold Atlas Units will, through the HoldCos, hold one share of Class B common stock for each Atlas Unit held by them immediately following this offering); and
- Atlas Inc. will contribute all of the net proceeds received by it in this offering to Atlas Operating in exchange for a number of Atlas Units (such that the total number of Atlas Units held by Atlas Inc. equals the number of shares of Class A common stock outstanding after this offering), and Atlas Operating will further contribute the net proceeds received to Atlas LLC.

In the event we increase or decrease the number of shares of Class A common stock sold in this offering, the number of Atlas Units held by us immediately following this offering will correspondingly increase or decrease, respectively.

Immediately following this offering, each Legacy Owner's ownership interest in any shares of Class A common stock, Class B common stock and/or Atlas Units, as the case may be, will be indirect ownership of such securities by virtue of such Legacy Owner's direct ownership interest in the one or more of the HoldCos, which will be the direct record owners of all such securities.

After giving effect to these transactions and this offering and assuming the underwriters' option to purchase additional shares is not exercised:

- the Legacy Owners will collectively own all of the outstanding shares of Class B common stock and shares of Class A common stock, collectively representing % of the voting power and % of the economic interest of Atlas Inc.;
- Atlas Inc. will own an approximate % interest in Atlas Operating; and
- the Legacy Owners that continue to hold Atlas Units immediately following the corporate reorganization and this offering will collectively own an approximate % interest in Atlas Operating.

If the underwriters' option to purchase additional shares is exercised in full:

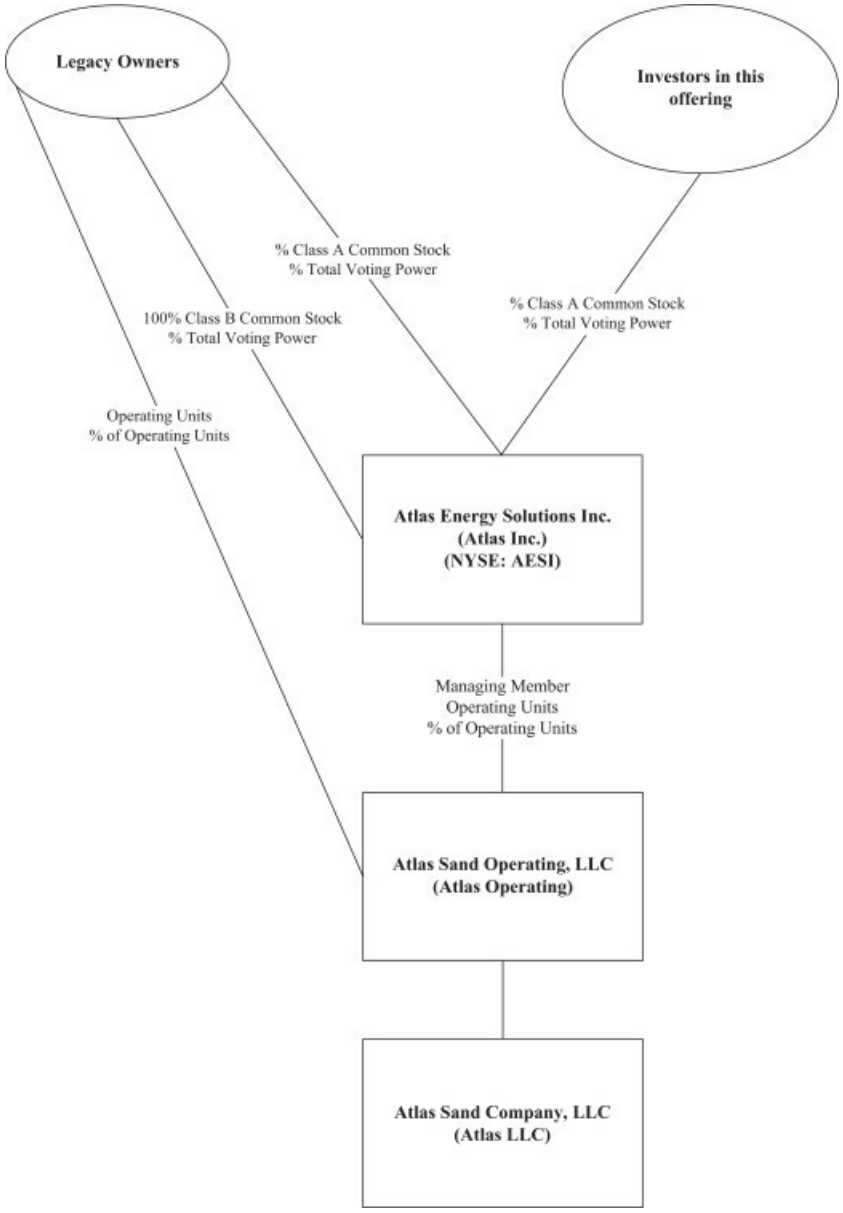
- the Legacy Owners will collectively own all of the outstanding shares of Class B common stock and shares of Class A common stock, collectively representing % of the voting power and % of the economic interest of Atlas Inc.;
- Atlas Inc. will own an approximate % interest in Atlas Operating; and
- the Legacy Owners that continue to hold Atlas Units immediately following the corporate reorganization and this offering will collectively own an approximate % interest in Atlas Operating.

Each share of Class B common stock has no economic rights but entitles its holder to one vote on all matters to be voted on by stockholders generally. Holders of Class A common stock and Class B common stock will vote together as a single class on all matters presented to our stockholders for their vote or approval, except as otherwise required by applicable law or by our amended and restated certificate of incorporation. We do not intend to list our Class B common stock on any exchange.

Our organizational structure following the offering and corporate reorganization is commonly referred to as an "Up-C" structure. Pursuant to this structure, following this offering we will hold a number of Atlas Units equal to the number of shares of Class A common stock issued and outstanding, and the Atlas Unitholders (other than us) will hold a number of Atlas Units equal to the number of shares of Class B common stock issued and outstanding. The Up-C structure was selected in order to (i) allow certain Legacy Owners the option to continue to hold their economic ownership in Atlas LLC in "pass-through" form for U.S. federal income tax purposes through their direct and indirect ownership of Atlas Units, and (ii) potentially allow us to benefit from certain net cash tax savings that we might realize as a result of certain increases in tax basis that may occur as a result of Atlas Inc.'s acquisition (or deemed acquisition for U.S. federal income tax purposes) of Atlas Units pursuant to the exercise of the Redemption Right or the Call Right. In contrast to many offerings by issuers choosing an Up-C structure, we have made the decision not to enter into a tax receivable agreement with the Legacy Owners with respect to any such cash tax savings we might realize, which we believe provides for increased alignment between us and our stockholders over the long term.

Following this offering, under the Atlas Operating LLC Agreement, the Atlas Unitholders, other than Atlas Inc., will, subject to certain limitations, have the Redemption Right to cause Atlas Operating to acquire all or a portion of their Atlas Units for, at Atlas Operating's election, (i) shares of our Class A common stock at a redemption ratio of one share of Class A common stock for each Atlas Unit redeemed, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (ii) an equivalent amount of cash. We will determine whether to issue shares of Class A common stock or cash based on facts in existence at the time of the decision, which we expect would include the relative value of the Class A common stock (including the trading prices for the Class A common stock at the time), the cash purchase price, the availability of other sources of liquidity (such as an issuance of preferred stock) to acquire the Atlas Units and alternative uses for such cash. Alternatively, upon the exercise of the Redemption Right, Atlas Inc. (instead of Atlas Operating) will have the Call Right to, for administrative convenience, acquire each tendered Atlas Unit directly from the redeeming Atlas Unitholder for, at its election, (x) one share of Class A common stock, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (y) an equivalent amount of cash. In connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right, a corresponding number of shares of Class B common stock will be cancelled. Please see "Certain Relationships and Related Party Transactions—Atlas Operating LLC Agreement."

The following diagram indicates our simplified ownership structure immediately following this offering and the transactions related thereto (assuming the underwriters' option to purchase additional shares is not exercised):



SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of our Class A common stock and Class B common stock that, upon the consummation of this offering and transactions related thereto, will be owned by:

- each person known to us to beneficially own more than 5% of any class of our outstanding voting securities;
- each member of our board of directors and each of our director nominees;
- each of our Named Executive Officers; and
- all of our directors, director nominees and executive officers as a group.

All information with respect to beneficial ownership has been furnished by the respective more than 5% stockholders, directors and Named Executive Officers, as the case may be. Unless otherwise noted, the mailing address of each listed beneficial owner is c/o Atlas Energy Solutions Inc., 5918 W. Courtyard Dr., Suite 500, Austin, Texas 78730. The following table does not reflect any shares of Class A common stock that the more than 5% stockholder, directors and Named Executive Officers may purchase in this offering through the Directed Share Program described in "Underwriting—Directed Share Program."

To the extent that the underwriters sell more than shares of Class A common stock, the underwriters have the option to purchase up to an additional shares from us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Shares Beneficially Owned Prior to the Offering(1)		Shares Beneficially Owned After the Offering (Assuming No Exercise of the Underwriters' Over-Allotment Option)						Shares Beneficially Owned After the Offering (Assuming Full Exercise of the Underwriters' Over-Allotment Option)					
			Class A Common Stock		Class B Common Stock(1)		Combined Voting Power(2)		Class A Common Stock		Class B Common Stock(1)		Combined Voting Power(2)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Over 5% Stockholders														
Atlas Sand Holdings, LLC(3)														
Atlas Sand Holdings II, LLC(4)														
Directors, Director Nominees and Named Executive Officers:														
Ben M. Brigham(5)														
John Turner														
Jeffrey Allison														
Gayle Burleson														
Stephen C. Cole														

	Shares Beneficially Owned Prior to the Offering(1)		Shares Beneficially Owned After the Offering (Assuming No Exercise of the Underwriters' Over-Allotment Option)						Shares Beneficially Owned After the Offering (Assuming Full Exercise of the Underwriters' Over-Allotment Option)					
			Class A Common Stock		Class B Common Stock(1)		Combined Voting Power(2)		Class A Common Stock		Class B Common Stock(1)		Combined Voting Power(2)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Stacy Hock														
A. Lance Langford														
Mark P. Mills														
Douglas G. Rogers														
Robb L. Voyles														
Directors, Director Nominees and Executive Officers as a group (12 persons)														

* Less than 1%.

(1) Subject to the terms of the Atlas Operating LLC Agreement, Atlas Unitholders (other than Atlas Inc.) will have the right to redeem all or a portion of their Atlas Units for Class A common stock (or cash, at Atlas Operating's election) at a redemption ratio of one share of Class A common stock for each Atlas Unit redeemed. In connection with any such redemption of Atlas Units, a corresponding number of shares of Class B common stock will be cancelled. Please see "Certain Relationships and Related Party Transactions—Atlas Operating LLC Agreement." Beneficial ownership of Atlas Units is not reflected as beneficial ownership of shares of our Class A common stock for which such units may be redeemed.

(2) Represents percentage of voting power of our Class A common stock and Class B common stock voting together as a single class. Holders of Atlas Units will hold one share of Class B common stock for each Atlas Unit.

(3) Atlas Sand Holdings, LLC ("Holdings") is the record holder of such shares. Atlas Sand Management Company, LLC ("ASMC") is the managing member of Holdings. Ben M. Brigham is the sole managing member of ASMC. Therefore, ASMC and Mr. Brigham may be deemed to share the right to direct the voting or disposition of the shares held by Holdings. Each of ASMC and Mr. Brigham disclaim beneficial ownership of the shares held by Holdings except to the extent of their pecuniary interest therein, if any.

(4) Atlas Sand Holdings II, LLC ("Holdings II") is the record holder of such shares. Atlas Sand Management Company II, LLC ("ASMC II") is the managing member of Holdings II. Ben M. Brigham is the sole managing member of ASMC II. Therefore, ASMC II and Mr. Brigham may be deemed to share the right to direct the voting or disposition of the shares held by Holdings II. Each of ASMC II and Mr. Brigham disclaim beneficial ownership of the shares held by Holdings II except to the extent of their pecuniary interest therein, if any.

(5) Includes (i) shares held by Holdings and (ii) shares held by Holdings II, of which Mr. Brigham may deemed to have or share beneficial ownership of the shares held thereby as the sole manager of each of ASMC and ASMC II, respectively. Additionally, Mr. Brigham may be deemed to have shared voting power over all securities held by the Principal Stockholders party to the Stockholders' Agreement, in light of his right to designate nominees for election to our board of directors and the obligation of the Principal Stockholders to vote their respective shares in favor of Mr. Brigham's nominees. See the section titled "Certain Relationships and Related Party Transactions—Stockholders' Agreement" herein. Because Mr. Brigham may be deemed to have shared voting power with respect to the shares held by the Principal Stockholders, he may be deemed to be the beneficial owner of such shares. Mr. Brigham disclaims beneficial ownership of the shares held by Holdings, Holdings II and the Principal Stockholders and each of their respective affiliated entities, except to the extent of his pecuniary interest therein, if any.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Atlas Operating LLC Agreement

The Atlas Operating LLC Agreement is filed as an exhibit to the registration statement of which this prospectus forms a part, and the following description of the Atlas Operating LLC Agreement is qualified in its entirety by reference thereto.

Redemption Rights

Following this offering, under the Atlas Operating LLC Agreement, the Atlas Unitholders, other than Atlas Inc., will, subject to certain limitations, have the right, pursuant to the Redemption Right, to cause Atlas Operating to acquire all or a portion of their Atlas Units for, at Atlas Operating's election, (i) shares of our Class A common stock at a redemption ratio of one share of Class A common stock for each Atlas Unit redeemed, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (ii) an equivalent amount of cash. We will determine whether to issue shares of Class A common stock or cash based on facts in existence at the time of the decision, which we expect would include the relative value of the Class A common stock (including the trading prices for the Class A common stock at the time), the cash purchase price, the availability of other sources of liquidity (such as an issuance of preferred stock) to acquire the Atlas Units and alternative uses for such cash. Alternatively, upon the exercise of the Redemption Right, Atlas Inc. (instead of Atlas Operating) will have the right, pursuant to the Call Right, to, for administrative convenience, acquire each tendered Atlas Unit directly from the redeeming Atlas Unitholder for, at its election, (x) one share of Class A common stock, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (y) an equivalent amount of cash. In connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right, a corresponding number of shares of Class B common stock will be cancelled.

As any Legacy Owners that hold Atlas Units cause their Atlas Units to be redeemed, holding other assumptions constant, Atlas Inc.'s membership interest in Atlas Operating will be correspondingly increased, the number of shares of Class A common stock outstanding will be increased, and the number of shares of Class B common stock outstanding will be reduced.

Distributions and Allocations

Under the Atlas Operating LLC Agreement, subject to the obligations of Atlas Operating to make certain tax distributions and to reimburse Atlas Inc. for its corporate and other overhead expenses, we will have the right to determine when distributions will be made to the holders of Atlas Units and the amount of any such distributions. Following this offering, if we authorize a distribution, such distribution will be made to the holders of Atlas Units generally on a pro rata basis in accordance with their respective percentage ownership of Atlas Units. To the extent Atlas Operating has available cash and subject to the terms of any current or future debt instruments, the Atlas Operating LLC Agreement will (i) require Atlas Operating to make pro rata cash distributions to the Atlas Unitholders, including Atlas Inc., in an amount sufficient to allow Atlas Inc. to pay its taxes and (ii) permit Atlas Inc., as managing member of Atlas Operating, to cause Atlas Operating to make additional pro rata distributions to the Atlas Unitholders, including to the Legacy Owners that hold Atlas Units and Atlas Inc., in an amount generally intended to allow such holders (other than Atlas Inc.) to satisfy their respective income tax liabilities with respect to their allocable share of the income of Atlas Operating, based on certain assumptions and conventions, to the extent such liabilities exceed amounts otherwise distributed by Atlas Operating. In addition, the Atlas Operating LLC Agreement will require Atlas Operating to make non-pro rata payments to Atlas Inc. to reimburse it for its corporate and other overhead expenses, which payments will not be treated as distributions under the Atlas Operating LLC Agreement.

Atlas Operating will allocate its net income or net loss for each year to the holders of Atlas Units pursuant to the terms of the Atlas Operating LLC Agreement, and the holders of Atlas Units, including Atlas Inc., will generally incur U.S. federal, state and local income taxes on their share of any net taxable income of Atlas Operating. Net income and losses of Atlas Operating generally will be allocated to the holders of Atlas Units on a pro rata basis in accordance with their respective percentage ownership of Atlas Units, subject to requirements under U.S. federal income tax law that certain items of income, gain, loss or deduction be allocated disproportionately in certain circumstances.

Issuance of Equity

The Atlas Operating LLC Agreement will generally provide that, at any time Atlas Inc. issues a share of its Class A common stock or any other equity security, the net proceeds received by Atlas Inc. with respect to such issuance, if any, shall be concurrently invested in Atlas Operating, and Atlas Operating shall issue to Atlas Inc. one Atlas Unit or other economically equivalent equity interest. Conversely, if at any time any shares of Atlas Inc.'s Class A common stock are redeemed, repurchased or otherwise acquired, Atlas Operating shall redeem, repurchase or otherwise acquire an equal number of Atlas Units held by Atlas Inc., upon the same terms and for the same price as the shares of our Class A common stock are redeemed, repurchased or otherwise acquired.

Competition

Under the Atlas Operating LLC Agreement, the members have agreed that the Principal Stockholders and any member of our board of directors who is not at the time an officer of the Company, and their respective affiliates, will be permitted to engage in business activities or invest in or acquire businesses that may compete with our business or do business with our customers.

Dissolution

Atlas Operating will be dissolved only upon the first to occur of (i) the sale of substantially all of its assets or (ii) an election by us to dissolve the company. Upon dissolution, Atlas Operating will be liquidated and the proceeds from any liquidation will be applied and distributed in the following manner: (a) first, to creditors (including to the extent permitted by law, creditors who are members) in satisfaction of the liabilities of Atlas Operating, (b) second, to establish cash reserves for contingent or unforeseen liabilities, and (c) third, to the Atlas Unitholders in proportion to the number of Atlas Units owned by each of them.

Registration Rights Agreement

In connection with the closing of this offering, we will enter into a registration rights agreement with certain Legacy Owners covering, in the aggregate, approximately % of our Class A and Class B common stock on a combined basis. The agreement will include provisions by which we agree, after the expiration of the lock-up period described below, to register under the U.S. federal securities laws the offer and resale of shares of our Class A common stock (including shares issued in connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right) by such Legacy Owners or certain of their respective affiliates or permitted transferees under the registration rights agreement. These registration rights will be subject to certain conditions and limitations. We will generally be obligated to pay all registration expenses in connection with these registration obligations, regardless of whether a registration statement is filed or becomes effective.

Stockholders' Agreement

In connection with the closing of this offering, we will enter into a stockholders' agreement with the Principal Stockholders. Among other things, the stockholders' agreement will provide the right to designate nominees for election to our board of directors as follows:

- so long as the Principal Stockholders collectively beneficially own greater than 50% of our Class A and Class B common stock (taken together as a single class), Mr. Brigham or his affiliates will have the right to determine the size of our board of directors and designate all members of our board of directors, including the right to designate all individuals to be included in the slate of directors to be nominated by the board of directors for election by the stockholders of the Company;
- so long as the Principal Stockholders collectively beneficially own at least 35% of our Class A and Class B common stock (taken together as a single class), Mr. Brigham or his affiliates will have the right to designate four (4) members of our board of directors, including the right to designate four (4) individuals to be included in the slate of directors to be nominated by the board of directors for election by the stockholders of the Company;
- so long as the Principal Stockholders collectively beneficially own at least 25% but not greater than 35% of our Class A and Class B common stock (taken together as a single class), Mr. Brigham or his affiliates will have the right to designate three (3) members of our board of directors, including the right to designate three (3) individuals to be included in the slate of directors to be nominated by the board of directors for election by the stockholders of the Company;
- so long as the Principal Stockholders collectively beneficially own at least 10% but not greater than 25% of our Class A and Class B common stock (taken together as a single class), Mr. Brigham or his affiliates will have the right to designate two (2) members of our board of directors, including the right to designate two (2) individuals to be included in the slate of directors to be nominated by the board of directors for election by the stockholders of the Company; and
- so long as the Principal Stockholders collectively beneficially own at least 5% but not greater than 10% of our Class A and Class B common stock (taken together as a single class), Mr. Brigham or his affiliates will have the right to designate one (1) member of our board of directors, including the right to designate one (1) individual to be included in the slate of directors to be nominated by the board of directors for election by the stockholders of the Company.

If the authorized size of our board of directors is increased or decreased at any time to constitute other than nine (9) directors, the number of directors that Mr. Brigham or his affiliates is entitled to designate pursuant to the stockholders' agreement will be proportionately increased or decreased, respectively, rounded to the nearest whole number.

Pursuant to the stockholders' agreement, we will be required to take all necessary actions, to the fullest extent permitted by applicable law (including with respect to any fiduciary duties under Delaware law), to cause the election of the nominees designated by Mr. Brigham or his affiliates, and each of the Principal Stockholders will agree to cause its respective shares of Class A and Class B common stock to be voted in favor of the election of each of the nominees designated by Mr. Brigham or his affiliates. Mr. Brigham or his affiliates will be entitled to designate the replacement for any of his respective board designees whose board service terminates prior to the end of such director's term.

In addition, the stockholders' agreement will provide that for so long as Mr. Brigham or his affiliates is entitled to designate any members of our board of directors, we will be required to take all

necessary actions to cause each of the audit committee, compensation committee and nominating and governance committee of our board of directors to include in its membership at least one director designated by Mr. Brigham or his affiliates, except to the extent that such membership would violate applicable securities laws or stock exchange rules.

Furthermore, so long as the Principal Stockholders collectively beneficially own at least a majority of the outstanding shares of our Class A and Class B common stock (taken together as a single class), we have agreed not to take, and will cause our subsidiaries not to take, the following actions (or enter into an agreement to take such actions) without the prior consent of Mr. Brigham or his affiliates, subject to certain exceptions:

- adopting or proposing any amendment, modification or restatement of or supplement to our certificate of incorporation or bylaws;
- increasing or decreasing the size of our board of directors; or
- issuing any equity securities that will rank senior to our Class A and Class B common stock as to voting rights, dividend rights or distribution rights upon liquidation, winding up or dissolution of the Company.

Historical Transactions with Affiliates

Brigham Development—Wyatt's Lodge

On December 10, 2021, Atlas LLC entered into a definitive agreement under which Atlas LLC acquired certain assets from Brigham Development, LLC and BDWTX, LLC in an all-cash transaction valued at $7.0 million. These assets include Wyatt's Lodge, a lodging facility that is used by Permian Basin based personnel and located between our Kermit and Monahans facilities in Kermit, Texas. This transaction is considered an asset acquisition in 2021. By acquiring Wyatt's Lodge, we eliminated approximately $1.5 million of annual rental expense. Brigham Development, LLC an BDWTX, LLC are each owned and controlled by our Executive Chairman and Chief Executive Officer, Bud Brigham.

On August 6, 2018, Atlas LLC entered into a Lease Agreement with BDWTX, LLC for the assets that included Wyatt's Lodge as described above. The Lease Agreement was amended on February 1, 2019 to adjust the terms of the lease payment obligations thereunder. Under the Lease Agreement, as amended, Atlas LLC operated Wyatt's Lodge and made aggregate lease payments equal to approximately $1.5 million and $1.5 million for the years ended December 31, 2021 and 2020, respectively. The Lease Agreement was terminated in December 2021 in connection with the acquisition by Atlas LLC described above, and therefore no payments were made for the year ended December 31, 2022.

Brigham Land Management LLC

Brigham Land Management LLC ("Brigham Land") provides the Company with landman services for certain of our projects and initiatives. The services are provided on a per hour basis at market prices. Brigham Land is owned and controlled by Vince Brigham, an advisor to the Company and the brother of our Executive Chairman and Chief Executive Officer, Bud Brigham. For the years ended December 31, 2022, 2021 and 2020, the Company made aggregate payments to Brigham Land equal to approximately $1.0 million, $0.7 million and $0.5 million, respectively.

Brigham Oil & Gas, LLC

On January 26, 2021, Atlas LLC entered into a Joint Development Agreement with, among others, Brigham Oil & Gas, LLC ("BOG"), which is controlled by our Executive Chairman and Chief

Executive Officer, Bud Brigham. Under the Joint Development Agreement, the Company has agreed to supply sand for certain wells to be drilled and completed by BOG. For the year ended December 31, 2022, we received revenue equal to approximately $0.9 million in the normal course of business and not related to the Joint Development Agreement. For the year ended December 31, 2021, we received revenue under the agreement equal to approximately $0.2 million. There were no sales transactions with BOG for the year ended December 31, 2020.

Brigham Earth, LLC

Brigham Earth, LLC provides the Company with professional and consulting fees as well as access to certain information and software systems. Brigham Earth, LLC is owned and controlled by our Executive Chairman and Chief Executive Officer, Bud Brigham. For the years ended December 31, 2022, 2021 and 2020, the Company made aggregate payments to Brigham Earth, LLC for these services equal to approximately $1.2 million, $1.1 million and $0.5 million, respectively.

BlackGold SPV I LP

On January 30, 2018, Atlas LLC, as borrower, entered into the 2018 Term Loan Credit Facility with BlackGold SPV I LP ("BlackGold SPV"). In connection with its entry into the 2018 Term Loan Credit Facility and the subsequent funding of certain term loans thereunder, Atlas LLC issued to BlackGold SPV certain warrants exercisable for Class D units of Atlas LLC, which BlackGold SPV exercised in full prior to the termination of the 2018 Term Loan Credit Facility in connection with our full repayment of borrowings thereunder on October 20, 2021. BlackGold SPV beneficially owns all of the outstanding Class D units of Atlas LLC, which represent over 5.0% beneficial ownership of Atlas LLC. Please see "Security Ownership of Certain Beneficial Owners and Management."

During the years ended December 31, 2021 and 2020, respectively, the interest rate was 13.0% and 13.0%, the largest aggregate amount of principal outstanding was $189.6 million and $189.6 million, and Atlas LLC made aggregate interest payments of approximately $18.9 million (including $3.0 million paid in kind with the issuance of additional principal) and $23.6 million (including $11.8 million paid in kind). In the years ended December 31, 2021 and 2020, Atlas LLC repaid approximately $192.6 million and $7.3 million of the principal amount of term loans under the 2018 Term Loan Credit Facility, respectively, which, in the case of the year ended December 31, 2021, included approximately $165.3 million of principal that Atlas LLC repaid in connection with the October 2021 payoff and termination described above, as well as approximately $4.5 million in prepayment premiums. The 2018 Term Loan Credit Facility was not outstanding and therefore no principal or interest payments were made during the year ended December 31, 2022.

In a Good Mood, LLC

In a Good Mood, LLC ("In a Good Mood") provides the Company with access, at cost, to reserved space in the Moody Center in Austin, Texas for concerts, sporting events and other opportunities as a benefit to our employees and for business entertainment. In a Good Mood is owned and controlled by our Executive Chairman and Chief Executive Officer, Bud Brigham. For the year ended December 31, 2022, the Company made aggregate payments to In a Good Mood for this access equal to approximately $0.2 million. There were no such payments made during the years ended December 31, 2021 and 2020.

Permian Dunes Holding Company, LLC

The rights and access to the mineral reserves associated with our Monahans operations are secured under the Monahans Lease with Permian Dunes. Permian Dunes is a greater than 5% beneficial owner of Atlas LLC. In December 2017, we also entered into the Kermit Royalty Agreement providing Permian Dunes with an overriding royalty interest in revenues we receive from the sale of proppant mined from the reserves associated with our Kermit facility.

Under the Monahans Lease and the Kermit Royalty Agreement, we make monthly royalty payments to Permian Dunes based on a percentage of our of gross monthly sales of proppant. The lease also includes an annual minimum royalty payment in the amount of $1,000,000 (the "Minimum Annual Royalty Payment") in any year of the term following the occurrence of a Capital Event. Because this offering will constitute a Capital Event under the Monahans Lease, if, during the twelve months following the date of the consummation of this offering, our royalty payments to Permian Dunes do not exceed the Minimum Annual Royalty Payment, we will be obligated to pay to Permian Dunes the difference between the total royalty payments for such year and the Minimum Annual Royalty Payment.

Under the terms of the Kermit Royalty Agreement, the agreement would terminate in connection with the consummation of this offering. In contrast, the Monahans Lease, including the royalty payment obligations thereunder, will survive the consummation of this offering or any other Capital Event.

Permian Dunes is wholly-owned and controlled by The Sealy & Smith Foundation, of which Douglas M. Rogers, a nominee to serve as a director of our board of directors, is the Executive Director, Secretary/Treasurer and a member of the board of directors.

Corporate Reorganization

In connection with our corporate reorganization, we will engage in certain transactions with the Legacy Owners. Please see the section titled "Corporate Reorganization."

Policies and Procedures for Review of Related Party Transactions

A "Related Party Transaction" is a transaction, arrangement or relationship in which we or any of our subsidiaries was, is or will be a participant, the amount of which involved exceeds $120,000, and in which any Related Person had, has or will have a direct or indirect material interest. A "Related Person" means:

- any person who is, or at any time during the applicable period was, one of our directors or one of our executive officers;
- any person who is known by us to be the beneficial owner of more than 5.0% of our Class A common stock;
- any immediate family member of any of the foregoing persons, which means any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law of a director, executive officer or a beneficial owner of more than 5.0% of our Class A common stock and any person (other than a tenant or employee) sharing the household of such director, executive officer or beneficial owner of more than 5.0% of our Class A common stock; and
- any firm, corporation or other entity in which any of the foregoing persons is a partner or principal or in a similar position or in which such person has a 10.0% or greater beneficial ownership interest.

Our board of directors will adopt a written related party transactions policy prior to the completion of this offering. Pursuant to this policy, our audit committee will review all material facts of all Related Party Transactions and either approve or disapprove entry into the Related Party Transaction, subject to certain limited exceptions. In determining whether to approve or disapprove entry into a Related Party Transaction, our audit committee shall take into account, among other factors, the following: (i) whether the Related Party Transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and (ii) the extent of the Related Person's interest in the transaction. Furthermore, the policy requires that all Related Party Transactions required to be disclosed in our filings with the SEC be so disclosed in accordance with applicable laws, rules and regulations.

DESCRIPTION OF CAPITAL STOCK

Upon completion of this offering and related transactions, the authorized capital stock of Atlas Inc. will consist of 1,000,000,000 shares of Class A common stock, $0.01 par value per share, of which shares will be issued and outstanding and 500,000,000 shares of Class B common stock, $0.01 par value per share, of which shares will be issued and outstanding and 500,000,000 shares of preferred stock, $0.01 par value per share, of which no shares will be issued and outstanding.

The following summary of the capital stock and amended and restated certificate of incorporation and bylaws of Atlas Inc. does not purport to be complete and is qualified in its entirety by reference to the provisions of applicable law and to our amended and restated certificate of incorporation and bylaws, which will be filed as exhibits to the registration statement of which this prospectus is a part.

Class A Common Stock

Voting Rights

Holders of shares of Class A common stock are entitled to one vote per share held of record on all matters to be voted upon by the stockholders. The holders of Class A common stock do not have cumulative voting rights in the election of directors. Holders of shares of our Class A common stock and Class B common stock vote together as a single class on all matters presented to our stockholders for their vote or approval, except with respect to the amendment of certain provisions of our amended and restated certificate of incorporation that would alter or change the powers, preferences or special rights of the preferred stock so as to affect them adversely, which amendments must be by a majority of the votes entitled to be cast by the holders of the shares affected by the amendment, voting as a separate class, or as otherwise required by applicable law.

Dividend Rights

Holders of shares of our Class A common stock are entitled to ratably receive dividends when and if declared by our board of directors out of funds legally available for that purpose, subject to any statutory or contractual restrictions on the payment of dividends and to any prior rights and preferences that may be applicable to any outstanding preferred stock.

Liquidation Rights

Upon our liquidation, dissolution, distribution of assets or other winding up, the holders of Class A common stock are entitled to receive ratably the assets available for distribution to the stockholders after payment of liabilities and the liquidation preference of any of our outstanding shares of preferred stock.

Other Matters

The shares of Class A common stock have no preemptive or conversion rights and are not subject to further calls or assessment by us. There are no redemption or sinking fund provisions applicable to the Class A common stock. All outstanding shares of our Class A common stock, including the Class A common stock offered in this offering, are fully paid and non-assessable.

Class B Common Stock

General

In connection with the corporate reorganization and this offering, the Legacy Owners holding Atlas Units immediately following the corporate reorganization and this offering will receive one share of Class B common stock for each such Atlas Unit that they hold. Accordingly, in addition to the number votes with respect to the shares of Class A common stock held by them, such Legacy Owners will have a number of votes in Atlas Inc. equal to the aggregate number of Atlas Units that they hold.

Immediately following this offering, each Legacy Owner's ownership interest in any shares of Class B common stock and/or Atlas Units, as the case may be, will be indirect ownership of such securities by virtue of such Legacy Owner's direct ownership interest in the one or more of the HoldCos, which will be the direct record owners of all such securities.

Voting Rights

Holders of shares of our Class B common stock are entitled to one vote per share held of record on all matters to be voted upon by the stockholders. Holders of shares of our Class A common stock and Class B common stock vote together as a single class on all matters presented to our stockholders for their vote or approval, except with respect to the amendment of certain provisions of our amended and restated certificate of incorporation that would alter or change the powers, preferences or special rights of the preferred stock so as to affect them adversely, which amendments must be by a majority of the votes entitled to be cast by the holders of the shares affected by the amendment, voting as a separate class, or as otherwise required by applicable law.

Dividend Rights

Holders of our Class B common stock do not have any right to receive dividends, unless the dividend consists of shares of our Class B common stock or of rights, options, warrants or other securities convertible or exercisable into or exchangeable for shares of Class B common stock paid proportionally with respect to each outstanding share of our Class B common stock and a dividend consisting of shares of Class A common stock or of rights, options, warrants or other securities convertible or exercisable into or redeemable for shares of Class A common stock on the same terms is simultaneously paid to the holders of Class A common stock.

Liquidation Rights

Holders of our Class B common stock do not have any right to receive a distribution upon a liquidation or winding up of Atlas Inc.

Transfer Restrictions

Shares of Class B common stock may be issued or transferred only in connection with the simultaneous issuance or transfer of an identical number of Atlas Units. Any purported issuance or transfer of shares of Class B common stock not accompanied by an issuance or transfer of the identical number of Atlas Units shall be null and void and of no force or effect.

Lock-Up Provisions

Our amended and restated certificate of incorporation will provide that, subject to customary exceptions, all of the shares of Common Stock held by the Legacy Owners may not be sold, pledged, transferred or otherwise disposed of for 180 days following the consummation of this offering, without the prior written consent of the representatives. Following the expiration of such lock-up restrictions,

the Legacy Owners, subject to compliance with the Securities Act or exceptions therefrom, will be able to freely trade their Class A Common Stock, including any shares issued upon exchange of Atlas Units.

Preferred Stock

Our amended and restated certificate of incorporation authorizes our board of directors, subject to any limitations prescribed by law, without further stockholder approval, to establish and to issue from time to time one or more classes or series of preferred stock, par value $0.01 per share, covering up to an aggregate of shares of preferred stock. Each class or series of preferred stock will cover the number of shares and will have the powers, preferences, rights, qualifications, limitations and restrictions determined by the board of directors, which may include, among others, dividend rights, liquidation preferences, voting rights, conversion rights, preemptive rights and redemption rights. Except as provided by law or in a preferred stock designation, the holders of preferred stock will not be entitled to vote at or receive notice of any meeting of stockholders.

Anti-Takeover Provisions under Section 203 of the Delaware General Corporation Law

We have elected not to be governed by or subject to the provisions of Section 203 of the Delaware General Corporation Law.

Amended and Restated Certificate of Incorporation and Bylaws

Provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective upon the closing of this offering, may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our Class A common stock.

Among other things, upon the completion of this offering, our amended and restated certificate of incorporation and amended and restated bylaws will:

- establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our amended and restated bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting;
- provide our board of directors the ability to authorize undesignated preferred stock. This ability makes it possible for our board of directors to issue, without stockholder approval, preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our Company;
- provide that subject to the rights of the holders of any series of preferred stock to elect directors under specified circumstances and the terms of the stockholders' agreement, the authorized number of directors may be changed only by resolution of the board of directors;

- provide that all vacancies, including newly created directorships, may, except as otherwise required by law or, if applicable, the rights of holders of a series of preferred stock, and subject to the terms of the Stockholders' Agreement, be filled by the affirmative vote of a majority of directors then in office, even if such directors constitute less than a quorum;
- provide that, subject to the terms of the Stockholders' Agreement, our amended and restated bylaws can be amended or repealed at any regular or special meeting of stockholders or by the board of directors;
- provide that, prior to the Trigger Date (such term as defined in our amended and restated certificate of incorporation), any action required or permitted to be taken by the stockholders at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote of stockholders if a consent or consents setting forth the action to be taken is or are signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and is or are delivered to the Corporation. On or after the Trigger Date, any action required or permitted to be taken by the stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing in lieu of a meeting of such stockholders, subject to the rights of the holders of any series of preferred stock with respect to such series;
- provide that our amended and restated certificate of incorporation and amended and restated bylaws may be amended by the affirmative vote of the holders of at least two-thirds of our then-outstanding common stock on or after the Trigger Date, and prior to such time, our amended and restated certificate of incorporation and amended and restated bylaws may be amended by the affirmative vote of the holders of a majority of our then-outstanding common stock;
- provide that special meetings of our stockholders may only be called by the board of directors (pursuant to a resolution adopted by a majority of the board of directors), the chief executive officer or the chairman of the board of directors on or after the Trigger Date, and prior to such time, a special meeting may also be called at the request of the stockholders holding a majority of the outstanding shares entitled to vote;
- provide for our board of directors to be divided into three classes of directors, with each class as nearly equal in number as possible, serving staggered three-year terms, other than directors that may be elected by holders of our preferred stock, if any. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us because it generally makes it more difficult for stockholders to replace a majority of the directors; and
- provide that, subject to the terms of the stockholders' agreement, the affirmative vote of the holders of at least 66 2/3% of the voting power of all then-outstanding common stock entitled to vote generally in the election of directors, voting together as a single class, shall be required to remove any or all of the directors from office and such removal may only be for cause.

Corporate Opportunity

Under our amended and restated certificate of incorporation, to the extent permitted by law:

- the Principal Stockholders and their affiliates have the right to, and have no duty to abstain from, exercising such right to, conduct business with any business that is competitive or in the same line of business as us, do business with any of our clients or customers, or invest or own any interest publicly or privately in, or develop a business relationship with, any business that is competitive or in the same line of business as us;

- if the Principal Stockholders or their affiliates acquire knowledge of a potential transaction that could be a corporate opportunity, they have no duty to offer such corporate opportunity to us; and
- we have renounced any interest or expectancy in, or in being offered an opportunity to participate in, such corporate opportunities.

Forum Selection

Our amended and restated certificate of incorporation will provide that unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the Superior Court of the State of Delaware, or, if the Superior Court of the State of Delaware does not have jurisdiction, the United States District Court for the District of Delaware, in each case, subject to that court having personal jurisdiction over the indispensable parties named defendants therein) will, to the fullest extent permitted by applicable law, be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim for a breach of a fiduciary duty owed by any of our current or former directors, officers, employees or stockholders to us or our stockholders;
- any action asserting a claim arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our bylaws (as either may be amended or restated), or as to which the DGCL confers jurisdiction to the Court of Chancery of the State of Delaware, our amended and restated certificate of incorporation or our bylaws; or;
- any other action asserting a claim against us that is governed by the internal affairs doctrine.

Our amended and restated certificate of incorporation will also provide that, unless we consent in writing to an alternate forum, to the fullest extent permitted by applicable law, the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Notwithstanding the foregoing, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive-forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find the exclusive-forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business.

To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this forum selection provision. This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and such persons. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

Limitation of Liability and Indemnification Matters

Our amended and restated certificate of incorporation will limit the liability of our directors for monetary damages for breach of their fiduciary duty as directors, except for liability that cannot be eliminated under the DGCL. Delaware law provides that directors of a company will not be personally liable for monetary damages for breach of their fiduciary duty as directors, except for liabilities:

- for any breach of their duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for unlawful payment of dividend or unlawful stock repurchase or redemption, as provided under Section 174 of the DGCL; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment, repeal or modification of these provisions will be prospective only and would not affect any limitation on liability of a director for acts or omissions that occurred prior to any such amendment, repeal or modification.

Our amended and restated bylaws will also provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. Our amended and restated bylaws also will permit us to purchase insurance on behalf of any officer, director, employee or other agent for any liability arising out of that person's actions as our officer, director, employee or agent, regardless of whether Delaware law would permit indemnification. We intend to enter into indemnification agreements with each of our current and future directors and officers. These agreements will require us to indemnify these individuals to the fullest extent permitted under Delaware law against liability that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We believe that the limitation of liability provision that will be in our amended and restated certificate of incorporation and the indemnification agreements will facilitate our ability to continue to attract and retain qualified individuals to serve as directors and officers.

Transfer Agent and Registrar

The transfer agent and registrar for our Class A common stock will be American Stock Transfer & Trust Company, LLC.

Listing

We have applied to list our Class A common stock for quotation on the NYSE under the symbol "AESI."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our Class A common stock. Future sales of our Class A common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect the market price of our Class A common stock prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of a substantial number of shares of our Class A common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of our Class A common stock at such time and our ability to raise equity-related capital at a time and price we deem appropriate.

Sales of Restricted Shares

Upon the closing of this offering and related transactions, we will have outstanding an aggregate of shares of Class A common stock. Of these shares, all of the shares of Class A common stock (or shares of Class A common stock if the underwriters' option to purchase additional shares is exercised in full) to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 under the Securities Act. All remaining shares of Class A common stock held by the Legacy Owners through holding companies will be deemed "restricted securities" as such term is defined under Rule 144. The restricted securities were issued and sold by us in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which rules are summarized below.

Following this offering, under the Atlas Operating LLC Agreement, the Atlas Unitholders, other than Atlas Inc., will, subject to certain limitations, have the right, pursuant to the Redemption Right, to cause Atlas Operating to acquire all or a portion of their Atlas Units for, at Atlas Operating's election, (i) shares of our Class A common stock at a redemption ratio of one share of Class A common stock for each Atlas Unit redeemed, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (ii) an equivalent amount of cash. Alternatively, upon the exercise of the Redemption Right, Atlas Inc. (instead of Atlas Operating) will have the right, pursuant to the Call Right, to, for administrative convenience, acquire each tendered Atlas Unit directly from the redeeming Atlas Unitholder for, at its election, (x) one share of Class A common stock, subject to conversion rate adjustments for stock splits, stock dividends, reclassification and other similar transactions, or (y) an equivalent amount of cash. In connection with any redemption of Atlas Units pursuant to the Redemption Right or the Call Right, a corresponding number of shares of Class B common stock will be cancelled. Please see "Certain Relationships and Related Party Transactions—Atlas Operating LLC Agreement." The shares of Class A common stock we issue upon such redemptions would be "restricted securities" as defined in Rule 144 described below. However, upon the closing of this offering, we intend to enter into a registration rights agreement with certain Legacy Owners that will, any time after 180 days from the date of this prospectus, and upon demand by such Legacy Owners, require us to register under the Securities Act certain of these shares of Class A common stock. Please see the section titled "Certain Relationships and Related Party Transactions—Registration Rights Agreement."

As a result of the lock-up agreements described below and the provisions of Rule 144 and Rule 701 under the Securities Act, the shares of our Class A common stock (excluding the shares to be sold in this offering) that will be available for sale in the public market are as follows:

- no shares will be eligible for sale on the date of this prospectus or prior to 180 days after the date of this prospectus; and

- shares will be eligible for sale upon the expiration of the lock-up agreements, beginning 180 days after the date of this prospectus, and when permitted under Rule 144 or Rule 701.

Lock-up Restrictions

We, certain of our security holders, our officers and directors have entered into lock-up agreements pursuant to which, subject to certain exceptions, we and they have agreed with the underwriters, for a period of 180 days after the date of this prospectus, not to directly or indirectly offer, sell, contract to sell or otherwise dispose of or transfer any shares of Class A common stock or any securities, convertible into or exchangeable for shares of Class A common stock, without the prior written consent of the representatives. These agreements also preclude any hedging collar or other transaction designed or reasonably expected to result in a disposition of shares of Class A common stock or securities convertible into or exercisable or exchangeable for shares of Class A common stock. The representatives may, in their sole discretion and at any time without notice, release all or any portion of the securities subject to these agreements. The representatives do not have any present intent or any understanding to release all or any portion of the securities subject to these agreements. Additionally, our amended and restated certificate of incorporation will provide that, subject to customary exceptions, all of the shares of Common Stock held by the Legacy Owners may not be sold, pledged, transferred or otherwise disposed of for 180 days following the consummation of this offering, without the prior written consent of the representatives. Please see the section titled “Underwriting” for a description of these lock-up provisions.

Rule 144

In general, under Rule 144 under the Securities Act as currently in effect, a person (or persons whose shares are aggregated) who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months (including any period of consecutive ownership of preceding non-affiliated holders) would be entitled to sell those shares, subject only to the availability of current public information about us. A non-affiliated person (who has been unaffiliated for at least the past three months) who has beneficially owned restricted securities within the meaning of Rule 144 for at least one year would be entitled to sell those shares without regard to the provisions of Rule 144.

A person (or persons whose shares are aggregated) who is deemed to be an affiliate of ours and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months would be entitled to sell within any three-month period a number of shares that does not exceed the greater of one percent of the then outstanding shares of our Class A common stock or the average weekly trading volume of our Class A common stock reported through the NYSE during the four calendar weeks preceding the filing of notice of the sale. Such sales are also subject to certain manner of sale provisions, notice requirements and the availability of current public information about us.

Rule 701

In general, under Rule 701 under the Securities Act, any of our employees, directors, officers, consultants or advisors who purchase shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of this offering is entitled to sell such shares 90 days after we become subject to the reporting requirements of the Exchange Act in reliance on Rule 144, without having to comply with the holding period requirement of Rule 144 and, in the case of non-affiliates, without having to comply with the public information provision of Rule 144. The SEC

has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after the date of this prospectus.

Stock Issued Under Employee Plans

We intend to file a registration statement on Form S-8 under the Securities Act to register stock issuable under our LTIP. The registration statement on Form S-8 is expected to be filed following the effective date of the registration statement of which this prospectus is a part and will be effective upon filing. Accordingly, shares registered under such registration statement will be available for sale in the open market following the effective date of such registration statement, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described elsewhere in this prospectus.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax considerations related to the purchase, ownership and disposition of our Class A common stock by a non-U.S. holder (as defined below) that holds our Class A common stock as a "capital asset" within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended from time to time (the "Code") (generally, property held for investment). This summary is based on the provisions of the Code, U.S. Treasury regulations promulgated thereunder, administrative rulings and judicial decisions, all as in effect on the date hereof, and all of which are subject to change or differing interpretations, possibly with retroactive effect. We cannot assure you that a change in law will not significantly alter the tax considerations that we describe in this summary. We have not sought any ruling from the U.S. Internal Revenue Service (the "IRS") with respect to the statements made and the positions and conclusions described in the following summary. Such statements, positions and conclusions are not free from doubt, and there can be no assurance that the IRS, your tax advisor, or a court will agree with such statements, positions and conclusions.

This summary does not address all aspects of U.S. federal income taxation that may be relevant to non-U.S. holders in light of their personal circumstances. In addition, this summary does not address the impact of the Medicare surtax on certain net investment income, U.S. federal estate or gift tax laws, any U.S. state or local or non-U.S. tax laws, any tax treaties or any other tax law other than the U.S. federal income tax law. This summary also does not address all U.S. federal income tax considerations that may be relevant to particular non-U.S. holders in light of their personal circumstances or that may be relevant to certain categories of investors that may be subject to special rules, such as:

- banks, insurance companies or other financial institutions;
- tax-exempt or governmental organizations;
- tax-qualified retirement plans;
- "qualified foreign pension funds" as defined in Section 897(l)(2) of the Code (or any entities all of the interests of which are held by a qualified foreign pension fund);
- dealers in securities or foreign currencies;
- persons whose functional currency is not the U.S. dollar;
- traders in securities that use the mark-to-market method of accounting for U.S. federal income tax purposes;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons subject to the alternative minimum tax;
- entities or arrangements treated as partnerships or pass-through entities for U.S. federal income tax purposes or holders of interests therein;
- persons deemed to sell our Class A common stock under the constructive sale provisions of the Code;
- persons that acquired our Class A common stock through the exercise of employee stock options or otherwise as compensation or through a tax-qualified retirement plan;
- certain former citizens or long-term residents of the United States; and
- persons that hold our Class A common stock as part of a straddle, appreciated financial position, synthetic security, hedge, conversion transaction or other integrated investment or risk reduction transaction.

PROSPECTIVE INVESTORS SHOULD CONSULT WITH, AND RELY SOLELY UPON, THEIR OWN TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS (INCLUDING ANY POTENTIAL FUTURE CHANGES THERETO) TO THEIR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR CLASS A COMMON STOCK ARISING UNDER ANY OTHER TAX LAWS, INCLUDING THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY U.S. STATE OR LOCAL OR NON-U.S. TAXING JURISDICTION, OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Non-U.S. Holder Defined

For purposes of this discussion, a "non-U.S. holder" is a beneficial owner of our Class A common stock that is not for U.S. federal income tax purposes a partnership or any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust (i) the administration of which is subject to the primary supervision of a U.S. court and which has one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code) who have the authority to control all substantial decisions of the trust or (ii) which has made a valid election under applicable U.S. Treasury regulations to be treated as a United States person.

If a partnership (including an entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our Class A common stock, the tax treatment of a partner in the partnership generally will depend upon the status of the partner or the partnership, the activities of the partnership and certain determinations made at the partner level. Accordingly, we urge partners in partnerships (including entities or arrangements treated as partnerships for U.S. federal income tax purposes) considering the purchase of our Class A common stock to consult with, and rely solely upon, their own tax advisors regarding the U.S. federal income tax considerations of the purchase, ownership and disposition of our Class A common stock by such partnership.

Distributions

Distributions of cash or other property on our Class A common stock, if any, will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, the distributions will be treated as a non-taxable return of capital to the extent of the non-U.S. holder's tax basis in our Class A common stock (and will reduce tax basis, but not below zero) and thereafter as capital gain from the sale or exchange of such Class A common stock. Please see "—Gain on Sale or Other Taxable Disposition of Class A Common Stock." Subject to the withholding requirements under FATCA (as defined below) and other than with respect to effectively connected dividends, each of which is discussed below, any distribution treated as a dividend paid to a non-U.S. holder on our Class A common stock generally will be subject to U.S. withholding tax at a rate of 30% of the gross amount of the distribution unless an applicable income tax treaty provides for a lower rate. To receive the benefit of a reduced treaty rate, a non-U.S. holder must provide the applicable withholding agent with a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) certifying qualification for the reduced rate.

Any portion of a distribution that is treated as a dividend paid to a non-U.S. holder that is effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, that is treated as attributable to a permanent establishment maintained by the non-U.S. holder in the United States) generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons. Such effectively connected dividends will not be subject to U.S. withholding tax if the non-U.S. holder satisfies certain certification requirements by providing the applicable withholding agent with a properly executed IRS Form W-8ECI certifying eligibility for exemption. If the non-U.S. holder is a corporation for U.S. federal income tax purposes, it may also be subject to a branch profits tax (at a 30% rate or such lower rate as specified by an applicable income tax treaty) on its effectively connected earnings and profits (as adjusted for certain items), which will include effectively connected dividends.

Gain on Sale or Other Taxable Disposition of Class A Common Stock

Subject to the discussions below under "—Backup Withholding and Information Reporting" and "—Additional Withholding Requirements under FATCA," a non-U.S. holder generally will not be subject to U.S. federal income or withholding tax on any gain realized upon the sale or other taxable disposition of our Class A common stock unless:

- the non-U.S. holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met;
- the gain is effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States); or
- our Class A common stock constitutes a United States real property interest by reason of our status as a United States real property holding corporation ("USRPHC") for U.S. federal income tax purposes and as a result such gain is treated as effectively connected with a trade or business conducted by the non-U.S. holder in the United States.

A non-U.S. holder described in the first bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate as specified by an applicable income tax treaty) on the amount of such gain, which generally may be offset by U.S. source capital losses provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

A non-U.S. holder whose gain is described in the second bullet point above or, subject to the exceptions described in the next paragraph, the third bullet point above, generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons unless an applicable income tax treaty provides otherwise. If the non-U.S. holder is a corporation for U.S. federal income tax purposes whose gain is described in the second bullet point above, then such gain would also be included in its effectively connected earnings and profits (as adjusted for certain items), which may be subject to a branch profits tax (at a 30% rate or such lower rate as specified by an applicable income tax treaty).

Generally, a corporation is a USRPHC if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business. We believe that we currently are, and expect to remain for the foreseeable future, a USRPHC for U.S. federal income tax purposes. However, as long as our Class A common stock is and continues to be "regularly traded on an established securities market" (within the meaning of the United States Treasury regulations), only a non-U.S. holder that actually or constructively owns, or owned at any time during the shorter of the

five-year period ending on the date of the disposition or the non-U.S. holder's holding period for the Class A common stock, more than 5% of our Class A common stock will be treated as disposing of a United States real property interest and will be taxable on gain realized on the disposition of our Class A common stock as a result of our status as a USRPHC. If our Class A common stock were not considered to be regularly traded on an established securities market, each non-U.S. holder (regardless of the percentage of stock owned) would be treated as disposing of a U.S. real property interest and would be subject to U.S. federal income tax on a taxable disposition of our Class A common stock (as described in the preceding paragraph), and a 15% withholding tax would apply to the gross proceeds from such disposition.

Non-U.S. holders should consult with, and rely solely upon, their own tax advisors with respect to the application of the foregoing rules to their ownership and disposition of our Class A common stock, including regarding potentially applicable income tax treaties that may provide for different rules.

Backup Withholding and Information Reporting

Any dividends paid to a non-U.S. holder must be reported annually to the IRS and to the non-U.S. holder. Copies of these information returns may be made available to the tax authorities in the country in which the non-U.S. holder resides or is established. Payments of dividends to a non-U.S. holder generally will not be subject to backup withholding if the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form).

Payments of the proceeds from a sale or other disposition by a non-U.S. holder of our Class A common stock effected by or through a U.S. office of a broker generally will be subject to information reporting and backup withholding (at the applicable rate) unless the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) and certain other conditions are met. Information reporting and backup withholding generally will not apply to any payment of the proceeds from a sale or other disposition of our Class A common stock effected outside the United States by a non-U.S. office of a broker. However, unless such broker has documentary evidence in its records that the non-U.S. holder is not a United States person and certain other conditions are met, or the non-U.S. holder otherwise establishes an exemption, information reporting will apply to a payment of the proceeds of the disposition of our Class A common stock effected outside the United States by such a broker if it has certain relationships within the United States.

Backup withholding is not an additional tax. Rather, the U.S. federal income tax liability (if any) of persons subject to backup withholding will be reduced by the amount of tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained, provided that the required information is timely furnished to the IRS.

Additional Withholding Requirements under FATCA

The Foreign Account Tax Compliance Act (Sections 1471 through 1474 of the Code), and the U.S. Treasury regulations and administrative guidance issued thereunder ("FATCA"), impose a 30% withholding tax on any dividends paid on our Class A common stock and, subject to the proposed U.S. Treasury regulations discussed below, on proceeds from sales or other dispositions of shares of our Class A common stock, if paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code) (including, in some cases, when such foreign financial institution or non-financial foreign entity is acting as an intermediary), unless (i) in the case of a foreign financial institution, such institution enters into an agreement with the U.S. government to withhold on certain

payments, and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are non-U.S. entities with U.S. owners); (ii) in the case of a non-financial foreign entity, such entity certifies that it does not have any "substantial United States owners" (as defined in the Code) or provides the applicable withholding agent with a certification identifying the direct and indirect substantial United States owners of the entity (in either case, generally on an IRS Form W-8BEN-E); or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules and provides appropriate documentation (such as an IRS Form W-8BEN-E). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these rules may be subject to different rules. Under certain circumstances, a holder might be eligible for refunds or credits of such taxes. While gross proceeds from a sale or other disposition of our Class A common stock paid after January 1, 2019 would have originally been subject to withholding under FATCA, proposed U.S. Treasury regulations provide that such payments of gross proceeds do not constitute withholdable payments. Taxpayers may generally rely on these proposed U.S. Treasury regulations until they are revoked or final U.S. Treasury regulations are issued. Non-U.S. holders are encouraged to consult with, and rely solely upon, their own tax advisors regarding the effects of FATCA on an investment in our Class A common stock.

INVESTORS CONSIDERING THE PURCHASE OF OUR CLASS A COMMON STOCK SHOULD CONSULT WITH, AND RELY SOLELY UPON, THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS (INCLUDING ANY POTENTIAL FUTURE CHANGES THERETO) TO THEIR PARTICULAR SITUATIONS AND THE APPLICABILITY AND EFFECT OF ANY OTHER TAX LAWS, INCLUDING U.S. FEDERAL ESTATE AND GIFT TAX LAWS AND ANY U.S. STATE OR LOCAL OR NON-U.S. TAX LAWS, AND TAX TREATIES.

CERTAIN ERISA CONSIDERATIONS

The following is a summary of certain considerations associated with the acquisition and holding of our Class A common stock by employee benefit plans that are subject to Title I of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), plans, individual retirement accounts and other arrangements that are subject to Section 4975 of the Code or employee benefit plans that are governmental plans (as defined in Section 3(32) of ERISA), certain church plans (as defined in Section 3(33) of ERISA), non-U.S. plans (as described in Section 4(b)(4) of ERISA) or other plans that are not subject to the foregoing but may be subject to provisions under any other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "Similar Laws"), and entities whose underlying assets are considered to include "plan assets" of any such plan, account or arrangement (each, a "Plan").

This summary is based on the provisions of ERISA and the Code (and related regulations and administrative and judicial interpretations) as of the date of this registration statement. This summary does not purport to be complete, and no assurance can be given that future legislation, court decisions, regulations, rulings or pronouncements will not significantly modify the requirements summarized below. Any of these changes may be retroactive and may thereby apply to transactions entered into prior to the date of their enactment or release. This discussion is general in nature and is not intended to be all inclusive, nor should it be construed as investment or legal advice.

General Fiduciary Matters

ERISA and the Code impose certain duties on persons who are fiduciaries of a Plan subject to Title I of ERISA or Section 4975 of the Code (an "ERISA Plan") and prohibit certain transactions involving the assets of an ERISA Plan and its fiduciaries or other interested parties. Under ERISA and the Code, any person who exercises any discretionary authority or control over the administration of an ERISA Plan or the management or disposition of the assets of an ERISA Plan, or who renders investment advice for a fee or other compensation to an ERISA Plan, is generally considered to be a fiduciary of the ERISA Plan.

In considering an investment in our Class A common stock with a portion of the assets of any Plan, a fiduciary should consider the Plan's particular circumstances and all of the facts and circumstances of the investment and determine whether the acquisition and holding of our Class A common stock is in accordance with the documents and instruments governing the Plan and the applicable provisions of ERISA, the Code or any Similar Law relating to the fiduciary's duties to the Plan, including, without limitation:

- whether the investment is prudent under Section 404(a)(1)(B) of ERISA and any other applicable Similar Laws;
- whether, in making the investment, the ERISA Plan will satisfy the diversification requirements of Section 404(a)(1)(C) of ERISA and any other applicable Similar Laws;
- whether the investment is permitted under the terms of the applicable documents governing the Plan;
- whether the acquisition or holding of our Class A common stock will constitute a "prohibited transaction" under Section 406 of ERISA or Section 4975 of the Code (please see the discussion under "—Prohibited Transaction Issues" below); and
- whether the Plan will be considered to hold, as plan assets, (i) only our Class A common stock or (ii) an undivided interest in our underlying assets (please see the discussion under "—Plan Asset Issues" below).

Prohibited Transaction Issues

Section 406 of ERISA and Section 4975 of the Code prohibit ERISA Plans from engaging in specified transactions involving plan assets with persons or entities who are "parties in interest," within the meaning of ERISA, or "disqualified persons," within the meaning of Section 4975 of the Code, unless an exemption is available. A party in interest or disqualified person who engages in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and the Code. In addition, the fiduciary of the ERISA Plan that engages in such a non-exempt prohibited transaction may be subject to penalties and liabilities under ERISA and the Code. The acquisition and/or holding of our Class A common stock by an ERISA Plan with respect to which the issuer, the initial purchaser, or a guarantor is considered a party in interest or a disqualified person may constitute or result in a direct or indirect prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Code, unless the investment is acquired and is held in accordance with an applicable statutory, class or individual prohibited transaction exemption.

Because of the foregoing, our Class A common stock should not be acquired or held by any person investing "plan assets" of any Plan, unless such acquisition and holding will not constitute a non-exempt prohibited transaction under ERISA and the Code or a similar violation of any applicable Similar Laws.

Plan Asset Issues

Additionally, a fiduciary of a Plan should consider whether the Plan will, by investing in us, be deemed to own an undivided interest in our assets, with the result that we would become a fiduciary of the Plan and our operations would be subject to the regulatory restrictions of ERISA, including its prohibited transaction rules, as well as the prohibited transaction rules of the Code and any other applicable Similar Laws.

The DOL regulations provide guidance with respect to whether the assets of an entity in which ERISA Plans acquire equity interests would be deemed "plan assets" under some circumstances. Under these regulations, an entity's assets generally would not be considered to be "plan assets" if, among other things:

(a) the equity interests acquired by ERISA Plans are "publicly offered securities" (as defined in the DOL regulations)—i.e., the equity interests are part of a class of securities that is widely held by 100 or more investors independent of the issuer and each other, are freely transferable, and are either registered under certain provisions of the federal securities laws or sold to the ERISA Plan as part of a public offering under certain conditions;

(b) the entity is an "operating company" (as defined in the DOL regulations)—i.e., it is primarily engaged in the production or sale of a product or service, other than the investment of capital, either directly or through a majority-owned subsidiary or subsidiaries; or

(c) there is no significant investment by "benefit plan investors" (as defined in the DOL regulations)—i.e., immediately after the most recent acquisition by an ERISA Plan of any equity interest in the entity, less than 25% of the total value of each class of equity interest (disregarding certain interests held by persons (other than benefit plan investors) with discretionary authority or control over the assets of the entity or who provide investment advice for a fee (direct or indirect) with respect to such assets, and any affiliates thereof) is held by ERISA Plans, IRAs and certain other Plans (but not including governmental plans, foreign plans and certain church plans), and entities whose underlying assets are deemed to include plan assets by reason of a Plan's investment in the entity.

Due to the complexity of these rules and the excise taxes, penalties and liabilities that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries, or other persons considering acquiring and/or holding shares of our common stock on behalf of, or with the assets of, any Plan, consult with their counsel regarding the potential applicability of ERISA, Section 4975 of the Code and any Similar Laws to such investment and whether an exemption would be applicable to the acquisition and holding of our Class A common stock. Purchasers of our Class A common stock have the exclusive responsibility for ensuring that their acquisition and holding of our Class A common stock complies with the fiduciary responsibility rules of ERISA and does not violate the prohibited transaction rules of ERISA, the Code or applicable Similar Laws. The sale of our Class A common stock to a Plan is in no respect a representation by us or any of our affiliates or representatives that such an investment meets all relevant legal requirements with respect to investments by any such Plan or that such investment is appropriate for any such Plan.

UNDERWRITING

We and the underwriters named below have entered into an underwriting agreement with respect to shares of our Class A common stock being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares of Class A common stock indicated in the following table.

Underwriters	Number of Shares
Goldman Sachs & Co. LLC	
BofA Securities, Inc.	
Piper Sandler & Co.	
RBC Capital Markets, LLC	
Barclays Capital Inc.	
Citigroup Global Markets Inc.	
Raymond James & Associates, Inc.	
Johnson Rice & Company LLC	
Stephens Inc.	
Capital One Securities, Inc.	
PEP Advisory LLC	
Drexel Hamilton, LLC	
Total	

Analyst Hub Securities, LLC has participated as a member of the selling group in this transaction, through its registered representatives, John Daniel and Sean Mitchell.

The underwriters are committed to take and pay for all of the shares of Class A common stock being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters have an option to buy up to an additional shares of Class A common stock from us to cover sales by the underwriters of a greater number of shares than the total number in the table above. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. After the initial offering of the shares, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

The following table provides information regarding the amount of the underwriting discounts and commissions to be paid to the underwriters by us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share	Total Without Option	With Option
Underwriting discounts and commissions paid by us	$	$	$
Proceeds, before expenses, to us	$	$	$

We estimate that the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $ million. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to $.

The representatives have informed us that the underwriters do not intend to make sales to discretionary accounts.

We, certain of our security holders, our officers and directors have agreed with the underwriters, subject to certain exceptions, not to dispose of or hedge any of their Class A common stock or securities convertible into or exchangeable for shares of Class A common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Goldman Sachs & Co. LLC, BofA Securities Inc. and Piper Sandler & Co. This agreement does not apply to any existing employee benefit plans. Please see the section titled “Shares Eligible for Future Sale” for a discussion of certain transfer restrictions.

Prior to the offering, there has been no public market for the Class A common stock. The initial public offering price will be negotiated among us and our representatives. Among the factors to be considered in determining the initial public offering price of the Class A common stock, in addition to prevailing market conditions, will be our historical performance, estimates of the business potential and our earnings prospects, an assessment of our management and the consideration of the above factors in relation to market valuation of companies in related businesses.

We have applied to list our Class A common stock on NYSE under the symbol “AESI.”

Lock-Up Restrictions

We, certain of our security holders, our officers and directors have entered into lock-up agreements pursuant to which, subject to certain exceptions, we and they have agreed, for a period of 180 days after the date of this prospectus, not to directly or indirectly offer, sell, contract to sell or otherwise dispose of or transfer any shares or any securities convertible into or exchangeable for shares of our capital stock, without the prior written consent of the representatives. Our amended and restated certificate of incorporation will provide that, subject to customary exceptions, all of the shares of Common Stock held by the Legacy Owners may not be sold, pledged, transferred or otherwise disposed of for 180 days following the consummation of this offering, without the prior written consent of the representatives. Following the expiration of such lock-up restrictions, the Legacy Owners, subject to compliance with the Securities Act or exceptions therefrom, will be able to freely trade their Class A Common Stock, including any shares issued upon exchange of Atlas Units. These restrictions also preclude any hedging collar or other transaction designed or reasonably expected to result in a disposition of shares of Class A common stock or securities convertible into or exercisable or exchangeable for shares of Class A common stock. The representatives may, in their sole discretion and at any time without notice, release all or any portion of the securities subject to these restrictions. The representatives do not have any present intent or any understanding to release all or any portion of the securities subject to these restrictions.

Stabilization

In connection with the offering, the underwriters may purchase and sell shares of Class A common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering, and a short position represents the amount of such sales that have not been covered by subsequent purchases. A “covered short position” is a short position that is not greater than the amount of

additional shares for which the underwriters' option described above may be exercised. The underwriters may cover any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. "Naked" short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the Class A common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of Class A common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of our stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the Class A common stock. As a result, the price of the Class A common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected in any trading market.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the prices of our Class A common stock. These transactions may occur on any trading market. If any of these transactions are commenced, they may be discontinued without notice at any time.

Certain Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

For example, Goldman Sachs & Co. LLC acted as a joint bookrunner in the initial public offering of Brigham Minerals, Inc., a publicly traded company co-founded by our Executive Chairman and Chief Executive Officer, Bud Brigham.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively traded securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Electronic Prospectus

This prospectus may be made available in electronic format on Internet sites or through other online services maintained by the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. Other than this prospectus in electronic format, any information on the underwriters' or their affiliates' websites and any information contained in any other website maintained by the underwriters or any affiliate of the underwriters is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Directed Share Program

At our request, an affiliate of BofA Securities, Inc., a participating Underwriter, has reserved for sale, at the initial public offering price, up to 5% of the shares offered by this prospectus for sale to some of our directors, officers, employees, distributors, dealers, business associates and related persons. If these persons purchase reserved shares it will reduce the number of shares available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.

Notice to Prospective Investors in Canada (Alberta, British Columbia, Manitoba, Ontario and Québec Only)

This document constitutes an "exempt offering document" as defined in and for the purposes of applicable Canadian securities laws. No prospectus has been filed with any securities commission or similar regulatory authority in Canada in connection with the offer and sale of shares of Class A common stock described herein (the "Securities"). No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this document or on the merits of the Securities and any representation to the contrary is an offence.

Canadian investors are advised that this document has been prepared in reliance on section 3A.3 of National Instrument 33-105 Underwriting Conflicts ("NI 33-105"). Pursuant to section 3A.3 of NI 33-105, this document is exempt from the requirement that the issuer and the underwriters in the offering provide Canadian investors with certain conflicts of interest disclosure pertaining to "connected issuer" and/or "related issuer" relationships as may otherwise be required pursuant to subsection 2.1(1) of NI 33-105.

Resale Restrictions

The offer and sale of the Securities in Canada are being made on a private placement basis only and are exempt from the requirement that the issuer prepare and file a prospectus under applicable Canadian securities laws. Any resale of Securities acquired by a Canadian investor in this offering must be made in accordance with applicable Canadian securities laws, which may vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with Canadian prospectus requirements, a statutory exemption from the prospectus requirements, in a transaction exempt from the prospectus requirements or otherwise under a discretionary exemption from the prospectus requirements granted by the applicable local Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the Securities outside of Canada.

Representations of Purchasers

Each Canadian investor who purchases the Securities will be deemed to have represented to the issuer, the underwriters and each dealer from whom a purchase confirmation is received, as applicable, that the investor (i) is purchasing as principal, or is deemed to be purchasing as principal in accordance with applicable Canadian securities laws, for investment only and not with a view to resale or redistribution; (ii) is an "accredited investor" as such term is defined in section 1.1 of National Instrument 45-106 *Prospectus Exemptions* or, in Ontario, as such term is defined in section 73.3(1) of the *Securities Act* (Ontario); and (iii) is a "permitted client" as such term is defined in section 1.1 of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*.

Taxation and Eligibility for Investment

This prospectus does not address any Canadian tax considerations. No representation or warranty is hereby made as to the tax consequences to a resident, or deemed resident, of Canada of an investment in the Securities or with respect to the eligibility of the Securities for investment by such investor under relevant Canadian federal and provincial legislation and regulations.

Rights of Action for Damages or Rescission

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Personal Information

We and the representatives hereby notify prospective Canadian purchasers that: (a) we may be required to provide personal information pertaining to the purchaser as required to be disclosed in Schedule I of Form 45-106F1 under NI 45-106 (including its name, address, telephone number, email address, if provided, and the number and type of securities purchased, the total purchase price paid for such securities, the date of the purchase and specific details of the prospectus exemption relied upon under applicable securities laws to complete such purchase) ("personal information"), which Form 45-106F1 may be required to be filed by us under NI 45-106, (b) such personal information may be delivered to the securities regulatory authority or regulator in accordance with NI 45-106, (c) such personal information is being collected indirectly by the securities regulatory authority or regulator under the authority granted to it under the securities legislation of the applicable legislation, (d) such

personal information is collected for the purposes of the administration and enforcement of the securities legislation of the applicable jurisdiction, and (e) the purchaser may contact the applicable securities regulatory authority or regulator by way of the contact information provided in Schedule 2 to Form 45-106F1. Prospective Canadian purchasers that purchase securities in this offering will be deemed to have authorized the indirect collection of the personal information by each applicable securities regulatory authority or regulator, and to have acknowledged and consented to such information being disclosed to the Canadian securities regulatory authority or regulator, and to have acknowledged that such information may become available to the public in accordance with requirements of applicable Canadian laws.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area (each, a "Member State"), no Class A common stock has been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to our Class A common stock which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with Regulation (EU) 2017/1129 (the "Prospectus Regulation"), except that offers of shares may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(b) by the underwriters to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior written consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of Class A common stock shall result in a requirement for us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Member State who initially acquires any Class A common stock or to whom any offer is made will be deemed to have represented, acknowledged, and agreed with us and the representatives that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any Class A common stock being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged, and agreed that the Class A common stock acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Member State to qualified investors, in circumstances in which the prior written consent of the representatives has been obtained to each such proposed offer or resale.

We, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments, and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any Class A common stock in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any Class A common stock to be offered so as to enable an investor to decide to purchase or subscribe for our Class A common stock, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Additional Notice to Prospective Investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares to the public in the United Kingdom shall require us or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018. (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (FSMA)) received by it in connection with the issue or sale of our Class A common stock in circumstances in which Section 21(1) of the FSMA does not apply to us.

Notice to Prospective Investors in Germany

This prospectus has not been prepared in accordance with the requirements for a securities or sales prospectus under the German Securities Prospectus Act (*Wertpapierprospektgesetz*), the German Sales Prospectus Act (*Verkaufsprospektgesetz*), or the German Investment Act (*Investmentgesetz*). Neither the German Federal Financial Services Supervisory Authority (*Bundesanstalt für finanzdienstleistungsaufsicht—BaFin*) nor any other German authority has been notified of the intention to distribute our Class A common stock in Germany. Consequently, shares of the Class A common stock may not be distributed in Germany by way of public offering, public advertisement or in any similar manner and this prospectus and any other document relating to this offering, as well as information or statements contained therein, may not be supplied to the public in Germany or used in connection with any offer for subscription of shares of the Class A common stock to the public in Germany or any other means of public marketing. Shares of Class A common stock is being offered and sold in Germany only to qualified investors which are referred to in Section 3 paragraph 2 no. 1, in connection with Section 2 no. 6, of the German Securities Prospectus Act, Section 8f paragraph 2 no. 4 of the German Sales Prospectus Act, and in Section 2 paragraph 11 sentence 2 no. 1 of the German Investment Act. This prospectus is strictly for use of the person who has received it. It may not be forwarded to other persons or published in Germany.

Notice to Prospective Investors in Switzerland

This document is not intended to constitute an offer or solicitation to purchase or invest in the securities. The securities may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act ("FinSA") and no application has or will be made to admit

the securities to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this document nor any other offering or marketing material relating to the securities constitutes a prospectus pursuant to the FinSA, and neither this document nor any other offering or marketing material relating to the securities may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of the securities.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("Companies (Winding Up and Miscellaneous Provisions) Ordinance") or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("Securities and Futures Ordinance"), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the shares under Section 275 of the SFA except: (1) to an institutional

investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore ("Regulation 32").

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than $200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended), or the FIEA. The securities may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

LEGAL MATTERS

The validity of our Class A common stock offered by this prospectus will be passed upon for us by Vinson & Elkins L.L.P., Austin, Texas. The underwriters have been represented by Latham & Watkins LLP, Austin, Texas.

EXPERTS

The consolidated financial statements of our predecessor at December 31, 2022 and 2021 and for each of the three years in the period ended December 31, 2022, appearing in this Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and is included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The balance sheets of Atlas Energy Solutions Inc. as of December 31, 2022 and February 3, 2022, appearing in this Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and is included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The information appearing in this prospectus concerning estimates of our proven mineral reserves was derived from the report of John T. Boyd Company, independent mining engineers and geologists, as of December 31, 2021, and as updated for December 31, 2022, and has been included herein on the authority of John T. Boyd Company as experts with respect to the matters covered by such report and in giving such report.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 (including the exhibits, schedules and amendments thereto) under the Securities Act, with respect to the shares of our Class A common stock offered hereby. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to us and the Class A common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus as to the contents of any contract, agreement or any other document are summaries of the material terms of such contract, agreement or other document. With respect to each of these contracts, agreements or other documents filed as an exhibit to the registration statement, reference is made to the exhibits for a more complete description of the matter involved. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC's website is *www.sec.gov*. A copy of the registration statement, of which this prospectus forms a part, and the exhibits and schedules thereto may be obtained from the SEC's website.

As a result of this offering, we will become subject to full information reporting requirements of the Exchange Act. We will fulfill our obligations with respect to such requirements by filing periodic reports and other information with the SEC. We intend to furnish our stockholders with annual reports containing financial statements certified by an independent public accounting firm.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the members and Board of Managers of Atlas Sand Company, LLC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Atlas Sand Company, LLC (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, members' equity and cash flows for each of the three years in the period ended December 31, 2022 and 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 at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2017.

/s/ Ernst & Young LLP

Austin, Texas

February 15, 2023

ATLAS SAND COMPANY, LLC
Consolidated Balance Sheets
(In thousands, except share data)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 82,010	$ 40,401
Accounts receivable	73,341	29,135
Accounts receivable—related parties	1,051	283
Inventories	5,614	3,199
Spare part inventories	10,797	7,207
Prepaid expenses and other current assets	5,918	4,048
Total current assets	178,731	84,273
Property, plant and equipment, net	541,524	458,317
Finance lease right-of-use assets	19,173	—
Operating lease right-of-use assets	4,049	—
Other long-term assets	7,522	1,260
Total assets	$ 750,999	$ 543,850
Liabilities & Members' Equity		
Current liabilities:		
Accounts payable	$ 31,645	$ 12,180
Accounts payable—related parties	154	617
Accrued liabilities	30,630	9,153
Current portion of long-term debt	20,586	15,563
Deferred revenues	—	2,000
Other current liabilities	5,659	1,125
Total current liabilities	88,674	40,638
Long-term debt, net of discount and deferred financing costs	126,588	159,712
Deferred tax liabilities	1,906	1,908
Asset retirement obligation	1,245	1,179
Other long-term liabilities	21,229	1,716
Total liabilities	239,642	205,153
Members' equity:		
Class A units, 316,273,129 units outstanding as of December 31, 2022 and 2021	276,273	276,273
Class C units, 94,639,647 units outstanding as of December 31, 2022 and 2021	94,640	94,640
Class D units, 45,492,305 units outstanding as of December 31, 2022 and 2021	36,225	36,225
Class P units, 85,333 and 83,833 units outstanding as of December 31, 2022 and 2021, respectively	—	—
Unit-based compensation	20,379	19,701
Other capital	(882)	(882)
Retained earnings (accumulated deficit)	84,722	(87,260)
Total members' equity	511,357	338,697
Total liabilities and members' equity	$ 750,999	$ 543,850

The accompanying notes are an integral part of these financial statements

ATLAS SAND COMPANY, LLC
Consolidated Statements of Operations
(In thousands)

	For the Year Ended December 31,		
	2022	2021	2020
Product sales	$ 408,446	$ 142,519	$ 80,527
Service sales	74,278	29,885	31,245
Total sales	482,724	172,404	111,772
Cost of sales (excluding depreciation, depletion and accretion expense)	198,918	84,656	73,118
Depreciation, depletion and accretion expense	27,498	23,681	20,887
Gross profit	256,308	64,067	17,767
Selling, general and administrative expense	24,317	17,071	17,743
Impairment of long-lived assets	—	—	1,250
Operating income (loss)	231,991	46,996	(1,226)
Interest expense, net	(15,760)	(42,198)	(32,819)
Other income (loss)	2,631	291	(25)
Income (loss) before income taxes	218,862	5,089	(34,070)
Income tax expense	1,856	831	372
Net income (loss)	$ 217,006	$ 4,258	$ (34,442)

The accompanying notes are an integral part of these financial statements

ATLAS SAND COMPANY, LLC
Consolidated Statements of Cash Flows
(In thousands)

	For the Year Ended December 31,		
	2022	2021	2020
Operating activities:			
Net income (loss)	$ 217,006	$ 4,258	$ (34,442)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation, depletion and accretion expense	28,617	24,604	21,579
Impairment of long-lived assets	—	—	1,250
Loss on extinguishment of debt	—	11,922	—
Amortization of debt discount	457	7,320	8,110
Amortization of deferred financing costs	442	739	791
Unit-based compensation expense	678	129	2,545
Deferred tax liabilities	(2)	360	372
Interest paid-in-kind through issuance of additional term loans	—	3,039	11,794
Repayment of paid-in-kind interest borrowings	—	(22,233)	—
Commodity derivatives gain	(1,842)	(55)	—
Settlements on commodity derivatives	2,137	—	—
Non-cash lease expense	(220)	—	—
Other	513	(105)	118
Changes in operating assets and liabilities:			
Accounts receivable	(44,207)	(17,626)	13,466
Accounts receivable—related party	(768)	(188)	49
Inventories	(2,415)	(364)	1,031
Spare part inventories	(4,239)	(617)	1,631
Prepaid expenses and other current assets	(2,030)	(1,175)	216
Other long-term assets	(6,549)	(596)	(66)
Accounts payable	7,881	5,744	(11,721)
Accounts payable—related parties	(464)	480	127
Deferred revenue	(2,000)	2,000	—
Accrued liabilities and other liabilities	13,017	3,720	(4,364)
Net cash provided by operating activities	206,012	21,356	12,486
Investing activities:			
Purchases of property, plant and equipment	(89,592)	(19,371)	(9,532)
Net cash used in investing activities	(89,592)	(19,371)	(9,532)
Financing Activities:			
Proceeds from equity issuances	—	12,613	—
Proceeds from warrant exercises	—	—	25
Proceeds from term loan borrowings	—	178,200	15,000
Payments on term loan borrowings	(28,544)	(172,872)	(7,291)
Debt extinguishment cost	—	(4,514)	—
Proceeds from SBA Loan	—	—	4,413
Issuance costs associated with debt financing	(233)	(660)	—
Payments under finance leases and capital leases	(1,010)	(423)	(318)
Member distributions	(45,024)	(10,000)	(3)
Net cash provided by (used in) financing activities	(74,811)	2,344	11,826
Net increase in cash and cash equivalents	41,609	4,329	14,780
Cash and cash equivalents, beginning of period	40,401	36,072	21,292
Cash and cash equivalents, end of period	$ 82,010	$ 40,401	$ 36,072
Supplemental cash flow information			
Cash paid during the period for:			
Interest	$ 14,904	$ 19,155	$ 12,106
Taxes	$ 468	$ 14	$ —
Non-cash items:			
Property, plant and equipment in accounts payable and accrued liabilities	$ 23,298	$ 2,551	$ 440
Issuance of warrants	$ —	$ —	$ 2,154

The accompanying notes are an integral part of these financial statements

ATLAS SAND COMPANY, LLC
Consolidated Statements of Members' Equity
(In thousands)

	Class A		Class C		Class D		Class P					
	Units	Value	Units	Value	Units	Value	Units	Value	Unit-Based Compensation	Other Capital	Retained Earnings (Accumulated Deficit)	Total Members' Equity
Balance at December 31, 2019	313,701	$273,701	84,599	$84,599	42,977	$34,046	52	$ —	$ 17,027	$ —	$ (47,073)	$ 362,300
Issuance of class D units	—	—	—	—	2,515	2,154	—	—	—	—	—	2,154
Issuance of class P units	—	—	—	—	—	—	30	—	—	—	—	—
Member distributions	—	—	—	—	—	—	—	—	—	—	(3)	(3)
Unit-based compensation expense	—	—	—	—	—	—	—	—	2,545	—	—	2,545
Proceeds from warrant exercises	—	—	—	—	—	25	—	—	—	—	—	25
Deferred tax liabilities	—	—	—	—	—	—	—	—	—	(882)	—	(882)
Net loss	—	—	—	—	—	—	—	—	—	—	(34,442)	(34,442)
Balance at December 31, 2020	313,701	$273,701	84,599	$84,599	45,492	$36,225	82	$ —	$ 19,572	$ (882)	$ (81,518)	$ 331,697
Issuance of class A units	2,572	2,572	—	—	—	—	—	—	—	—	—	2,572
Issuance of class C units	—	—	10,041	10,041	—	—	—	—	—	—	—	10,041
Issuance of class P units	—	—	—	—	—	—	2	—	—	—	—	—
Member distributions	—	—	—	—	—	—	—	—	—	—	(10,000)	(10,000)
Unit-based compensation expense	—	—	—	—	—	—	—	—	129	—	—	129
Net income	—	—	—	—	—	—	—	—	—	—	4,258	4,258
Balance at December 31, 2021	316,273	$276,273	94,640	$94,640	45,492	$36,225	84	$ —	$ 19,701	$ (882)	$ (87,260)	$ 338,697
Issuance of class P units	—	—	—	—	—	—	1	—	—	—	—	—
Member distributions	—	—	—	—	—	—	—	—	—	—	(45,024)	(45,024)
Unit-based compensation expense	—	—	—	—	—	—	—	—	678	—	—	678
Net income	—	—	—	—	—	—	—	—	—	—	217,006	217,006
Balance at December 31, 2022	316,273	$276,273	94,640	$94,640	45,492	$36,225	85	$ —	$ 20,379	$ (882)	$ 84,722	$ 511,357

The accompanying notes are an integral part of these financial statements

ATLAS SAND COMPANY, LLC
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1—Business and Organization

Atlas Sand Company, LLC, (the "Company") is a Delaware limited liability company formed on April 20, 2017. The Company is a pure-play, low-cost producer of high-quality, locally sourced 100 mesh and 40/70 raw sand, used as a proppant during the well completion process, necessary to facilitate the recovery of hydrocarbons from oil and natural gas wells, exclusively in the Permian Basin. One hundred percent of the Company's sand reserves are located in Winkler and Ward Counties, Texas, and operations consist of proppant production and processing facilities, including one facility near Kermit, Texas ("the Kermit facility") and a second facility near Monahans, Texas ("the Monahans facility").

The Company sells product and services primarily to oil and natural gas exploration and production companies and oilfield service companies either under supply agreements or through spot sales in the open market. The Company also offers complete mine to wellsite proppant logistics solutions.

The Company is controlled by Atlas Sand Management Company, LLC ("ASMC"). The Company also has several wholly owned subsidiaries, which include Atlas Sand Employee Company, LLC; Atlas OLC Employee Company, LLC; Atlas Construction Employee Company, LLC; Fountainhead Logistics Employee Company, LLC; Atlas Sand Employee Holding Company, LLC; Atlas Sand Construction, LLC; OLC Kermit, LLC; and OLC Monahans, LLC; Fountainhead Logistics, LLC; Atlas Energy Solutions, Inc.; Atlas Sand Holdings, LLC; Atlas Sand Management Company II, LLC; Atlas Sand Holdings II, LLC; Atlas Sand Operating, LLC; and Atlas Sand Merger Sub, LLC. All subsidiaries are included in the consolidated financial statements of the Company.

Note 2—Summary of Significant Accounting Policies

Basis of Presentation

These consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") and Securities and Exchange Commission ("SEC") requirements. The consolidated financial statements include the account of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

The Company has evaluated events occurring after the balance sheet date as possible subsequent events through February 15, 2023. Any material subsequent events that occurred during this time have been properly recognized or disclosed in the financial statements.

Consolidation

The Financial Statements include the accounts of the Company and wholly owned subsidiaries. All intercompany transactions and accounts have been eliminated in consolidation.

Use of Estimates

The preparation of Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the related disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates used in the preparation of these financial statements include, but are not limited to: the sand reserves and their impact on calculating the depletion expense under the units-of-production

method; the depreciation and amortization associated with property, plant and equipment; stock-based compensation; spare parts inventory reserve; collectability of receivables; and certain liabilities. The Company bases its estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

Cash and cash equivalents

Cash and cash equivalents consist of all highly liquid investments that are readily convertible into cash and have original maturities of three months or less when purchased. The Company places cash deposits with high-credit-quality financial institutions. At times, cash may be uninsured or in deposit accounts that exceed or are not covered under the Federal Deposit Insurance Corporation limit.

Concentrations of Credit Risk

Throughout 2022 and 2021, the Company has maintained cash balances on deposit and time deposits with financial institutions in excess of federally insured amounts; however, all these financial institutions hold an investment-grade rating by one or more major rating agencies.

For the year ended December 31, 2022, one customer comprised 12% of the Company's sales. For the year ended December 31, 2021, one customer comprised 13% of the Company's sales. For the year ended December 31, 2020, two customers comprised 29% and 10% of the Company's sales, respectively.

Accounts Receivable

Accounts receivable are recorded at cost when earned and represent claims against third parties that will be settled in cash. The carrying value of the Company's receivables, net of allowance for doubtful accounts, represents the estimated collectable amount. If events or changes in circumstances indicate specific receivable balances may be impaired, further consideration is given to the Company's ability to collect those balances and the allowance is adjusted accordingly. Past-due receivable balances are written off when the Company's internal collection efforts have been unsuccessful in collecting the amounts due. The Company performs credit evaluations of new customers and sometimes require deposits and prepayments, to mitigate credit risk. When it is probable that all or part of an outstanding balance will not be collected, the Company establishes an allowance for doubtful accounts. The Company recognized $0.1 million of bad debt expense during the year ended December 31, 2021. During the year ended December 31, 2021, the Company determined the bad debt was not collectable and the allowance for doubtful accounts was written off. The Company did not recognize bad debt expense during the years ended December 31, 2022 and 2020. As of December 31, 2022 and 2021, there was no allowance for doubtful accounts.

As of December 31, 2022, two customers represented 19% and 13% of the Company's outstanding accounts receivable balance. As of December 31, 2021, three customers represented 13%, 11% and 10% of the Company's outstanding accounts receivable balance.

Accounts Receivable—Related Parties

These amounts represent reimbursement of vendor payments from related parties and outstanding billings with a customer.

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Inventories

Inventories include raw sand stockpiles, in-process product, and finished product available for shipment. Inventories are valued at the lower of cost or net realizable value. Cost is determined using a weighted average cost method. Production costs include direct excavation costs, production personnel and benefits costs, processing costs, rental equipment costs, other costs directly attributable to plant operations, depreciation, and depletion.

Spare Part Inventories

Spare part inventories include critical spares, materials and supplies. Spare part inventories are valued at the lower of cost or net realizable value. Cost is determined using a weighted average cost method. As of December 31, 2022 and 2021, there was $0.7 million and $0.1 million in spare parts inventory reserve, respectively.

Prepaid Expenses and Other Current Assets

Prepaid expenses consist primarily of prepaid software fees, prepaid rent, delay rental payments on leased land, insurance, trade show fees and sales events. These expenses are recognized over the contract period as events occur or when the future benefit is realized. As of December 31, 2022 and 2021, prepaid expenses were $5.2 million and $2.7 million, respectively. Other current assets consist of certain short-term supplier deposits for leased equipment, which were $0.7 million and $1.2 million as of December 31, 2022 and 2021, respectively. During the year ended December 31, 2021, the Company entered into commodity derivative instruments to reduce the effect of price changes on a portion of the Company's future natural gas usage at the facilities. The commodity derivative instruments are measured at fair value using Level 2 inputs and are included in prepaid expenses and other current assets on the consolidated balance sheets. As of December 31, 2022, the Company did not have any outstanding commodity derivative instruments. As of December 31, 2021, the current derivative asset was $0.2 million. The Company has not designated any of the derivative contracts as fair value or cash flow hedges. Therefore, the Company does not apply hedge accounting to the commodity derivative instruments. Net gains and losses on commodity derivatives instruments are recorded based on the changes in the fair values of the derivative instruments and are included in other income (loss) on the consolidated statements of operations. For the years ended December 31, 2022 and 2021, net gains on commodity derivatives instruments were $1.8 million and $0.1 million, respectively. There was no commodity derivative instrument activity for the year ended December 31, 2020. The Company's cash flow is only impacted when the actual settlements under the commodity derivative contracts result in making or receiving a payment to or from the counterparty. These settlements under the commodity derivative contracts are reflected as operating activities in the Company's consolidated statements of cash flows.

Any premiums paid on derivative contracts are capitalized as part of the derivative assets or derivative liabilities, as appropriate, at the time the premiums are paid. Premium payments are reflected in cash flows from operating activities in the Company's consolidated statements of cash flows. Over time, as the derivative contracts settle, the differences between the cash received and the premiums paid or fair value of contracts acquired are recognized in net gains or losses on commodity derivative contracts, and the cash received is reflected in cash flows from operating activities in the Company's consolidated statements of cash flows.

The Company's valuation estimate takes into consideration the counterparties' credit worthiness, the Company's credit worthiness, and the time value of money. The consideration of these factors results

in an estimated exit-price for each derivative asset or liability under a marketplace participant's view. Management believes that this approach provides a reasonable, non-biased, verifiable, and consistent methodology for valuing commodity derivative instruments.

Property, Plant and Equipment, Including Depreciation and Depletion

Property, plant and equipment are recorded at cost and depreciated over their estimated useful lives using either the straight-line method or the units of production method. Construction in progress is comprised of assets which have not been placed into service and is not depreciated until the related assets or improvements are ready to be placed into service.

Interest incurred during the construction of plant facilities was capitalized. Capitalized interest was recorded within plant facilities associated with productive, depletable properties, until the plant facilities were placed into service, and is being amortized using the units of production method. The Company did not capitalize interest for the years ended December 31, 2022, 2021 and 2020.

Costs of improvements that extend economic life or improve service potential are capitalized and depreciated over the remaining useful life of the asset, with routine repairs and maintenance expensed as incurred.

Fixed assets are carried at historical cost. Fixed assets, other than plant facilities associated with productive, depletable properties, are depreciated using the straight-line method over the estimated useful lives of the assets as follows:

Plant Equipment	1 - 40 years
Furniture and office Equipment	3 - 15 years
Asset retirement obligation	50 years
Computer and network equipment	3 - 7 years
Buildings and leasehold improvements	5 - 40 years
Logistic Equipment	4 - 7 years

Mine development project costs are capitalized once the deposit is classified as a proven and probable reserve. Mine development costs include engineering, mineralogical studies, drilling and other related costs to develop the mine and remove the overburden to initially expose the mineral and allow for the construction of an access way. Exploration costs are expensed as incurred and classified as exploration expense.

Mining property and development costs are amortized using the units of production method on estimated recoverable tonnage, which equals estimated proven and probable reserves. The impact to reserve estimates is recognized on a prospective basis. Drilling and related costs are capitalized for deposits where proven and probable reserves exist. These activities are directed at obtaining additional information on the deposit or converting non-reserve minerals to proven and probable reserves, with the benefit being realized over a period greater than one year.

Impairment or Disposal of Property, Plant and Mine Development

The Company periodically evaluates whether current events or circumstances indicate that the carrying value of our property, plant and equipment assets may not be recoverable. If circumstances indicate that the carrying value may not be recoverable, the Company estimates future undiscounted net cash

flows using estimates, including but not limited to estimates of proven and probable sand reserves, estimated future sales prices (considering historical and current prices, price trends and related factors), operating costs and anticipated capital expenditures. If the undiscounted cash flows are less than the carrying value of the assets, the Company recognizes an impairment loss equal to the amount by which the carrying value exceeds the fair value of the assets.

The recoverability of the carrying value of the Company's mining property and development costs are dependent upon the successful development and commercial production of the Company's mineral deposit and the related processing facilities. The Company's evaluation of mineral properties for potential impairment primarily includes evaluating changes in the mineral reserves, or the underlying estimates and assumptions, including estimated production costs. Assessing the economic feasibility requires certain estimates including the prices of products to be produced and processing recovery rates, as well as operating and capital costs.

Deferred Offering Costs

Deferred offering costs consist primarily of accounting, legal, and other fees related to our proposed initial public offering ("IPO"). Upon consummation of the proposed IPO, the deferred offering costs will be offset against the proceeds from the offering. In the event the offering is aborted, deferred offering costs will be expensed. As of December 31, 2022 and 2021, the Company capitalized $6.3 million and $0.4 million of deferred offering costs within other long-term assets on the consolidated balance sheets, respectively.

Asset Retirement Obligations

In accordance with ASC 410-20, *Asset Retirement Obligations*, the Company records a liability for asset retirement obligations at the fair value of the estimated costs to retire a tangible long-lived asset at the time the liability is incurred, when there is a legal obligation to incur costs to retire the asset and when a reasonable estimate of the fair value of the obligation can be made. The Company has asset retirement obligations with respect to certain assets due to various contractual obligations to clean and/or dispose of those assets at the time they are retired.

A liability for the fair value of an asset retirement obligation, with a corresponding increase to the carrying value of related long-lived assets, is recognized at the time of an obligating event. The asset is depreciated using the straight-line method, and the discounted liability is increased through accretion over the expected timing of settlement.

The estimated liability is based on third-party estimates of costs to abandon the mine site, including estimated economic lives and external estimates as to the cost to bring the land to a state required by the lease agreements. The Company utilized a discounted rate reflecting management's best estimate of the credit-adjusted risk-free rate. Revisions to the liability could occur due to changes in the estimated costs, changes in the mine's economic life or if federal or state regulators enact new requirements regarding the abandonment of mine sites. Accretion expense, which was $0.1 million for all three years ended December 31, 2022, 2021 and 2020, respectively, is recorded on the consolidated statement of operations in depreciation, depletion and accretion expense.

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Changes in the asset retirement obligations are as follows (in thousands):

	For the Year Ended December 31,	
	2022	2021
Beginning Balance	$ 1,179	$ 1,116
Additions to liabilities	—	—
Accretion expense	66	63
Ending Balance	$ 1,245	$ 1,179

Deferred Revenues

The Company occasionally receives prepayments from customers for future deliveries of product. These prepayments represent consideration that is unconditional for which the Company has yet to transfer title to the product. Amounts received from customers in advance of product deliveries are recorded as contract liabilities referred to as deferred revenues and are recognized as revenue upon delivery of the product. The Company did not recognize any deferred revenue on the Company's consolidated balance sheets as of December 31, 2022. The Company recognized $2.0 million of deferred revenue on the Company's consolidated balance sheets as of December 31, 2021.

Changes in the deferred revenues balance are as follows (in thousands):

	For the Year Ended December 31,	
	2022	2021
Beginning Balance	$ 2,000	$ —
Customer prepayments	22,302	2,280
Revenue recognized	(24,302)	(280)
Ending Balance	$ —	$2,000

Deferred Debt Discount and Financing Costs

In connection with entering into the 2018 Term Loan Credit Facility, the Company delivered to the lender warrants for up to 41,299,845 Class D units. The right to purchase Class D units became exercisable upon the funding of each draw under the 2018 Term Loan Credit Facility Agreement. The Company recognized a $32.2 million debt discount associated with the warrants based on the relative fair value of the debt and warrants issued. In connection with the First Amendment to the 2018 Term Loan Credit Facility (the "First Amendment"), the Company delivered to the lender additional warrants for up to 4,192,460 Class D units, which were exercisable upon funding of the draws in proportion to the additional drawings. The Company delivered 2,515,470 Class D units in connection with the First Amendment for the year ended December 31, 2020. Based on the relative fair value of the debt and warrants issued, the Company recognized $2.2 million of debt discount associated with the warrants delivered for the year ended December 31, 2020. The Company did not issue warrants for both the years ended December 31, 2022 and 2021. All warrants delivered have been exercised by the lender. There are no outstanding warrants as of December 31, 2022 and 2021. In connection with entering into the 2021 Term Loan Credit Facility, the Company recognized $1.8 million of debt discount related to fees paid to the lender for the year ended December 31, 2021. The debt discounts are reflected as a direct reduction from the carrying amount of the debt obligation on the Company's consolidated

balance sheets. Such costs are amortized to interest expense using the effective interest method. The Company recognized $0.5 million, $7.3 million, and $8.1 million of interest expense associated with the amortization of the debt discounts for the years ended December 31, 2022, 2021 and 2020, respectively.

The Company defers costs directly associated with acquiring third-party debt financing and these costs are amortized using the effective interest method over the life of the associated third-party debt financing. In connection with entering into the 2021 Term Loan Credit Facility and the 2018 Term Loan Credit Facility, the Company incurred $0.8 million and $2.3 million of deferred financing costs, respectively. These deferred financing costs are reflected as a direct deduction from the carrying amount of the related debt obligation on the Company's consolidated balance sheets.

In 2018, the Company entered into the 2018 ABL Credit Facility and incurred $1.0 million of deferred financing costs. Deferred financing costs, net of amortization, related to the 2018 ABL Credit Facility are included in other long-term assets on the consolidated balance sheets. As of December 31, 2022 and 2021, deferred financing costs, net of amortization, related to the 2018 ABL Credit Facility was $0.2 million and $0.4 million, respectively. Deferred financing costs associated with the 2018 ABL Credit Facility are amortized on a straight-line basis over the life of the agreement and are recorded as interest expense in the consolidated statements of operations.

Interest expense associated with the amortization of deferred financing costs was $0.4 million, $0.7 million, and $0.8 million for the years ended December 31, 2022, 2021 and 2020, respectively.

On October 25, 2021, the Company repaid all borrowings outstanding under the 2018 Term Loan Credit Facility, in connection with entering into a new Term Loan Credit Facility. In connection with the repayment on October 25, 2021, unamortized debt discount of $11.1 million, deferred financing costs of $0.8 million and a make-whole premium of $4.5 million were recognized as a loss on debt extinguishment within interest expense, net, on the Company's consolidated statements of operations for the year ended December 31, 2021.

Fair Value of Financial Instruments

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Inputs that are generally unobservable and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

The amounts reported in the balance sheets as current assets or liabilities, including cash and cash equivalents, accounts receivable, spare parts inventories, inventories, prepaid expenses and other

current assets, accounts payable, accrued liabilities and deferred revenues approximate fair value due to the short-term maturities of these instruments. As of the dates indicated, the Company's long-term debt consisted of the following (in thousands):

	At December 31, 2022		At December 31, 2021		
	Carrying Value	Fair Value	Carrying Value	Fair Value	Valuation Technique
Financial liabilities:					
Outstanding principal amount of the 2021 Term Loan Credit	$ 147,174	$ 146,837	$ 175,275	$ 177,028	Level 2—Market Approach

The Company's 2021 Term Loan Credit Facility bears interest at a fixed rate of 8.47%, where its fair value will fluctuate based on changes in interest rates and credit quality. As of December 31, 2022, the fair value of long-term debt has been determined by discounting the future cash flows using current market interest rates for similar financial instruments. These inputs are not quoted prices in active markets, but they are either directly or indirectly observable; therefore, they are classified as Level 2 inputs. As of December 31, 2021, the Company determined the fair value of the principal amount outstanding under the 2021 Term Loan Credit Facility based on the relative discount received in the 2021 Term Loan Credit Facility agreement executed in October 2021. See Note 7, *Debt*, for discussion of the 2021 Term Loan Credit Facility agreement. The Company concluded, as the pricing of the 2021 Term Loan Credit Facility was indirectly observable through a recent market transaction, that is classified as Level 2.

The Company entered into commodity derivative instruments accounted for at fair value on a recurring basis. For further discussion on the fair value of commodity derivative instruments see *Prepaid Expenses and Other Current Assets* discussed within this note.

Leases

The Company leases office space, equipment, and vehicles under non-cancellable agreements. The Company's leases may include options to extend or renew at the Company's discretion. The measurement of the lease term includes options to extend or renew when it is reasonably certain the Company will exercise those options. Lease assets and liabilities are recognized at the commencement date based on the present value of minimum lease payments over the lease term. To determine the present value of future minimum lease payments, the Company uses the implicit rate when readily determinable; however, certain leases do not provide an implicit rate. Therefore, to determine the present value of minimum lease payments, the Company use the incremental borrowing rate based on the information available at the commencement date of the lease. The Company's finance lease agreements typically include an interest rate that is used to determine the present value of future lease payments. Short-term operating leases with an initial term of twelve months or less are not recorded on our balance sheet. Minimum lease payments are expensed on a straight-line basis over the lease term, including reasonably certain renewal options.

The Company periodically evaluate whether current events or circumstances indicate that the carrying value of our right-of-use assets exceeds fair value. If such a review should indicate that the carrying amount of right-of-use asset is not recoverable, the Company will reduce the carrying amount of such assets to fair value.

Environmental Costs and Other Contingencies

The Company recognizes liabilities for environmental and other contingencies when there is an exposure that indicates it is both probable that a liability has been incurred and the amount of loss can be reasonably estimated. Where the most likely outcome of a contingency can be reasonably

estimated, the Company accrues a liability for that amount. Where the most likely outcome cannot be estimated a range of potential losses is established and, if no one amount in that range is more likely than any other, the amount at the low end of that range is accrued.

The Company records liabilities for environmental contingencies at the undiscounted amounts on the consolidated balance sheets as accrued liabilities and other liabilities when environmental assessments indicate that remediation efforts are probable, and costs can be reasonably estimated. Estimates of the liabilities are based on currently available facts and presently enacted laws and regulations, taking into consideration the likely effects of other societal and economic factors. These estimates are subject to revision in future periods based on actual costs or new circumstances. The Company capitalizes costs that benefit future periods and recognizes a current period charge in operations and maintenance expenses when clean-up efforts do not benefit future periods.

The Company evaluates potential recoveries of amounts from third parties, including insurance coverage, separately from the liability. Recovery is evaluated based on the solvency of the third party, among other factors. When recovery is assured, the Company records and reports an asset separately from the associated liability on the consolidated balance sheets.

Management is not aware of any environmental or other contingencies that would have a material effect on the consolidated financial statements for the years ended December 31, 2022, 2021 and 2020.

Revenues

Under ASC Topic 606-Revenue from Contracts with Customers (“ASC 606”), revenue recognition is based on the transfer of control, or the customer’s ability to benefit from the services and products in an amount that reflects the consideration expected to be received in exchange for those services and products. In recognizing revenue for products and services, the transaction price is determined from sales orders or contracts with customers.

The Company generates revenues from the sale of product that customers purchase for use in the oil and gas industry. Revenues are derived from product sold to customers under supply agreements, whose terms can extend for over one year, and from spot sales through individual purchase orders executed at prevailing market rates. The Company’s revenues are primarily a function of the price per ton realized and the volumes sold. Pricing structures under the supply agreements are, in certain cases, subject to certain contractual adjustments and consist of a combination of negotiated pricing and fixed pricing. These arrangements may undergo periodic negotiations regarding pricing and volume requirements, which may occur in volatile market conditions.

The Company recognizes revenue for product at a point in time following the transfer of control and satisfaction of the performance obligation of such items to the customer, under ASC 606, which typically occurs upon customer pick-up at the facilities. The Company’s standard collection terms are generally 30 days, with certain customer payment terms extending up to 60 days.

Certain of the Company’s contracts contain shortfall provisions that calculate agreed upon fees that are billed when the customer does not meet the minimum purchases over a period of time defined in each contract and when collectability is reasonably certain. As the Company does not have the ability to predict customers’ orders over the period, there are constraints around the ability to recognize the variability in consideration related to this condition. The Company did not recognize shortfall revenue for the years ended December 31, 2022, 2021 and 2020.

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The Company generates service revenue by providing transportation, storage solutions and contract labor services to companies in the oil and gas industry. Transportation services typically consist of transporting product from the plant facilities to the wellsite. The amounts invoiced reflects the transportation services rendered. The amount invoiced for storage solutions and contract labor services reflect the amount of time these services were utilized in the billing period. Transportation, storage solutions and contract labor services are contracted through work orders executed under established pricing terms.

The Company's contracts for product consist of a single performance obligation as the promise to transfer product is not separately identifiable from other promises within the contract and, therefore, are not distinct. For the portion of the Company's contracts that contain multiple performance obligations, such as work orders containing a combination of product and services, the Company allocates the transaction price to each performance obligation identified in the contract based on relative stand-alone selling prices, or estimates of such prices, and recognize the related revenue as control of each individual product or service is transferred to the customer, in satisfaction of the corresponding performance obligations.

All of the Company's revenue is generated from product and service sales in Texas and New Mexico. As such, no further disaggregation of revenue information is provided.

The Company has elected to use the ASC 606 practical expedients, pursuant to which it has excluded disclosures of transaction prices allocated to remaining performance obligations and when it expects to recognize such revenue. The remaining performance obligations are primarily comprised of unfulfilled contracts to deliver product, most of which hold a remaining duration of less than one year, and of which ultimate transaction prices will be allocated entirely to the unfulfilled contracts. The Company's transaction prices under these contracts may be impacted by market conditions and potential contract negotiations, which have not yet been determined, and are therefore variable in nature.

Unit-Based Compensation

The Company awards incentive units to members of management, consultants and employees as incentive compensation. The Company accounts for these awards under the measurement and recognition provisions of Accounting Standards Codification ("ASC") 718, *Compensation—Stock Compensation*. The Company accounts for unit-based compensation by amortizing the fair value of the units, which is determined at the grant date, over the applicable vesting period for each tranche of the award using a graded vesting methodology.

The Company accounts for forfeitures as they occur and reverses any previously recognized unit-based compensation expense for the unvested portion of the awards that were forfeited. The Company did not recognize any forfeitures during the years ended December 31, 2022 and 2021. The Company recognized $0.2 million of forfeitures during the year ended December 31, 2020. Unit-based compensation expense is recognized as selling, general and administrative expense on the Company's consolidated statements of operations.

Cost of Sales, Excluding Depreciation, Depletion and Accretion Expense

Cost of sales, excluding depreciation, depletion and accretion expense, related to product sales primarily consists of the cost to produce product, including direct and indirect labor, employee housing costs, excavation costs, rental equipment, maintenance expense, utilities, natural gas and royalty expense.

Cost of sales, excluding depreciation, depletion and accretion expense, related to service sales primarily consists of direct and indirect labor, transportation costs and rental equipment.

Cost of sales, excluding depreciation, depletion and accretion expense, related to product sales and service sales was $130.8 million and $68.1 million for the year ended December 31, 2022, respectively. Cost of sales, excluding depreciation, depletion and accretion expense, related to product sales and service sales was $57.8 million and $26.9 million for the year ended December 31, 2021, respectively. Cost of sales, excluding depreciation, depletion and accretion expense, related to product and service sales were $47.1 million and $26.0 million for the year ended December 31, 2020, respectively.

Selling, General and Administrative Expense

Selling, general and administrative expense primarily consists of non-production personnel wages and benefits, insurance expense, travel and entertainment, advertising expense, professional fees, rent expense for the Company's corporate office and office supplies, among other expenses to support the business.

Defined Contribution Plans

The Company has defined contribution plans covering substantially all employees who meet certain service and eligibility requirements. The Company's matching contribution to defined contribution plans was approximately $0.5 million, $0.4 million, and $0.3 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Income Taxes

The Company is a limited liability company. As a limited liability company, the Company has elected to be treated as a partnership for income tax purposes and, therefore, is not subject to federal income tax. The Company's taxable income or loss, which may differ significantly from taxable income reportable to members as result of differences between the tax basis and financial reporting basis of assets and liabilities and the taxable income allocation requirements under the Company's current LLC Agreement, is included in the federal income tax returns of each member. Accordingly, there is no provision for federal income taxes in the accompanying consolidated financial statements. However, the Company's operations located in Texas are subject to an entity-level tax, the Texas margin tax, at a statutory rate of up to 0.75% of income that is apportioned to Texas. Deferred tax assets and liabilities are recognized for future Texas margin tax consequences attributable to differences between the financial statement carrying amount of existing assets and liabilities and their respective Texas margin tax bases. As of December 31, 2022 and 2021, the Company's net long-term deferred tax liabilities related solely to carrying value differences associated with the Company's property, plant and equipment.

The Company evaluates the uncertainty in tax positions taken or expected to be taken in the course of preparing the consolidated financial statements to determine whether the tax positions are more likely than not of being sustained by the applicable tax authority. However, the conclusions regarding the evaluation are subject to review and may change based on factors including, but not limited to, ongoing analysis of tax laws, regulations, and interpretations thereof. As of December 31, 2022 and 2021, the Company did not have any liabilities for uncertain tax positions or gross unrecognized tax benefits. The Company's income tax returns from 2019, 2020 and 2021 are subject to examinations by U.S. federal,

state or local tax authorities. The IRS closed the examination of Company's federal tax returns for the taxable year ended December 31, 2018 with no change. The Company cannot predict or provide assurance as to the ultimate outcome of any existing or future examinations.

The Company's wholly owned corporate subsidiary, Atlas Energy Solutions, Inc. ("AESI") is subject to income taxes. AESI was formed in February 2022 to facilitate a potential Up-C structure. AESI did not have any operations from formation through December 31, 2022. The corporate subsidiary has a de minimis tax provision as of December 31, 2022.

Segments

The Company operates as one operating segment. Operating segments are defined as components of an enterprise for which separate financial information is evaluated regularly by the chief operating decision maker ("CODM"). The Company's CODM was collectively its Chairman of the Board, Chief Executive Officer, and President and Chief Financial Officer.

The CODM evaluates the Company's financial information and performance on a consolidated basis for purposes of making operating decisions and allocating resources. The Company operates with centralized functions and delivers most of its products and services in a similar way to all customers.

Recently Issued Accounting Pronouncements

Rate Reform—In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* , which provides optional guidance for a limited time to ease the potential burden in accounting for reference rate reform. The new guidance provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts and hedging relationships that reference LIBOR or another reference rate expected to be discontinued due to reference rate reform. These amendments are effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. In December 2022, FASB issued ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848* . ASU 2022-06 amended ASU 2020-04 and deferred the sunset date of Topic 848 from December 31, 2022, to December 31, 2024, after which entities will no longer be permitted to apply the relief in Topic 848. The Company is evaluating the impact of this standard on its consolidated financial statements and does not believe it will have a material impact on the consolidated financial statements.

Financial Instruments—In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326)*, which amends the guidance on the impairment of financial instruments. The standard adds an impairment model, referred to as current expected credit loss, which is based on expected losses rather than incurred losses. The standard applies to most debt instruments, trade receivables, lease receivables, reinsurance receivables, financial guarantees and loan commitments. Under the guidance, companies are required to disclose credit quality indicators disaggregated by year of origination for a five-year period. In May 2019, ASU 2016-13 was subsequently amended by ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments —Credit Losses, ASU 2019-05, Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief. The new guidance is effective for fiscal years beginning after December 15, 2022. The Company is currently

evaluating the impact of the ASU on the consolidated financial statements and does not believe it will have a material impact on the consolidated financial statements.

Leases—On January 1, 2022, the Company adopted ASU 2016-02, *Leases (Topic 842)*, as amended by other ASUs issued since February 2016, using the modified retrospective transition method applied at the effective date of the standard. By electing this option transition method, information prior to January 1, 2022 has not been restated and continues to be reported under the accounting standards in effect for the period (*ASC Topic 840*).

The Company elected the package of practical expedients permitted under the transition guidance within the new standard, including the option to carry forward the historical lease classifications and assessment of initial direct costs, account for lease and non-lease components as a single lease, and to not include leases with an initial term of less than 12 months in the lease assets and liabilities.

The adoption of ASC Topic 842 resulted in the recognition of finance lease right-of-use assets, operating lease right-of-use assets, and lease liabilities for finance and operating leases. As of January 1, 2022, the adoption of the new standard resulted in the recognition of finance lease right-of-use assets of $0.7 million, including $0.7 million reclassified from property, plant and equipment, net, and finance lease liabilities of $0.6 million. Additionally, the Company recorded operating lease right-of-use assets of $5.4 million and operating lease liabilities of $7.1 million, including $2.3 million and $4.8 million recorded to other short-term liabilities and other long-term liabilities, respectively as of January 1, 2022. There was no significant impact to the consolidated statements of income, equity or cash flows. Refer to Note 6, *Leases,* for additional disclosures required under ASC Topic 842.

Note 3—Inventories

Inventories consisted of the following (in thousands):

	For the Year Ended December 31,	
	2022	2021
Raw materials	$ 290	$ 2
Work-in-process	4,825	2,747
Finished goods	499	450
Inventories	$ 5,614	$ 3,199

For the years ended December 31, 2022 and 2021, no inventory reserve was deemed necessary.

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Note 4—Property, Plant and Equipment, Net

Property, plant and equipment, net, consisted of the following (in thousands):

	For the Year Ended December 31,	
	2022	2021
Plant facilities associated with productive, depletable properties	$ 243,613	$ 243,383
Plant equipment	251,122	237,845
Land	3,009	3,009
Furniture and office equipment	1,407	1,230
Computer and network equipment	1,648	1,541
Buildings and leasehold improvements	25,402	24,763
Logistic Equipment	1,591	—
Construction in progress	111,711	18,524
Property, plant and equipment	639,503	530,295
Less: Accumulated depreciation and depletion	(97,979)	(71,978)
Property, plant and equipment, net	$ 541,524	$ 458,317

Depreciation and depletion expense recognized in depreciation, depletion and accretion expense was $22.1 million and $5.4 million for the year ended December 31, 2022, respectively, as compared to $19.4 million and $4.2 million for the year ended December 31, 2021, respectively, and as compared to $17.5 million and $3.2 million for the year ended December 31, 2020, respectively. Depreciation expense recognized in selling, general and administrative expense was $1.1 million, $1.0 million, and $0.8 million for the years ended December 31, 2022, 2021 and 2020, respectively. The Company recognized $1.3 million of impairment of long-lived assets related to certain power generation assets where the vendor was unable to meet its obligations for the year ended December 31, 2020. The Company pursued legal remedy and determined the assets were not recoverable. The Company recognized $0.1 million of loss on disposal of fixed assets for the year ended December 31, 2020. The Company did not recognize impairment of long-lived assets or loss on disposal of assets for the years ended December 31, 2022 and 2021.

For the year ending December 31, 2021, the Company had capital leases that are reported as part of plant equipment. The amortization of capital leases is included in depreciation, depletion and accretion expense on the consolidated statements of operations. As of December 31, 2021, the Company had capital leases with a cost of $1.5 million and accumulated depreciation of $0.9 million. The Company recognized $0.4 million and $0.3 million of depreciation expense associated with capital leases for the year ended December 31, 2021 and 2020, respectively. On January 1, 2022, the Company adopted ASU Topic 842. Refer to Note 6, *Leases,* for additional disclosures required under ASC Topic 842.

ATLAS SAND COMPANY, LLC
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 5—Accrued Liabilities

Accrued liabilities consisted of the following (in thousands):

	For the Year Ended December 31,	
	2022	2021
Accrued capital expenditures	$ 10,536	$ 1,411
Accrued personnel costs	1,485	787
Accrued production costs	4,586	1,652
Accrued royalties	6,529	1,129
Professional services	1,263	592
Sales and use tax payable	2,144	1,099
Other	4,087	2,483
Total accrued liabilities	$ 30,630	$ 9,153

Note 6—Leases

The Company has operating and finance leases primarily for office space, equipment, and vehicles. The terms and conditions for these leases vary by the type of underlying asset.

Certain leases include variable lease payments for items such as property taxes, insurance, maintenance, and other operating expenses associated with leased assets. Payments that vary based on an index or rate are included in the measurement of lease assets and liabilities at the rate as of the commencement date. All other variable lease payments are excluded from the measurement of lease assets and liabilities, and are recognized in the period in which the obligation for those payments is incurred.

The components of lease expense for the year ended December 31, 2022 are as follows (in thousands):

	Year Ended December 31, 2022
Finance lease cost:	
Amortization of right-of-use assets	$ 2,027
Interest on lease liabilities	666
Operating lease cost	1,085
Variable lease cost	706
Short-term lease cost	12,576
Total lease cost	$ 17,060

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Supplemental cash flow and other information related to leases for the year ended December 31, 2022 are as follows (in thousands):

	Year Ended December 31, 2022
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash outflows from operating leases	$ 1,305
Operating cash outflows from finance leases	$ 666
Financing cash outflows from finance leases	$ 1,010
Right-of-use assets obtained in exchange for new lease liabilities:	
Operating leases	$ 6,245
Finance leases	$ 21,201

During the year ended December 31, 2022, the Company modified an agreement which related to certain operating right-of-use assets of $1.3 million and liabilities of $1.3 million, the change in terms increased the amount, extended the term, and resulted in finance lease classification. In connection with this modification, the Company recognized finance lease right-of-use assets of $3.2 million and liabilities of $3.2 million. There was no gain or loss recognized as a result of these amendments. Lease terms and discount rates as of December 31, 2022 are as follows (in thousands):

	Year Ended December 31, 2022
Weighted-average remaining lease term:	
Operating leases	4.5 years
Finance leases	5.3 years
Weighted-average discount rate:	
Operating leases	4.3%
Finance leases	9.4%

Future minimum lease commitments as of December 31, 2022 are as follows (in thousands):

	Finance	Operating
2023	$ 4,976	$ 1,291
2024	5,051	1,312
2025	4,964	1,342
2026	4,964	1,281
2027	2,876	681
Thereafter	3,015	—
Total lease payments	25,846	5,907
Less imputed interest	(5,691)	(538)
Total	$20,155	$ 5,369

ATLAS SAND COMPANY, LLC
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Supplemental balance sheet information related to the Company's leases as of December 31, 2022 was as follows (in thousands):

	Classification	December 31, 2022
Operating Leases		
Current operating lease liabilities	Other current liabilities	$ 1,082
Noncurrent operating lease liabilities	Other long-term liabilities	$ 4,287
Finance Leases		
Current finance lease liabilities	Other current liabilities	$ 3,213
Noncurrent finance lease liabilities	Other long-term liabilities	$ 16,942

For the year ending December 31, 2021, the Company had the current portion of capital leases included in other current liabilities on the consolidated balance sheets and the long-term portion of capital leases included in other long-term liabilities on the consolidated balance sheets. As of December 31, 2021, the current portion of capital leases and long-term portion of capital leases was $0.3 million and $0.3 million, respectively.

On May 16, 2022, Atlas entered into a master lease agreement with Stonebriar Commercial Finance ("Stonebriar") for the right, but not the obligation, to fund up to $70.0 million of purchases of transportation and logistics equipment. The interim financing for down payments on any purchased equipment is based on one-month SOFR, plus 8.0%. The final interest rate will be set upon acceptance of the equipment based on the terms of the agreement. As of December 31, 2022, Stonebriar has funded $16.8 million of lease commitments under this agreement.

On July 28, 2022, Atlas entered into a master lease agreement with Stonebriar for the right, but not the obligation, to fund up to $10.0 million of purchases of dredges and related equipment. The interim financing for down payments on any purchased equipment is based on one-month SOFR, plus 8.0%. The final interest rate will be set upon acceptance of the equipment based on the terms of the agreement. As of December 31, 2022, Stonebriar has funded $6.4 million of lease commitments under this agreement.

As of December 31, 2022, the Company had additional lease commitments that have not yet commenced totaling $6.0 million and therefore are not reflected on the consolidated balance sheet and tables above. These leases include agreements for transportation, logistics equipment and dredge equipment. These leases will commence between fiscal year 2022 and fiscal year 2023 with lease terms of 4 to 7 years. Certain transportation and logistics leases discussed here are a component of the purchase commitments discussed in Note 8, *Commitments and Contingencies*.

ATLAS SAND COMPANY, LLC
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 7—Debt

Debt consists of the following (in thousands):

	For the Year Ended December 31,	
	2022	2021
Term Loan Credit Facility	$ 148,995	$ 177,539
Less: Debt discount, net of accumulated amortization of $546 and $89, respectively	(1,254)	(1,711)
Less: Deferred financing fees, net of accumulated amortization of $248 and $29 respectively	(567)	(553)
Less: Current portion (a)	(20,586)	(15,563)
Long-term debt	$ 126,588	$ 159,712

(a) The current portion of long-term debt reflects payments based on the terms of the 2021 Term Loan Credit Facility.

2021 Term Loan Credit Facility

On October 20, 2021, the Company entered into a $180 million, aggregate principal amount, term loan credit facility ("2021 Term Loan Credit Facility") which bears an interest rate of 8.47% per annum on borrowings outstanding under the facility with Stonebriar Commercial Finance, LLC (the "Term Lender") and has a maturity date of October 1, 2027. The 2021 Term Loan Credit Facility is guaranteed on a secured basis and interest, plus principal, is payable in seventy-two consecutive monthly installments.

At any time prior to the October 1, 2027, maturity date, the Company may redeem the 2021 Term Loan Credit Facility, in whole or in part, at a price equal to 100% of the principal amount plus a prepayment fee. The prepayment fee ranges from 3% on or before October 20, 2022, to 2% after October 20, 2022, and on or before October 20, 2023, and 1% thereafter. Upon maturity of the 2021 Term Loan Credit Facility, the entire unpaid principal amount, together with interest, fees and other amounts payable in connection with the facility, is immediately due and payable without further notice or demand.

The 2021 Term Loan Credit Facility includes certain non-financial covenants, including but not limited to restrictions on incurring additional debt and certain restricted payments. The 2021 Term Loan Credit Facility is not subject to financial covenants unless greater than $5.0 million or more in aggregate is outstanding under the Company's ABL Credit Agreement and for which a minimum average liquidity balance of $20.0 million must be maintained. The 2021 Term Loan Credit Facility requires certain debt prepayment, not subject to a prepayment penalty fee, concurrent with a Company equity distribution. The Company is required to make a prepayment in an amount equal to one-third or one-fourth of the total equity distribution, based on a pro forma leverage ratio as defined in the 2021 Term Loan Credit Agreement. In May 2022, August 2022, and October 2022, the Company paid $15.0 million, $15.0 million, and $15.0 million of equity distributions, respectively, and concurrently paid $5.0 million, $3.8 million and $3.8 million of the 2021 Term Loan Credit Facility as required by the terms described above, respectively. In January 2023, the Company paid a $15.0 million equity distribution and concurrently paid $3.8 million of the 2021 Term Loan Credit Facility as required by the terms described above.

ATLAS SAND COMPANY, LLC
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Proceeds from the 2021 Term Loan Credit Facility were used exclusively for general corporate purposes, which included the repayment of outstanding indebtedness under the 2018 Term Loan Credit Facility, and to make permitted distributions. As of December 31, 2022 and 2021, the Company was in compliance with the covenants of the 2021 Term Loan Credit Facility.

2018 Asset-Based Loan Credit Facility

On December 14, 2018, the Company closed on the Asset-Based Loan Credit Facility ("2018 ABL Credit Facility") that provides revolving credit financing with a borrowing capacity of up to $50.0 million. The 2018 ABL Credit Facility is unconditionally guaranteed, jointly and severally, by the Company and its subsidiaries. The 2018 ABL Credit Facility will mature on the stated maturity date, December 14, 2023. As of December 31, 2022 and 2021, the Company had no outstanding borrowings under the 2018 ABL Credit Facility.

The 2018 ABL Credit Facility includes a letter of credit sub-facility, which permits issuances of letters of credit up to an aggregate amount of $10.0 million. As of December 31, 2022 and 2021, the Company had $1.1 million and $0.6 million of outstanding letters of credit under the 2018 ABL Credit Facility, respectively.

The Company may also request swingline loans under the agreement in an aggregate principal amount not to exceed $7.5 million. During the years ended December 31, 2022 and 2021, the Company had no outstanding swingline loans under the 2018 ABL Credit Facility.

Obligations under the 2018 ABL Credit Facility were secured by a first-priority lien on substantially all assets of the Company, until September 9, 2019, when the lenders and the Company entered into the split collateral intercreditor agreement, at which time the 2018 ABL Credit Facility became secured by a first-priority lien on inventory and accounts receivable held by the Company and its subsidiaries, and a second-priority lien on the remaining assets of the Company.

Initially, the borrowing base was set at $35.0 million for the period beginning on December 14, 2018 and ending on April 1, 2019. Thereafter, the amount of available credit changes every month, depending on the amount of eligible accounts receivable and inventory the Company has available to serve as collateral. For the period beginning on April 1, 2019, and ending on June 30, 2019, the facility was limited to the lesser of (a) 85% to 90% of the eligible accounts receivable and (b) 75% of the market value of the eligible inventory. Thereafter, the facility is limited to the lesser of (i) the aggregate commitment and (ii) the sum of (a) 85% to 90% of the eligible accounts receivable and (b) lesser of 70% of the cost of the eligible inventory and 85% of the orderly liquidation value of the eligible inventory. The borrowing base components are subject to customary reserves and eligibility criteria. As of December 31, 2022, availability was $48.9 million.

Borrowings under the 2018 ABL Credit Facility bear interest, at the Company's option, at either a base rate or London Interbank Offered Rate ("LIBOR"), as applicable, plus an applicable margin that ranges based on average excess availability. LIBOR loans bear interest at the LIBOR plus an applicable margin, which ranges from 1.50% to 2.00%. Base rate loans bear interest at the applicable base rate, plus an applicable margin, which ranges from 0.50% to 2.00%. In addition to paying interest on outstanding principal under the 2018 ABL Credit Facility, the Company is required to pay a commitment fee of 0.375% per annum with respect to the unutilized commitment under the 2018 ABL Credit Facility, based on the average utilization of the 2018 ABL Credit Facility. The Company is also required to pay customary letter of credit fees, to the extent that one or more letter of credit is

outstanding. There were no outstanding borrowings under the 2018 ABL Credit Facility as of December 31, 2022. The Company recognized $0.2 million, $0.2 million, and $0.3 million of interest expense, unutilized commitment fees and other fees under the 2018 ABL Credit Facility, classified as interest expense, for the years ended December 31, 2022, 2021 and 2020, respectively.

The 2018 ABL Credit Facility requires that if the excess availability, as defined, is less than the greater of (i) 12.50% of the maximum credit and (ii) $5.0 million, the Company shall comply with a minimum fixed charge coverage ratio of at least 1.00 to 1.00, for covenant trigger periods beginning after March 14, 2019. In addition, the 2018 ABL Credit Facility contains negative covenants that restrict the Company from, among other things, incurring additional debt, granting liens, entering into guarantees, entering into certain mergers, making certain loans and investments, entering into swap agreements, disposing of assets, prepaying certain debt, declaring dividends, accounting changes, transactions with affiliates, modifying certain material agreements or organizational documents relating to, or changing the business it conducts.

The 2018 ABL Credit Facility contains certain customary representations and warranties, affirmative covenants, and events of default, including, among other things, payment defaults, breach of representations and warranties, covenant defaults, cross-defaults and cross-acceleration to certain indebtedness, certain events of bankruptcy, certain events of abandonment, certain events under the Employee Retirement Income Security Act of 1974 as amended from time to time, material judgments, actual or asserted failure of any guaranty or security document supporting the 2018 ABL Credit Facility to be in full force and effect and change of control. If such an event of default occurs, the lenders under the 2018 ABL Credit Facility would be entitled to take various actions, including the acceleration of amounts due under the 2018 ABL Credit Facility and all actions permitted to be taken by a secured creditor. As of December 31, 2022, the Company was in compliance with the covenants of the 2018 ABL Credit Facility.

Limited Waiver and First Amendment to the 2018 ABL Credit Facility

On June 4, 2019, the Company and the lenders agreed to amended certain terms of the 2018 ABL Credit Facility to extend the due date for taking certain actions with regard to two wholly owned subsidiaries of the Company, OLC Kermit, LLC and OLC Monahans, LLC, and to allow the making of limited investments into those subsidiaries. In addition, the lender agreed to waive any defaults or events of default that may have resulted from the Company's acquisition of the two subsidiaries. The Limited Waiver and First Amendment was extended on August 31, 2019, on December 31, 2019, and on June 30, 2020.

Second Amendment to the 2018 ABL Credit Facility

On October 22, 2019, the Company and the lenders agreed to amend certain terms of the 2018 ABL Credit Facility to allow the Company to enter into insurance premium financing arrangements in the ordinary course of business.

Third Amendment to the 2018 ABL Credit Facility

On April 13, 2020, the Company and the lenders agreed to amend certain terms of the 2018 ABL Credit Facility that, in the event the Qualified SBA Loan is not forgiven, or fails to qualify for forgiveness, in accordance with the terms of the CARES ACT, allows the Company to establish reserves up to the amount of the Qualified Small Business Administration Loan that is not forgiven or fails to qualify for forgiveness.

Fourth Amendment to the 2018 ABL Credit Facility

On March 23, 2021, the Company and the lenders agreed to amend certain terms of the 2018 ABL Credit Facility, including expanding the list of assets available for the calculation of available credit. Subsequent to the execution of the Fourth Amendment to the 2018 ABL Credit Facility ("Fourth Amendment"), the facility is limited to the lessor of (i) the aggregate commitment and (ii) the sum of (a) 90% of the book value of eligible accounts receivable, (b) lesser of 100% Pledged Cash, defined on any date, as the aggregate amount of unrestricted cash on deposit in the cash collateral account, and $25.0 million, and (c) the lesser of 70% of the cost of eligible inventory and 85% of the net orderly liquidation value of the eligible inventory. The Company is required to keep cash on deposit in the cash collateral account only to the extent any outstanding borrowings under the 2018 ABL Credit Facility exceed the portion of the borrowing base represented by accounts receivable and inventory. The borrowing base components are subject to customary reserves and eligibility criteria. Additionally, the Fourth Amendment contains provisions addressing the potential transition from LIBOR to a secured overnight financing rate ("SOFR"), in the event the administrator has ceased or will cease publication of LIBOR.

Fifth Amendment to the 2018 ABL Credit Facility

On October 20, 2021, the Company and the lender agreed to amend certain terms of the 2018 ABL Credit Facility, to, among other things, allow the Company to enter into the 2021 Term Loan Credit Facility with Stonebriar Commercial Finance (the "2021 Term Loan Credit Facility"), to repay all borrowings outstanding under the 2018 Term Loan Credit Facility and to conform certain covenants under the 2018 ABL Credit Facility to the 2021 Term Loan Credit Facility.

2018 Term Loan Credit Facility

On January 30, 2018, the Company closed on the 2018 Term Loan Credit Facility that provided debt financing in an aggregate principal amount of $150.0 million, which was funded in a series of tranches during 2018. The Company refers to these borrowings, collectively, as the "2018 Term Loan Credit Facility." In connection with the 2018 Term Loan Credit Facility, the Company delivered to the lender warrants for up to 41,299,845 Class D units. See Note 9, *Equity*, for further discussion.

Obligations under the 2018 Term Loan Credit Facility were secured by a second-priority lien on substantially all assets of the Company, until September 9, 2019, when the lenders and the Company entered into the split collateral intercreditor agreement, at which time the 2018 Term Loan Credit Facility became secured by a second-priority lien on inventory and accounts receivable held by the Company and its subsidiaries, and a first-priority lien on the remaining assets of the Company. In addition, the Company's subsidiaries had guaranteed the Company's obligations under the 2018 Term Loan Credit Facility and had granted to the lender security interests in substantially all respective assets.

Borrowings under the 2018 Term Loan Credit Facility bore interest equal to the lesser of (1) the applicable interest rate, which was set at either 10% or 13% per annum, based upon the Company's consolidated leverage ratio or (2) the highest lawful rate, as defined in the 2018 Term Loan Credit Facility agreement. The Company, at its option, could pay up to 50% of any interest payment in-kind. The interest rate for the 2018 Term Loan Credit Facility was 13% during the year ended December 31, 2021. The Company recognized interest expense associated with the 2018 Term Loan Credit Facility of $18.9 million and $23.6 million for the years ended December 31, 2021 and 2020.

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The 2018 Term Loan Credit Facility would have matured on January 30, 2023, and, for certain loans, would amortize in quarterly installments equal to 1.00% of the aggregate outstanding principal balance as of each quarterly payment date beginning with the initial payment, which was made for the year ended December 31, 2018. Beginning on March 31, 2021, the quarterly principal payments increased to 5.00% of the aggregate outstanding principal balance, with the balance payable on the final maturity date, subject to the amend and extend provisions applicable under the agreement.

The Company had the option to voluntarily prepay the outstanding 2018 Term Loan Credit Facility along with all interest then accrued and unpaid, in whole or in part, and the applicable premium payment based upon either (a) the present value using a discount rate based upon a U.S. Treasury rate plus 50 basis points of the amount of interest that would have been payable on the principal balance prepaid if prior to January 30, 2020, (b) 7% of the principal balance prepaid, thereafter and prior to January 30, 2021, (c) 3% of the principal balance prepaid, anytime thereafter, or (d) 1% of the principal balance if prepaid upon the occurrence of an Initial Public Offering (“IPO”) event.

The 2018 Term Loan Credit Facility contained customary representations and warranties and customary affirmative and negative covenants, including limits or restrictions on the Company’s ability to incur liens, incur indebtedness, make certain restricted payments, merge or consolidate and dispose of assets. In addition, it contained customary events of default that entitled the lenders to cause any or all of the Company’s indebtedness under the 2018 Term Loan Credit Facility to become immediately due and payable. The events of default (some of which were subject to applicable grace or cure periods) included, among other things, nonpayment defaults, covenant defaults, cross-defaults to other material indebtedness, bankruptcy and insolvency defaults and material judgment defaults.

First Amendment to the 2018 Term Loan Credit Facility

On April 3, 2019, the Company amended certain terms of the 2018 Term Loan Credit Facility, which allowed for borrowings of an additional $25.0 million, primarily to fund capital improvement projects. In addition, language related to payment terms for certain 2018 Term Loan Credit Facility was amended so that all aggregate outstanding principal related to the 2018 Term Loan Credit Facility, other than the paid-in-kind loans, is paid according to the terms noted above.

In connection with the First Amendment to the 2018 Term Loan Credit Facility above on April 3, 2019, additional warrants were delivered for up to 4,192,460 Class D units, which were exercisable upon funding of the draws in proportion to the additional $25.0 million in borrowings, see Note 9, *Equity*, for further discussion.

On June 20, 2019, the Company borrowed $5.0 million of the additional $25.0 million under the 2018 Term Loan Credit Facility. On June 28, 2019, the Company borrowed another $5.0 million of the additional $25.0 million under the 2018 Term Loan Credit Facility. On April 24, 2020 and July 7, 2020, the Company borrowed $12.2 and $2.3 million of the additional $25.0 million under the 2018 Term Loan Credit Facility, respectively.

Limited Waiver and Second Amendment to the 2018 Term Loan Credit Facility

On June 4, 2019, the Company and the lender agreed to amended certain terms of the 2018 Term Loan Credit Facility to extend the due date for taking certain actions with regard to two wholly owned subsidiaries of the Company, OLC Kermit, LLC and OLC Monahans, LLC, and to allow the making of limited investments into those subsidiaries. In addition, the lender agreed to waive any defaults or

events of default that may have resulted from the Company's acquisition of the two subsidiaries. The Limited Waiver and Second Amendment was extended on August 31, 2019, on December 31, 2019, on June 30, 2020, and on August 29, 2020.

Third Amendment to the 2018 Term Loan Credit Facility

On October 22, 2019, the Company and the lender agreed to amend certain terms of the 2018 Term Loan Credit Facility to allow the Company to enter into insurance premium financing arrangements in the ordinary course of business.

Fourth Amendment to the 2018 Term Loan Credit Facility

On April 13, 2020, the Company and the lender agreed to amend certain terms of the 2018 Term Loan Credit Facility to allow the Company to receive the Qualified Small Business Administration Loan in an amount not to exceed $10.0 million.

Extinguishment of the 2018 Term Loan Credit Facility

On October 25, 2021, the Company repaid all borrowings outstanding under the 2018 Term Loan Credit Facility, in connection with entering into a new 2021 Term Loan Credit Facility with Stonebriar Commercial Finance. The Company paid a total of $171.0 million, which included principal of $143.1 million, paid-in-kind borrowings of $22.2 million, make-whole premium of $4.5 million, and $1.2 million of accrued interest. In connection with the repayment on October 25, 2021, unamortized debt discount and deferred financing costs of $11.9 million and a make-whole premium of $4.5 million were recognized as a loss on debt extinguishment within interest expense, net, on the consolidated statements of operations for the year ended December 31, 2021.

Debt Obligations

The following table sets forth future principal payment obligations as of December 31, 2022, based on the terms of the Term Loan Credit Facility (in thousands).

2023	$ 20,586
2024	35,457
2025	38,611
2026	42,012
2027	12,329
Total	$ 148,995

Note 8—Commitments and Contingencies

Royalty Agreements

The Company has entered into a royalty agreement associated with its leased properties with a related party, under which it is committed to pay royalties on product sold from its production facilities for which the Company has received payment from the end customer. Royalty expense is recorded as the product is sold, is included in costs of sales, and totaled between 10% and 15% of cost of sales for the year ended December 31, 2022, and less than 10% of cost of sales for the years ended December 31, 2021 and 2020, respectively.

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Standby Letters of Credit

As of December 31, 2022 and 2021, the Company had outstanding standby letters of credit issued under the 2018 ABL Credit Facility of $1.1 million and $0.6 million, respectively.

Lease Obligations

As of December 31, 2022, the Company's estimated future minimum lease payments under long-term operating and finance lease agreements are associated with the Company's adoption of ASC 842 and relate to lease payment maturities. The Company's leases include office space, equipment and vehicles. See Note 6, *Leases,* for additional disclosure on the Company's estimated future minimum lease payments.

Purchase Commitments

On March 23, 2022, the Company entered into an agreement to purchase transportation and logistics equipment in the amount of $5.2 million and $26.2 million in 2022 and 2023, respectively, subject to customary terms and conditions. On April 20, 2022, the Company entered into an agreement to purchase transportation and logistics equipment in the amount of $8.5 million and $11.9 million in 2022 and 2023, respectively, subject to customary terms and conditions.

Litigation

The Company is involved in various legal and administrative proceedings that arise from time to time in the ordinary course of doing business. Some of these proceedings may result in fines, penalties or judgments being assessed against the Company, which may adversely affect financial results. In addition, from time to time, the Company is involved in various disputes, which may or may not be settled prior to legal proceedings being instituted and which may result in losses in excess of accrued liabilities, if any, relating to such unresolved disputes. Expenses related to litigation reduce operating income. The Company does not believe that the outcome of any of these proceedings or disputes would have a significant adverse effect on the financial position, long-term results of operations or cash flows. It is possible, however, that charges related to these matters could be significant to results of operations or cash flows in any single accounting period. Management is not aware of any legal, environmental or other commitments and contingencies that would have a material effect on the consolidated financial statements.

Note 9—Equity

The Company has authority to issue an unlimited number of units under its current capital structure and the ability to issue additional units of different classes or series. The outstanding units are designated as Class A units, Class C units, Class D units and Class P units. Additional units, of the same or different classes or series, having the same or different rights, powers and duties as preexisting units may be created and issued. All Class A, Class C, Class D and Class P unitholders as of December 31, 2022 and 2021, are deemed to be members of the Company ("Members").

On January 30, 2018, the Company executed the Third Amended and Restated Limited Liability Company Agreement of Atlas Sand Company, LLC ("LLC Agreement") to create Class D units as a class of unit that the Company is authorized to issue. This amendment was executed in connection with the issuance of the 2018 Term Loan Credit Facility. The Company delivered to the lender warrants

for up to 41,299,845 Class D units, with an exercise price of $0.01 per warrant unit, that became exercisable upon the funding of each draw under the 2018 Term Loan Credit Facility. During the year ended December 31, 2018, the lender exercised all 41,299,845 Class D warrants.

On April 3, 2019, the Company amended certain terms of the 2018 Term Loan Credit Facility. In connection with the First Amendment, the Company delivered to the lender additional warrants for up to 4,192,460 Class D units, which were exercisable upon funding of the draws in proportion to the additional drawings. During the year ended December 31, 2020, the Company delivered and the lender immediately exercised the remaining 2,515,470 Class D warrants associated with the First Amendment. There were no warrants outstanding as of December 31, 2022 and 2021.

Each Member of the Company is entitled to one vote for each Class A, Class C and Class D unit owned by such Member. Class P units are issued in connection with the Company's long-term incentive plan and have no voting rights.

The Company's LLC Agreement contains provisions for the allocation of net income and loss to the Class A and Class D units. For purposes of maintaining Member capital accounts, the LLC Agreement specifies that net income or net loss shall be allocated proportionally among Members in accordance with their respective percentage ownership interest.

In accordance with the Company's LLC Agreement, all Class C units shall automatically convert to Class A units immediately prior to the closing of a Capital Event, as defined in the Company's LLC Agreement, which, in general, includes a public offering or sale of the Company's assets or equity. Additionally, the holders of Class C units may elect, at any time prior to the approval of a Capital Event, to convert all Class C units into newly issued Class A units by providing notice to the Company.

The Company's LLC Agreement sets forth the calculation to be used to determine the amount of cash distributions that the unitholders will receive.

In December 2021, May 2022, August 2022, and October 2022, the Company paid a cash distribution to Class A and Class D unitholders in the aggregate amount of $10.0 million, $15.0 million, $15.0 million, and $15.0 million, respectively, based on the Company's LLC Agreement calculation. In January 2023, the Company paid additional cash distributions to Class A and Class D unitholders of $15.0 million based on the Company's LLC Agreement calculation. Class C units do not participate in cash distributions, based on the terms of the Company's LLC Agreement.

Upon admittance as Members of the Company, the Class C unitholders were initially granted an option that entitles them to acquire a percentage of the units of the Company that are offered in conjunction with additional capital contribution events, as defined by the Company's LLC Agreement, which generally includes instances where additional units are issued by the Company. The option is not unconditional and can only be exercised upon the occurrence of certain capital events. The consideration for the exercise of the option is based on the percentage ownership of the Class C unitholders at the date of the capital event and the total capital to be contributed in connection with such capital event.

In October 2021, pursuant to the Company's LLC Agreement, the Company delivered a Funding Notice to the Atlas Sand Company, LLC unitholders (other than ASMC, which is the majority unitholder and had already made Additional Capital Contributions related to such Funding Notice), by which the Company offered each unitholder the right, but not the obligation, to make Additional Capital

Contributions to the Company. In addition, the Company delivered a notice to the Class C unitholders pursuant to their option giving them the right to make additional capital contributions, which they exercised. The offering closed on December 1, 2021 and resulted in Additional Capital Contributions of $12.6 million for the year ended December 31, 2021.

Note 10—Unit-Based Compensation

The Company recognizes unit-based compensation expense for awards granted under two long-term incentive plans, the Atlas Sand Management Company, LLC Long-Term Incentive Plan (the "ASMC Plan") and the Atlas Sand Company, LLC Long-Term Incentive Plan (the "ASCo Plan"). The ASMC Plan was adopted on September 15, 2017, by ASMC for officers, employees, directors, managers and consultants of the Company (the "ASMC Participants"). The ASCo Plan was adopted by the Company on December 15, 2017, for officers, employees, directors, managers, consultants or other advisors of the Company (the "ASCo Participants").

The Company has applied the guidance of FASB Interpretation 44, which establishes an accounting model where equity awards granted by a parent company to employees of a subsidiary are recognized in the financial statements of the subsidiary. During the years ended December 31, 2022, 2021 and 2020, the Company recognized $0.2 million, de minimis, and $0.9 million of unit-based compensation expense in its consolidated statements of operations related to awards in the ASMC Plan, respectively.

On May 28, 2018, the Company adopted the Amended and Restated Long-Term Incentive Plan that reduced the authorized available awards to be issued under the ASCo Plan from 149,425 to 100,000. The ASCo Plan consists of equity grants of Class P units made to ASCo Participants at the discretion of the plan administrator. Pursuant to the terms of the ASCo Plan, to the extent that an award is canceled, any and all Class P units that are canceled and repurchased will be available again for new awards under the ASCo Plan.

The vesting schedule for each grant under the plans shall be determined by the respective plans' administrator.

A summary of ASCo's Class P unit activity is as follows (in thousands):

ASCo Plan Class P unit activity	Number of Class P Units	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2020	2,500	$ 151.57
Granted	2,500	—
Vested	(2,167)	$ 151.57
Forfeited	—	—
Non-vested at December 31, 2021	2,833	$ 151.57
Granted	2,200	$ 151.57
Vested	(1,500)	$ 151.57
Forfeited	—	—
Non-vested at December 31, 2022	3,533	$ 151.57

The Company accounts for each tranche of the unit awards as compensatory awards in accordance with FASB ASC 718, and as such, compensation expense is recognized over the service condition

vesting period based on the grant date fair values using a graded vesting methodology. To determine grant date fair value, the Company valued these unit awards utilizing a Monte Carlo option pricing model, to take into consideration the probability of a market condition on being met. This methodology involves making assumptions for the expected time to liquidity, volatility and risk-free rate.

The Company estimated expected volatility based on a 50/50 blend of historical and implied volatility. The risk-free interest rate is based on the yield on U.S. government bonds for a period commensurate with the expected term. The expected term is based on time to the expected exit date as of the valuation date based on the probability weighted average of exit scenario terms. The Company applies a discount to reflect the lack of marketability due to the absence of an active market for its shares. Further, the Company assumed no expected dividend yield.

For the years ended December 31, 2022, 2021 and 2020, the Company recognized $0.4 million, $0.1 million, and $1.6 million of unit-based compensation expense related to awards in the ASCo Plan, respectively.

As of December 31, 2022, unrecognized unit-based compensation expense amounts related to the ASCo and ASMC Plans were $0.2 million and $0.1 million, respectively, with a weighted average remaining service period of 1.2 years.

Note 11—Income Taxes

The components of the income tax provision are as follows (in thousands):

	For the Year Ended December 31,		
	2022	2021	2020
Current income tax provision:			
Federal	$ —	$—	$ —
State	1,858	471	(294)
Total current income tax provision (benefit)	$1,858	$471	$(294)
Deferred income tax provision:			
Federal	$ —	$—	$ —
State	(2)	360	666
Total deferred income tax provision (benefit)	$ (2)	$360	$ 666
Income tax provision	$1,856	$831	$ 372

Income tax expense was different than the amounts computed by applying the statutory federal income tax rate for partnerships (0%) as follows (in thousands, except effective tax rates):

	For the Year Ended December 31,		
	2022	2021	2020
Income before income taxes	$218,862	$5,089	$(34,070)
Income tax expense at the federal statutory rate	—	—	—
State income tax expense	1,856	831	372
Income tax expense	$ 1,856	$ 831	$ 372
Effective tax rate	0.8%	16.3%	(1.1)%

ATLAS SAND COMPANY, LLC
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The tax effects of cumulative temporary differences that give rise to significant deferred tax assets and deferred tax liabilities are presented below (in thousands):

	For the Year Ended December 31,	
	2022	2021
Deferred tax assets:		
Other	$ —	$ —
Total deferred tax assets	$ —	$ —
Deferred tax liabilities:		
Depreciable and depletable assets	$ 1,906	$ 1,908
Other	—	—
Total deferred tax liabilities	$ 1,906	$ 1,908

Due to the contribution of certain depletable assets by members of the Company, a deferred tax liability was created equal to the difference between the fair market value of the contributed assets ("GAAP basis") and the historical cost basis ("Tax basis"). A deferred tax liability of $0.9 million has been recorded as a component of members' equity because the difference resulted from transactions with members. The deferred tax liability will be amortized as the associated basis difference is realized on the tax return.

Note 12—Related-Party Transactions

One member of the Company's Board of Managers served as an executive for a company to whom the Company sold product. For the year ended December 31, 2020, the Company recognized $0.8 million in revenues from this customer. This entity was no longer considered a related party subsequent to May 2020, as the member of the Company's Board of Managers was no longer associated with this entity.

The Company had one month-to-month lodging facility lease with a counterparty controlled by one member of the Company's Board of Managers. During both the years ended December 31, 2021 and 2020, the Company recognized $1.5 million of rent expense associated with these leases. On December 10, 2021, the Company acquired this lodging facility and related assets in West Texas for $7.0 million from counterparties controlled by the Executive Chairman of the Company's Board of Managers. This transaction is considered an asset acquisition in 2021. Subsequent to this transaction and as of December 31, 2021, the man camp lease was terminated. Therefore, the Company did not incur rental expense on the lodging facility for the year ended December 31, 2022.

On January 26, 2021, the Company entered into a Joint Development Agreement with, among others, a customer, which is controlled by one member of the Company's Board of Managers. Under the Joint Development Agreement, the Company has agreed to supply sand for certain wells to be drilled and completed the customer. For the years ended December 31, 2022 and 2021, the Company recognized no revenue and $0.2 million under the agreement. For the years ended December 31, 2022 and 2021, the Company recognized $0.9 million and no revenue with this customer that was not under the agreement. As of December 31, 2022 and 2021, the Company's outstanding balance of related-party accounts receivable to this customer was $0.9 million and $0.1 million.

During the years ended December 31, 2022, 2021 and 2020, the Company incurred $2.4 million, $2.0 million and $1.2 million of expenses with members of the Company, including such activities as

payroll reimbursements, business development activities, travel expenditures and other general business expenditures, respectively.

As of December 31, 2022 and 2021, the Company's outstanding balance of related-party accounts payable to these members was $0.2 million and $0.6 million, respectively.

The Company issued warrants for Class D units to the 2018 Term Loan Credit Facility lender, which the 2018 Term Loan Credit Facility lender exercised in full prior to the termination of the 2018 Term Loan Credit Facility. Refer to *2018 Term Loan Credit Facility* section in Note 7—*Debt* and Note 9—*Equity* for additional disclosure.

Refer to Note 8—*Commitments and contingencies* for disclosure related to the Company's royalty agreement with a related party.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Sole Director and Stockholder of Atlas Energy Solutions Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Atlas Energy Solutions Inc. (the "Corporation") as of February 3, 2022 and December 31, 2022 and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements presents fairly, in all material respects, the financial position of the Corporation at February 3, 2022 and December 31, 2022, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

The financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's 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 in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Corporation 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 Corporation'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 financial statement, 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 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 financial statements. We believe that our audits provides a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Corporation's auditor since 2022.

Austin, Texas

February 15, 2023

ATLAS ENERGY SOLUTIONS INC.
BALANCE SHEET

	December 31, 2022	February 3, 2022
Assets		
Cash and cash equivalents	$ 10	$ 10
Total assets	$ 10	$ 10
Stockholders' equity		
Class A Common stock, $0.01 par value, authorized 1,000 shares, 1,000 issued and outstanding at February 3, 2022	$ 10	$ 10
Total stockholders' equity	$ 10	$ 10

The accompanying notes are an integral part of these financial statements

ATLAS ENERGY SOLUTIONS INC.
NOTES TO THE BALANCE SHEETS

Note 1—Organization and Basis of Presentation

Atlas Energy Solutions Inc. ("Atlas Inc." or "Corporation") is a Delaware corporation formed on February 3, 2022. Atlas Inc.'s fiscal year end is December 31. Atlas Inc. was formed with the intent that Atlas Inc. will be included in a reorganization into a holding corporation structure. It is anticipated that the Atlas Inc. will become a holding corporation and its sole material asset is expected to be an equity interest in Atlas Sand Company, LLC, a Delaware limited liability company (the "Company").

These balance sheets have been prepared in accordance with accounting principles generally accepted in the United States. Separate statements of operations, changes in stockholders' equity and of cash flows have not been presented because there have been no activities in this entity and because the single transaction is fully disclosed below. These balance sheets have been prepared assuming the Corporation will continue as a going concern, which contemplates, among other things, the realization of assets and satisfaction of liabilities in the normal course of business.

Note 2—Summary of Significant Accounting Policies

Cash and Cash Equivalents

Cash and cash equivalents consist of all highly liquid investments that are readily convertible into cash and have original maturities of three months or less when purchased. The Company places cash deposits with high-credit-quality financial institutions. At times, cash may be uninsured or in deposit accounts that exceed or are not covered under the Federal Deposit Insurance Corporation limit.

Income Taxes

The Corporation is treated as a subchapter C corporation, and therefore, are subject to both federal and state income taxes. The federal and state tax provisions were de minimis as of December 31, 2022.

Note 3—Stockholders' Equity

Atlas Inc. is authorized to issue 1,000 shares of Class A common stock, par value $0.01 per share ("Class A Common Stock"). Under the Atlas Inc.'s certificate of incorporation in effect as of February 3, 2022, all shares of Class A Common Stock are identical. In exchange for $10.00, the Corporation has issued 1,000 shares of Class A common stock, all of which were held by the Company as of February 3, 2022 and December 31, 2022.

Note 4—Subsequent Events

Subsequent events have been evaluated through February 15, 2023, the date this balance sheet was issued.

GLOSSARY OF CERTAIN INDUSTRY TERMS

100-mesh frac sand: Sand that passes through a sieve with 40 holes per linear inch and is retained by a sieve with 140 holes per linear inch.

40/70-mesh frac sand: Sand that passes through a sieve with 40 holes per linear inch and is retained by a sieve with 70 holes per linear inch.

API: American Petroleum Institute.

Crush strength: A proppant is exposed to varying stress levels in one-thousand PSI increments. The crush strength classifies a proppant according to the stress at which 10% fines is generated. For example, a 7,000 PSI proppant would produce less than 10% fines at 7,000 PSI.

Frac sand: A proppant used in the completion and re-completion of unconventional oil and natural gas wells to stimulate and maintain oil and natural gas exploration and production through the process of hydraulic fracturing.

Hydraulic fracturing: The process of pumping fluids, mixed with granular proppants, into a geological formation at pressures sufficient to create fractures in the hydrocarbon-bearing rock.

Inferred resource: The part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Mesh size: Measurement of the size of a grain of sand indicating it will pass through a sieve of a certain size.

***mmtpy*:** Means one million metric tons per year.

Natural gas: A mixture of hydrocarbons (principally methane, ethane, propane, butanes and pentanes), water vapor, hydrogen sulfide, carbon dioxide, helium, nitrogen and other chemicals that occur naturally underground in a gaseous state.

Overburden: Material such as soil and unusable sand that lies above the useable sand and must be removed to excavate the useable sand.

Probable reserves: Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Proppant: A sized particle mixed with fracturing fluid to hold fractures open after a hydraulic fracturing treatment.

Proven reserves: Reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.

Reserves: Sand that can be economically extracted or produced at the time of determination based on relevant legal, economic and technical considerations.

Roundness: A measure of how round the curvatures of an object are. The opposite of round is angular. It is possible for an object to be round but not spherical (e.g. an egg-shaped particle is round, but not spherical). When used to describe proppant, roundness is a reference to having a curved shape which promotes hydrocarbon flow, as the curvature creates a space through which the hydrocarbons can flow.

Silica: A chemically resistant dioxide of silicon that occurs in crystalline, amorphous and cryptocrystalline forms.

Sphericity: A measure of how well an object is formed in a shape where all points are equidistant from the center. The more spherical a proppant, the more highly it is desired relative to non-spherical proppant, as the gaps created by it are typically the largest and this promotes maximum hydrocarbon flow.

Turbidity: Measurement of the level of contaminants, such as silt and clay, in a sample.

Shale play: A geological formation that contains petroleum and/or natural gas in nonporous rock that requires special drilling and completion techniques.

U.S. Energy Information Administration (EIA): The statistical and analytical agency within the U.S. Department of Energy.

Atlas Energy Solutions Inc.

Shares

Class A Common Stock

Until , 2023 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth an itemized statement of the amounts of all expenses (excluding underwriting discounts and commissions) payable by us in connection with the registration of the common stock offered hereby. With the exception of the SEC registration fee, FINRA filing fee and the NYSE listing fee, the amounts set forth below are estimates.

SEC registration fee	$ 11,020
FINRA filing fee	14,850
NYSE listing fee	295,000*
Accounting fees and expenses	450,000*
Directors' & officers' liability insurance premiums	525,000*
Legal fees and expenses	3,000,000
Printing and engraving expenses	400,000*
Transfer agent and registrar fees	10,000*
Miscellaneous	44,130*
Total	$ 4,750,000*

* To be provided by amendment

Item 14. Indemnification of Directors and Officers.

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware (referred to as the "DGCL") empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in

subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit.

Our amended and restated certificate of incorporation will provide for indemnification of its directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our bylaws will provide for indemnification of its directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law.

In addition, we will enter into indemnification agreements with each of our directors and officers. These agreements will require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We intend to enter into indemnification agreements with its future directors.

The proposed form of underwriting agreement, to be filed as Exhibit 1.1 to this registration statement provides for indemnification of our directors and officers by the underwriters against certain liabilities arising under the Securities Act or otherwise in connection with this offering.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or person controlling us pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

In connection with our incorporation on February 3, 2022 under the laws of the State of Delaware, we issued 1,000 shares of our Class A common stock to Atlas LLC for an aggregate purchase price of $10.00. These securities were offered and sold by us in reliance upon the exemption from the registration requirements provided by Section 4(a)(2) of the Securities Act. These shares will be redeemed for nominal value in connection with our reorganization.

Further, pursuant to the terms of certain reorganization transactions that will be completed prior to the closing of this offering, as described in further detail under "Corporate Reorganization," we will

issue shares of Class B common stock to certain of the Legacy Owners. Such issuances will not involve any underwriters, underwriting discounts or commissions or a public offering, and we believe that each such issuance will be exempt from registration requirements pursuant to Section 4(a)(2) of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

Exhibit Number	Description
*1.1	Form of Underwriting Agreement.
*2.1	Form of Master Reorganization Agreement.
**3.1	Certificate of Incorporation of Atlas Energy Solutions Inc.
*3.2	Form of Amended and Restated Certificate of Incorporation of Atlas Energy Solutions Inc.
**3.3	Bylaws of Atlas Energy Solutions Inc.
**3.4	Form of Amended and Restated Bylaws of Atlas Energy Solutions Inc.
**4.1	Form of Class A Common Stock Certificate.
**4.2	Form of Registration Rights Agreement.
**5.1	Form of Opinion of Vinson & Elkins L.L.P. as to the legality of the securities being registered.
*10.1†	Form of Atlas Energy Solutions Inc. Long Term Incentive Plan.
**10.2	Form of Indemnification Agreement.
*10.3	Form of Stockholders' Agreement.
**10.4	Form of Amended and Restated Limited Liability Company Agreement of Atlas Sand Operating, LLC.
*10.5	Loan, Security and Guaranty Agreement, dated as of February 22, 2023, among Atlas Sand Company, LLC, as Borrower, certain of its subsidiaries, as Guarantors, Bank of America, N.A., as Agent and Bank of America, N.A., as Sole Lead Arranger and Sole Bookrunner.
**10.6	Credit Agreement, dated October 20, 2021 by and between Atlas Sand Company, LLC, as borrower, and Stonebriar Commercial Finance, LLC as lender.
**#10.7	Mining Lease Agreement, dated as of December 15, 2017, by and between the Sealy & Smith Foundation and Atlas Sand Company, LLC.
*+10.8	Third Amended & Restated Limited Liability Company Agreement of Atlas Sand Company, LLC
*+10.9	First Amended & Restated Limited Liability Company Agreement of Atlas Sand Management Company, LLC
*10.10†	Atlas Sand Company, LLC Long Term Incentive Plan
*10.11†	Atlas Sand Management Company, LLC Long Term Incentive Plan
*+10.12†	Form of Participation Agreement (Atlas Sand Company, LLC Long Term Incentive Plan)
*+10.13†	Form of Participation Agreement (Atlas Sand Management Company, LLC Long Term Incentive Plan)

Exhibit Number	Description
**21.1	List of subsidiaries of Atlas Energy Solutions Inc.
*23.1	Consent of Ernst & Young LLP, independent registered public accounting firm to Atlas Energy Solutions Inc.
*23.2	Consent of Ernst & Young LLP, independent registered public accounting firm to Atlas Sand Company, LLC.
**23.3	Consent of Vinson & Elkins L.L.P. (included as part of Exhibit 5.1 hereto).
**23.4	Consent of John T. Boyd Company, independent mining engineers and geologists.
**23.5	Consent of Stacy Hock.
**23.6	Consent of Gayle Burleson.
**23.7	Consent of Mark P. Mills.
**23.8	Consent of Robb L. Voyles.
**23.9	Consent of Douglas G. Rogers.
**23.10	Consent of A. Lance Langford.
**23.11	Consent of Stephen C. Cole.
**24.1	Power of Attorney (included on the signature page of the initial filing of the Registration Statement).
**99.1	John T. Boyd Company Summary of Reserves at December 31, 2021.
**99.2	Addendum to Summary Reserve Report of John T. Boyd Company as of December 31, 2022.
**107	Calculation of Filing Fee Table.

* Filed herewith.
** Previously filed.
† Compensatory plan or arrangement
# Certain portions of this exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed.
+ The exhibits and schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K and will be provided to the Securities and Exchange Commission upon request.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless

in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

For the purpose of determining liability under the Securities Act of 1933 to any purchaser, if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

For the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(1) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(2) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(3) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(4) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Austin, State of Texas, on February 24, 2023.

ATLAS ENERGY SOLUTIONS INC.

By: /s/ Ben M. Brigham
Name: Ben M. Brigham
Title: Executive Chairman, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities indicated below on February 24, 2023.

Name	Title
/s/ Ben M. Brigham Ben M. Brigham	Executive Chairman, Chief Executive Officer and Director (Principal Executive Officer)
/s/ John Turner John Turner	President and Chief Financial Officer (Principal Accounting and Financial Officer)

Exhibit 1.1

Atlas Energy Solutions Inc.

Class A Common Stock

Underwriting Agreement

[•], 2023

Goldman Sachs & Co. LLC,
BofA Securities, Inc.
Piper Sandler & Co.
As representatives (the "Representatives") of the several Underwriters named in Schedule I hereto,

c/o Goldman Sachs & Co. LLC
200 West Street,
New York, New York 10282-2198

c/o BofA Securities, Inc.
One Bryant Park
New York, New York 10036

c/o Piper Sandler & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402

Ladies and Gentlemen:

Atlas Energy Solutions Inc., a Delaware corporation (the "Company"), proposes, subject to the terms and conditions stated in this agreement (this "Agreement"), to issue and sell to the Underwriters named in Schedule I hereto (the "Underwriters") an aggregate of [•] shares of its Class A common stock, par value $0.01 per share, of the Company (the "Firm Shares") and, at the election of the Underwriters, up to [•] additional shares (the "Optional Shares") of Class A common stock of the Company (the "Stock"). The Firm Shares and the Optional Shares that the Underwriters elect to purchase pursuant to Section 2 hereof being collectively called the "Shares."

The Company and Merrill Lynch, Pierce, Fenner & Smith Incorporated, (an affiliate of BofA Securities, Inc., a participating Underwriter, hereafter referred to as "Merrill Lynch") agree that up to 5% of the Firm Shares to be purchased by the Underwriters (the "Reserved Securities") shall be reserved for sale by Merrill Lynch to certain persons designated by the Company (the "Invitees"), as part of the distribution of the Shares by the Underwriters, subject to the terms of this Agreement, the applicable rules, regulations and interpretations of FINRA and all other applicable laws, rules and regulations. The Company has solely determined, without any direct or indirect participation by the underwriters or Merrill Lynch, the Invitees who will purchase Reserved Securities (including the amount to be purchased by such persons) sold by Merrill Lynch. To the extent that such Reserved Securities are not orally confirmed for purchase by Invitees by 11:59 PM. (New York City time) on the date of this Agreement, such Reserved Securities may be offered to the public as part of the public offering contemplated hereby.

On the date hereof the business of the Company is conducted through Atlas Sand Company, LLC, a Delaware limited liability company ("Atlas LLC"), and its subsidiaries. In connection with the offering contemplated by this Agreement, the Corporate Reorganization (as such term is defined in the Registration Statement and the Pricing Disclosure Package (each as defined below) in the section titled "Corporate Reorganization") will be effected prior to the First Time of Delivery (as defined below), pursuant to which the Company will become the managing member of Atlas Sand Operating, LLC, a Delaware limited liability company ("Atlas Operating"), and Atlas Operating will become the sole managing member of Atlas LLC. As the managing member of Atlas Operating, the Company, through Atlas Operating, will operate and control all of the business and affairs of Atlas LLC and, through Atlas LLC and its subsidiaries, conduct its business. Upon consummation of the offering contemplated by this Agreement, the Company will contribute the net proceeds of the Offering to Atlas Operating in exchange for common units of Atlas Operating ("Atlas Units") in such number that will result in the Company holding a total number of Atlas Units after such exchange equal to the total number of shares of Class A common stock that will be outstanding after this offering, and Atlas Operating will further contribute the net proceeds received to Atlas LLC.

1. The Company represents and warrants to, and agrees with, each of the Underwriters that:

(a) A registration statement on FormS-1 (File No. 333-269488) (the "Initial Registration Statement") in respect of the Shares has been filed with the Securities and Exchange Commission (the "Commission"); the Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, have been declared effective by the Commission in such form; other than a registration statement, if any, increasing the size of the offering (a "Rule 462(b) Registration Statement"), filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Act"), which became effective upon filing, no other document with respect to the Initial Registration Statement has been filed with the Commission; and no stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose or pursuant to Section 8A of the Act has been initiated or threatened by the Commission (any preliminary prospectus included in the Initial Registration Statement or filed with the Commission pursuant to Rule 424(a) of the rules and regulations of the Commission under the Act is hereinafter called a "Preliminary Prospectus"; the various parts of the Initial Registration Statement and the Rule 462(b) Registration Statement, if any, including all exhibits thereto and including the information contained in the form of final prospectus filed with the Commission pursuant to Rule 424(b) under the Act in accordance with Section 5(a) hereof and deemed by virtue of Rule 430A under the Act to be part of the Initial Registration Statement at the time it was declared effective, each as amended at the time such part of the Initial Registration Statement became effective or such part of the Rule 462(b) Registration Statement, if any, became or hereafter becomes effective, are hereinafter collectively called the "Registration Statement"; the Preliminary Prospectus relating to the Shares that was included in the Registration Statement immediately prior to the Applicable Time (as defined in Section 1(c) hereof) is hereinafter called the "Pricing Prospectus"; and such final prospectus, in the form first filed pursuant to Rule 424(b) under the Act, is hereinafter called the "Prospectus"; any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act or Rule 163B under the Act is hereinafter called a "Testing-the-Waters Communication"; and any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Act is hereinafter called a "Written Testing-the-Waters Communication"; and any "issuer free writing prospectus" as defined in Rule 433 under the Act relating to the Shares is hereinafter called an "Issuer Free Writing Prospectus");

(b) (i) No order preventing or suspending the use of any Preliminary Prospectus or any Issuer Free Writing Prospectus has been issued by the Commission, and (ii) each Preliminary Prospectus, at the time of filing thereof, conformed in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder, and did not include 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 the Underwriter Information (as defined in Section 9(b) of this Agreement);

(c) For the purposes of this Agreement, the "Applicable Time" is [•] p.m. (Eastern time) on the date of this Agreement. The Pricing Prospectus, as supplemented by the information listed on Schedule II(b) hereto, taken together (collectively, the "Pricing Disclosure Package"), as of the Applicable Time, did not, and as of each Time of Delivery (as defined in Section 4(a) of this Agreement) will 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 Issuer Free Writing Prospectus and each Written Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement, the Pricing Prospectus or the Prospectus and each Issuer Free Writing Prospectus and each Written Testing-the-Waters Communication, as supplemented by and taken together with the Pricing Disclosure Package, as of the Applicable Time, did not, and as of each Time of Delivery will 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 reliance upon and in conformity with the Underwriter Information;

(d) The Registration Statement conforms, and the Prospectus and any further amendments or supplements to the Registration Statement and the Prospectus will conform, in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder and do not and will not, as of the applicable effective date as to each part of the Registration Statement, as of the applicable filing date as to the Prospectus and any amendment or supplement thereto, and as of each Time of Delivery, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, in the case of the Registration Statement, or include 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 which they were made, not misleading, in the case of the Prospectus; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information;

(e) Neither the Company nor any of its subsidiaries has, since the date of the latest audited financial statements included in the Pricing Prospectus, (i) sustained 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 or (ii) entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole, in each case otherwise than as set forth or contemplated in the Pricing Prospectus; and, since the respective dates as of which information is given in the Registration Statement and the Pricing Prospectus, there has not been (A) any change in the capital stock (other than as a result

of (1) the exercise, if any, of stock options or the award, if any, of stock options or restricted stock in the ordinary course of business pursuant to the Company's equity plans that are described in the Pricing Prospectus and the Prospectus or (2) the issuance, if any, of stock upon conversion of Company securities as described in the Pricing Prospectus and the Prospectus) or long-term debt of the Company or any of its subsidiaries or (B) any Material Adverse Effect (as defined below); as used in this Agreement, "Material Adverse Effect" shall mean any material adverse change or effect, or any development involving a prospective material adverse change or effect, in or affecting (1) the business, properties, general affairs, management, financial position, stockholders' equity or results of operations of the Company and its subsidiaries, taken as a whole, except as set forth or contemplated in the Pricing Prospectus, or (2) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Shares, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus;

(f) The Company and its subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them, in each case free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries;

(g) Each of the Company and its subsidiaries has been (i) duly organized and is validly existing and in good standing under the laws of its jurisdiction of organization, with power and authority (corporate and other) to own its properties and conduct its business as described in the Pricing Prospectus, and (ii) duly qualified as a foreign corporation or foreign 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, except, in the case of this clause (ii), where the failure to be so qualified or in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and each subsidiary of the Company has been listed in the Registration Statement;

(h) The Company has an authorized capitalization as set forth in the Pricing Prospectus and all of the issued shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and conform to the description of the Stock contained in the Pricing Disclosure Package and Prospectus; and all of the issued shares of capital stock of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and (except, in the case of any foreign subsidiary, for directors' qualifying shares) are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims;

(i) The Shares have been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued and fully paid and non-assessable and will conform to the description of the Stock contained in the Pricing Disclosure Package and the Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights;

(j) The issue and sale of the Shares and the compliance by the Company with this Agreement and the consummation of the transactions contemplated in this Agreement and the Pricing Prospectus will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, (i) any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject, except, in the case of this clause (i) for such defaults, breaches, or violations that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (ii) the certificate of incorporation or bylaws (or other applicable organizational document) of the Company or any of its subsidiaries, or (iii) any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its 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 Shares or the consummation by the Company of the transactions contemplated by this Agreement, (X) except such as have been obtained under the Act, the approval by the Financial Industry Regulatory Authority ("FINRA") of the underwriting terms and arrangements and 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 Shares by the Underwriters, and (Y) such as have been obtained under the laws and regulations of jurisdictions outside the United States in which the Reserved Securities were offered;

(k) Neither the Company nor any of its subsidiaries is (i) in violation of its certificate of incorporation or bylaws (or other applicable organizational document), (ii) in violation of any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties or (iii) in default in the performance or observance of any obligation, agreement, 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, except, in the case of the foregoing clauses (ii) and (iii), for such defaults as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect;

(l) The statements set forth in the Pricing Prospectus and Prospectus under the caption "Description of Capital Stock," insofar as they purport to constitute a summary of the terms of the Stock, under the caption "Material U.S. Federal Income Tax Considerations for Non-U.S. Holders" and under the caption "Underwriting," insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate, complete and fair in all material respects;

(m) Other than as set forth in the Pricing Prospectus, there are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings ("Actions") pending to which the Company or any of its subsidiaries or, to the Company's knowledge, any officer or director of the Company, is a party or of which any property of the Company or any of its subsidiaries or, to the Company's knowledge, any officer or director of the Company, is the subject which, if determined adversely to the Company or any of its subsidiaries (or such officer or director), would individually or in the aggregate reasonably be expected to have a Material Adverse Effect; and, to the Company's knowledge, no such proceedings are threatened or contemplated by governmental authorities or others; there are no current or pending Actions that are required under the Act to be described in the Registration Statement or the Pricing Prospectus that are not so described therein; and there are no statutes, regulations or contracts or other documents that are required under the Act to be filed as exhibits to the Registration Statement or described in the Registration Statement, the Pricing Prospectus that are not so filed as exhibits to the Registration Statement or described in the Registration Statement and the Pricing Prospectus;

(n) No relationship, direct or indirect, exists between or among the Company or any of its subsidiaries, on the one hand, and the directors, officers, stockholders or other affiliates of the Company or any of its subsidiaries, on the other, that would be required by the Act to be described in a registration statement on Form S-1 to be filed with the Commission and that is not so described in the Registration Statement, the Pricing Disclosure Package or the Prospectus;

(o) The Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof, will not be an "investment company," as such term is defined in the Investment Company Act of 1940, as amended (the "Investment Company Act");

(p) The Company and its subsidiaries 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 would not reasonably be expected to have a Material Adverse Effect, there is no tax deficiency that has been, or would reasonably be expected to be, asserted against the Company or any of its subsidiaries or any of their respective properties or assets;

(q) At the time of filing the Initial Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or any offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) under the Act) of the Shares, and at the date hereof, the Company was not and is not an "ineligible issuer," as defined under Rule 405 under the Act;

(r) Ernst & Young LLP, who has certified certain financial statements of the Company and its subsidiaries, is an independent registered public accounting firm with respect to the Company within the meaning of the Act and the applicable rules and regulations thereunder adopted by the Commission and the Public Company Accounting Oversight Board (United States);

(s) The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) that (i) complies with the requirements of the Exchange Act, (ii) has been designed by the Company'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 and (iii) is sufficient to provide reasonable assurance that (A) transactions are executed in accordance with management's general or specific authorization, (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets, (C) access to assets is permitted only in accordance with management's general or specific authorization and (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and except as disclosed in the Pricing Prospectus, the Company's internal control over financial reporting is effective and the Company is not aware of any material weaknesses in its internal control over financial reporting**;**

(t) Except as disclosed in the Pricing Prospectus, since the date of the latest audited financial statements included in the Pricing Prospectus, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting;

(u) The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) that comply with the requirements of the Exchange Act; such disclosure controls and procedures have been designed to ensure that material information relating to the Company and its subsidiaries is made known to the Company's principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective in all material respects to perform the functions for which they were established;

(v) The Company has full right, power and authority to execute and deliver this Agreement and to perform its obligations hereunder; and all action required to be taken for the due and proper authorization, execution and delivery of this Agreement and the consummation of the transactions contemplated hereby has been or will be duly and validly taken on or prior to each Time of Delivery;

(w) This Agreement has been duly authorized, executed and delivered by the Company;

(x) Neither the Company nor any of its subsidiaries, nor any director, officer or employee of the Company or any of its subsidiaries nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries has (i) made, offered, promised or authorized any unlawful contribution, gift, entertainment or other unlawful expense (or taken any act in furtherance thereof); (ii) made, offered, promised or authorized any direct or indirect unlawful payment; or (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the rules and regulations thereunder, the U.K. Bribery Act 2010 or any other applicable anti-corruption, anti-bribery or related law, statute or regulation (collectively, "Anti-Corruption Laws"); the Company and its subsidiaries have conducted their businesses in compliance with Anti-Corruption Laws and have instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; neither the Company nor any of its subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of Anti-Corruption Laws;

(y) The operations of the Company and its subsidiaries are and have been conducted at all times in 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 Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulation or guidelines issued, administered or enforced by any governmental agency (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 Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened;

(z) Neither the Company nor any of its subsidiaries, nor any director, officer or employee of the Company or any of its subsidiaries nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries is (i) 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 the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person," the European Union, His Majesty's Treasury, the United Nations Security Council, or other relevant sanctions authority (collectively, "Sanctions"), or (ii) located, organized, or resident in a country or territory that is the subject or target of comprehensive Sanctions (currently, Cuba, Iran, North Korea, Syria, the Crimea region of Ukraine, the so-called Donetsk People's Republic, and the so-called Luhansk People's Republic (each a "Sanctioned Jurisdiction"), the Company will not, except as authorized under applicable Sanctions, directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (A) to fund or facilitate any activities of or business with any person, or in any country or territory, that, at the time of such funding, is the subject or the target of Sanctions or (B) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions; except as authorized under applicable Sanctions, neither the Company nor any of its subsidiaries is engaged in, or has, at any time in the past five years, engaged in, any dealings or transactions with or involving any individual or entity that was or is, as applicable, at the time of such dealing or transaction, the subject or target of Sanctions or with any Sanctioned Jurisdiction; and the Company and its subsidiaries have instituted, and maintain, policies and procedures designed to promote and achieve continued compliance with applicable Sanctions;

(aa) The financial statements included in the Registration Statement, the Pricing Prospectus and the Prospectus, together with the related schedules and notes, present fairly, in all material respects, the financial position of the Company and its subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its subsidiaries for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") and applied on a consistent basis throughout the periods involved. The supporting schedules, if any, present fairly, in all material respects, in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the Pricing Prospectus and the Prospectus present fairly, in all material respects, the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included in the Registration Statement, the Pricing Prospectus or the Prospectus under the Act or the rules and regulations promulgated thereunder. All disclosures contained in the Registration Statement, the Pricing Prospectus and the Prospectus regarding "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply, in all material respects, with Regulation G of the Exchange Act and Item 10 of Regulation S-K of the Act, to the extent applicable;

(bb) The Company and each of its subsidiaries (i) own or otherwise possess adequate rights to use all material patents, patent applications, trademarks, service marks, trade names, domain names, copyrights and registrations and applications thereof, licenses, know-how, software, systems and technology (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures and other intellectual property) (collectively, "Intellectual Property Rights") necessary for the conduct of their respective businesses, (ii) to the knowledge of the Company, do not, through the conduct of their respective businesses, infringe, violate or conflict with any Intellectual Property Rights of any third party and (iii) have not received any written notice of any claim of infringement, violation or conflict with, any Intellectual Property Rights of any third party;

(cc) Except as disclosed in the Pricing Disclosure Package and the Prospectus, (i)(A) neither the Company nor any of its subsidiaries is in violation of, and does not have any liability under, any federal, state, local or non-U.S. statute, law, rule, regulation, ordinance, code, other requirement or rule of law (including common law), or decision or order of any domestic or foreign governmental agency, governmental body or court, relating to pollution, to the use, handling, transportation, treatment, storage, discharge, disposal or release of Hazardous Substances (as defined below), to the protection or restoration of the environment or natural resources, to health and safety including as such relates to exposure to Hazardous Substances, and to natural resource damages (collectively, "Environmental Laws"), (B) to the knowledge of the Company, neither the Company nor any of its subsidiaries is liable or allegedly liable for any release or threatened release of Hazardous Substances, including at any off site storage, treatment, or disposal site, (C) neither the Company nor any of its subsidiaries is subject to any pending, or to the Company's knowledge, threatened, claim by any governmental agency or governmental body or person arising under Environmental Laws or relating to the release of or exposure to Hazardous Substances and (D) the Company and its subsidiaries have received, are in compliance with all, and have no liability under any, permits, licenses, authorizations, identification numbers, consents, waivers, exemptions, or other approvals required under applicable Environmental Laws to conduct their business, except in each case covered by clauses (A) through (D) such as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and (ii) to the knowledge of the Company and its subsidiaries, there are no facts or circumstances that would reasonably be expected to result in a violation of, liability under, or claim pursuant to any Environmental Law that would reasonably be expected to have a Material Adverse Effect. Except as disclosed in the Pricing Disclosure Package and the Prospectus, (x) there is no proceeding that is pending, or that is known to be contemplated, against the Company or any of its subsidiaries under any Environmental Laws in which a governmental entity is also a party, other than such proceeding regarding which it is reasonably believed no monetary sanctions of $300,000 or more will be imposed, and (y) none of the Company or its subsidiaries anticipates material capital expenditures relating to any Environmental Laws. For purposes of this subsection "Hazardous Substances" means (A) petroleum and petroleum products, by-products or breakdown products, radioactive materials, asbestos-containing materials, and polychlorinated biphenyls, and (B) any other chemical, material or substance defined or regulated as toxic or hazardous or as a pollutant, contaminant or waste under Environmental Laws;

(dd) The Company and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with, the operation of the business of the Company and its subsidiaries as currently conducted and, to the Company's knowledge, the IT Systems are free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants; the Company and its subsidiaries have implemented and maintained reasonable controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data (including all personal, personally identifiable, sensitive, confidential or regulated data (collectively, "Company Data")) used in connection with their businesses, and to the Company's knowledge, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same; the Company and its subsidiaries are presently in compliance in all material respects 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 Company Data and to the protection of such IT Systems and Company Data from unauthorized use, access, misappropriation or modification;

(ee) No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) included in any of the Registration Statement, the Pricing Prospectus or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith;

(ff) Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included in each of the Registration Statement, the Pricing Prospectus and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects;

(gg) There is and has been no failure on the part of the Company or, to the knowledge of the Company, any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002, as amended and the rules and regulations promulgated in connection therewith (the "Sarbanes-Oxley Act"), including Section 402 related to loans and Sections 302 and 906 related to certifications, that are then in effect and with which the Company is required to comply as of the effectiveness of the Registration Statement;

(hh) Neither the Company nor any of its affiliates has taken or will take, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company or any of its subsidiaries in connection with the offering of the Shares;

(ii) The Company and each of its subsidiaries have such permits, licenses, approvals, consents, franchises, certificates of need and other approvals or authorizations of governmental or regulatory authorities ("Permits") as are necessary under applicable law to own their respective properties and conduct their respective businesses in the manner described in the Registration Statement, the Pricing Prospectus and the Prospectus, except for any of the foregoing that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received notice of any proceedings related to the revocation or modification of any such Permits that, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to have a Material Adverse Effect;

(jj) The Company and its subsidiaries, taken as a whole, are insured against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged and as required by law; and

(kk) From the time of initial confidential submission of a registration statement relating to the Shares with the Commission filing of the Initial Registration Statement through the date hereof, the Company has been and is an "emerging growth company" as defined in Section 2(a)(19) of the Act (an "Emerging Growth Company").

(ll) The mineral reserve estimates contained in the Registration Statement, the Pricing Prospectus and the Prospectus are derived from a report that has been prepared by John T. Boyd Company, and such estimates (i) fairly reflect, in all material respects, the mineral reserves attributable to the Kermit and Monahans facilities at the date indicated therein and (ii) were calculated in accordance with standard mining engineering procedures used in the sand industry

and applicable government reporting requirements and applicable law. All assumptions used in the calculation of the mineral reserve estimates contained in the Registration Statement, the Pricing Prospectus and the Prospectus were and are reasonable in connection with (i) the procedures described in the Registration Statement, the Pricing Prospectus and the Prospectus and (ii) all applicable guidelines and industry standards of the Commission applied on a consistent basis throughout the periods involved. John T. Boyd Company, which prepared the reports upon which the estimates of the mineral reserves of the Company disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus were based, is an independent mining engineer and for the periods set forth in the Registration Statement, the Pricing Prospectus and the Prospectus.

(mm) In connection with any offer and sale of Reserved Securities outside the United States, each Preliminary Prospectus, the Prospectus and any amendment or supplement thereto, complied and will comply in all material respects with any applicable laws or regulations of foreign jurisdictions in which the same is distributed. The Company has not offered, or caused Merrill Lynch to offer, Reserved Securities to any person with the specific intent to unlawfully influence (i) a customer or supplier of the Company or any of its affiliates to alter the customer's or supplier's level or type of business with any such entity or (ii) a trade journalist or publication to write or publish favorable information about the Company or any of its affiliates, or their respective businesses or products.

(nn) The Company has specifically directed in writing the allocation of Shares to each Invitee, and neither Merrill Lynch nor any other Underwriter has had any involvement or influence, directly or indirectly, in such allocation decision.

2. Subject to the terms and conditions herein set forth, (a) the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price per share of $[•], the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto and (b) in the event and to the extent that the Underwriters shall exercise the election to purchase Optional Shares as provided below, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at the purchase price per share set forth in clause (a) of this Section 2 (provided that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares), that portion of the number of Optional Shares as to which such election shall have been exercised (to be adjusted by you so as to eliminate fractional shares) determined by multiplying such number of Optional Shares by a fraction, the numerator of which is the maximum number of Optional Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule I hereto and the denominator of which is the maximum number of Optional Shares that all of the Underwriters are entitled to purchase hereunder.

The Company hereby grants to the Underwriters the right to purchase at their election up to [•] Optional Shares, at the purchase price per share set forth in the paragraph above, provided, however, that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares. Any such election to purchase Optional Shares may be exercised only by written notice from you to the Company, given within a period of 30 calendar days after the date of this Agreement, setting forth the aggregate number of Optional Shares to be purchased and the date on which such Optional Shares are to be delivered, as determined by you but in no event earlier than the First Time of Delivery (as defined in Section 4 hereof) or, unless you and the Company otherwise agree in writing, earlier than two or later than ten business days after the date of such notice.

3. Upon the authorization by you of the release of the Shares, the several Underwriters propose to offer the Shares for sale upon the terms and conditions set forth in the Pricing Disclosure Package and the Prospectus.

4. (a) The Shares to be purchased by each Underwriter hereunder, in definitive or book-entry form, and in such authorized denominations and registered in such names as the Representatives may request upon at least forty-eight hours' prior notice to the Company shall be delivered by or on behalf of the Company to the Representatives, through the facilities of The Depository Trust Company ("DTC"), for the account of such Underwriter, against payment by or on behalf of such Underwriter of the purchase price therefor by wire transfer of federal (same-day) funds to the account specified by the Company to the Representatives at least forty-eight hours in advance. The Company will cause the certificates, if any, representing the Shares to be made available for checking and packaging at least twenty-four hours prior to the Time of Delivery (as defined below) with respect thereto at the office of DTC or its designated custodian (the "Designated Office"). The time and date of such delivery and payment shall be, with respect to the Firm Shares, [9:30] a.m., New York City time, on [•], 2023 or such other time and date as the Representatives and the Company may agree upon in writing, and, with respect to the Optional Shares, [9:30] a.m., New York time, on the date specified by the Representatives in the written notice given by the Representatives of the Underwriters' election to purchase such Optional Shares, or such other time and date as the Representatives and the Company may agree upon in writing. Such time and date for delivery of the Firm Shares is herein called the "First Time of Delivery," such time and date for delivery of the Optional Shares, if not the First Time of Delivery, is herein called the "Second Time of Delivery," and each such time and date for delivery is herein called a "Time of Delivery."

(b) The documents to be delivered at eachTime of Delivery by or on behalf of the parties hereto pursuant to Section 8 hereof, including the cross receipt for the Shares and any additional documents requested by the Underwriters pursuant to Section 8(l) hereof, will be delivered at the offices of Latham & Watkins LLP, 301 Congress Avenue, Suite 900, Austin, TX 78701 (the "Closing Location"), and the Shares will be delivered at the Designated Office, all at such Time of Delivery. A meeting will be held at the Closing Location at [•] p.m., New York City time, on the New York Business Day preceding such 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 City are generally authorized or obligated by law or executive order to close.

5. The Company agrees with each of the Underwriters:

(a) To prepare the Prospectus in a form approved by you and to file such Prospectus pursuant to Rule 424(b) under the Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by Rule 430A under the Act; to make no further amendment or any supplement to the Registration Statement or the Prospectus prior to the last Time of Delivery which shall be disapproved by you promptly after reasonable notice thereof; to advise you, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any amendment or supplement to the

Prospectus has been filed and to furnish you with copies thereof; to file promptly all material required to be filed by the Company with the Commission pursuant to Rule 433(d) under the Act; to advise you, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus in respect of the Shares, of the suspension of the qualification of the Shares for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or the Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus or suspending any such qualification, to promptly use its best efforts to obtain the withdrawal of such order;

(b) Promptly from time to time to take such action as you may reasonably request to qualify the Shares for offering and sale under the securities laws of such jurisdictions as you may 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 Shares, provided, however, that in connection therewith the Company shall not be required to qualify as a foreign corporation (where not otherwise required) or to file a general consent to service of process in any jurisdiction (where not otherwise required);

(c) Prior to 10:00 a.m., New York City time, on the New York Business Day next succeeding the date of this Agreement and from time to time, to furnish the Underwriters with written and electronic copies of the Prospectus in New York City in such quantities as you may reasonably request, and, if the delivery of a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is required at any time prior to the expiration of nine months after the time of issue of the Prospectus in connection with the offering or sale of the Shares and if at such time any event shall have occurred as a result of which the Prospectus 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 Prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is delivered, not misleading, or, if for any other reason it shall be necessary during such same period to amend or supplement the Prospectus in order to comply with the Act to notify you and upon your request to prepare and furnish without charge to each Underwriter and to any dealer in securities as many written and electronic copies as you may from time to time reasonably request of an amended Prospectus or a supplement to the Prospectus which will correct such statement or omission or effect such compliance; and in case any Underwriter is required to deliver a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) in connection with sales of any of the Shares at any time nine months or more after the time of issue of the Prospectus, upon your request but at the expense of such Underwriter, to prepare and deliver to such Underwriter as many written and electronic copies as you may request of an amended or supplemented Prospectus complying with Section 10(a)(3) of the Act;

(d) To make generally available to its securityholders as soon as practicable, but in any event not later than sixteen months after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act), an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the Act and the rules and regulations of the Commission thereunder (including, at the option of the Company, Rule 158);

(e) The amended and restated certificate of incorporation of the Company (the "Amended and Restated Charter") that will be in effect immediately following the First Time of Delivery will include the provisions, which shall be substantially in the form of Annex IV hereto (the "Lock-Up Provisions"), and which prohibit the transfer, sale, pledge or other disposition by each Legacy Owner (as defined in the Registration Statement and the Pricing Disclosure Package) of (or entry into any transaction or device that is designed to, or could be expected to, result in the disposition at any time in the future of) any shares of Class A common stock or securities convertible into, or exercisable or exchangeable for, any shares of Class A Common Stock for a period commencing on the date hereof and ending on the 180th day after the date of the Prospectus (the "Lock-Up Period");

(f) During the Lock-Up Period, the Company will not take any actions or steps to amend, restate and/or change the Amended and Restated Charter in a manner inconsistent with the Lock-Up Provisions and will not waive the Lock-Up Provisions without the prior written consent of the Representatives and will take all reasonably necessary actions to preserve the Lock-Up Provisions during the Lock-Up Period. The Company will direct its transfer agent to place stop transfer restrictions upon the securities subject to the Lock-Up Provisions and the Company will not, during the Lock-Up Period, deliver any instruction or opinion of counsel to its transfer agent permitting the removal of such stop transfer restrictions without the prior written consent of the Representatives;

(g) (1) During the Lock-Up Period, not to (i) offer, 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 Company that are substantially similar to the Shares, including but not limited to any options or warrants to purchase shares of Stock or any securities that are convertible into or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise (other than the Shares to be sold hereunder or pursuant to employee stock option plans existing on, or upon the conversion or exchange of convertible or exchangeable securities outstanding as of, the date of this Agreement), without the prior written consent of the Representatives; provided, however, that the foregoing restrictions shall not apply to (A) any shares of Stock or any securities or other awards (including without limitation options, restricted stock or restricted stock units) convertible into, exercisable for, or that represent the right to receive, shares of Stock (collectively, "Incentive Awards") issued pursuant to any stock option plan, incentive plan or stock purchase plan of the Company (collectively, the "Company Stock Plans") or pursuant to equity compensation arrangements described in the Registration Statement and the Prospectus, (B) any shares of Stock issued upon the conversion, exercise or exchange of convertible, exercisable or exchangeable securities described in the Registration Statement, the Pricing Disclosure Package and the Prospectus or any shares of Stock vested or exercised pursuant to Incentive Awards, (C) the filing of a registration statement on Form S-8 relating to securities granted or to be granted pursuant to the terms of a Company Stock Plan in effect as of and described in the Pricing Disclosure Package and the Prospectus, (D) the issuance of securities in connection with the Corporate Reorganization (as defined in the Registration Statement and the Pricing Disclosure Package in the section titled "Corporate Reorganization") and (E) the issuance of Stock or securities convertible into or exercisable or exchangeable for Stock as consideration for the acquisition of equity interests or assets of any person, or the acquisition by the Company by any other manner of any business, properties, assets or persons, in one transaction or a series of related transactions, or the filing of a registration statement relating to such securities; provided that with respect to clause (E) above no more than an aggregate of 10% of the number of shares of the Company's capital stock outstanding immediately after the issuance and sale of the Shares pursuant to this Agreement are issued;

(2) If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a lock-up letter described in Section 8(j) hereof for an officer or director of the Company and provides the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Annex II hereto through a major news service at least two business days before the effective date of the release or waiver.

(h) To furnish to its stockholders 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 effective date of the Registration Statement), to make available to its stockholders consolidated summary financial information of the Company and its subsidiaries for such quarter in reasonable detail (which may be satisfied by filing with the Commission's Electronic Data Gathering, Analysis and Retrieval (EDGAR) System);

(i) During a period of three years from the effective date of the Registration Statement, to furnish to you copies of all reports or other communications (financial or other) furnished to stockholders, and to deliver to you (i) as soon as they are available, upon request, copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed; and (ii) such additional information concerning the business and financial condition of the Company as you may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company and its subsidiaries are consolidated in reports furnished to its stockholders generally or to the Commission); provided, however, that the obligations described in this Section 5(i) may be satisfied by any filing of such reports or communications with the Commission's Electronic Data Gathering, Analysis and Retrieval (EDGAR) System);

(j) To use the net proceeds received by it from the sale of the Shares pursuant to this Agreement in the manner specified in the Pricing Prospectus under the caption "Use of Proceeds";

(k) To use its best efforts to list, subject to notice of issuance, the Shares on the New York Stock Exchange (the "Exchange");

(l) To file with the Commission such information on Form10-Q or Form 10-K as may be required by Rule 463 under the Act;

(m) If the Company elects to rely upon Rule 462(b), the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) by 10:00 P.M., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing either pay to the Commission the filing fee for the Rule 462(b) Registration Statement or give irrevocable instructions for the payment of such fee pursuant to Rule 111 under the Act;

(n) Upon reasonable request of any Underwriter, to furnish, or cause to be furnished, to such Underwriter an electronic version of the Company's trademarks, servicemarks and corporate logo for use on the website, if any, operated by such Underwriter for the purpose of facilitating the on-line offering of the Shares (the "License"); provided, however, that the License shall be used solely for the purpose described above, is granted without any fee and may not be assigned or transferred by such Underwriter;

(o) To promptly notify you if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Shares within the meaning of the Act and (ii) the last Time of Delivery; and

(p) The Company hereby agrees that it will ensure that the Reserved Securities will be restricted as required by FINRA or the FINRA rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of this Agreement. Merrill Lynch will notify the Company as to which persons will need to be so restricted. At the request of the Underwriters, the Company will direct the transfer agent to place a stop transfer restriction upon such securities for such period of time. Should the Company release, or seek to release, from such restrictions any of the Reserved Securities, the Company agrees to reimburse Merrill Lynch for any reasonable expenses (including, without limitation, legal expenses) they incur in connection with such release.

6. (a) The Company represents and agrees that, without the prior consent of the Representatives, it has not made and will not make any offer relating to the Shares that would constitute a "free writing prospectus" as defined in Rule 405 under the Act; each Underwriter represents and agrees that, without the prior consent of the Company and the Representatives, it has not made and will not make any offer relating to the Shares that would constitute a free writing prospectus required to be filed with the Commission; any such free writing prospectus the use of which has been consented to by the Company and the Representatives is listed on Schedule II(a) hereto;

(b) The Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Issuer Free Writing Prospectus, including timely filing with the Commission or retention where required and legending; and the Company represents that it has satisfied and agrees that it will satisfy the conditions under Rule 433 under the Act to avoid a requirement to file with the Commission any electronic road show;

(c) The Company agrees that if at any time following issuance of an Issuer Free Writing Prospectus or Written Testing-the-Waters Communication any event occurred or occurs as a result of which such Issuer Free Writing Prospectus or Written Testing-the-Waters Communication would conflict with the information in the Registration Statement, the Pricing Prospectus or the Prospectus or 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 then prevailing, not misleading, the Company will give prompt notice thereof to the Representatives and, if requested by the Representatives, will prepare and furnish without charge to each Underwriter an Issuer Free Writing Prospectus, Written Testing-the-Waters Communication or other document which will correct such conflict, statement or omission;

(d) The Company represents and agrees that (i) it has not engaged in, or authorized any other person to engage in, any Testing-the-Waters Communications, other than Testing-the-Waters Communications with the prior consent of the Representatives with entities that the Company reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Act; and (ii) it has not distributed, or authorized any other person to distribute, any Written Testing-the-Waters Communications, other than those distributed with the prior consent of the Representatives that are listed on Schedule II(c) hereto; and the Company reconfirms that the Underwriters have been authorized to act on its behalf in engaging in Testing-the-Waters Communications;

(e) Each Underwriter represents and agrees that anyTesting-the-Waters Communications undertaken by it were with entities that such Underwriter reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Act.

7. The Company covenants and agrees with the several Underwriters that the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's counsel and accountants in connection with the registration of the Shares under the Act and all other expenses in connection with the preparation, printing, reproduction and filing of the Registration Statement, any Preliminary Prospectus, any Written Testing-the-Waters Communication, any Issuer Free Writing Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of printing or producing any Agreement among Underwriters, this Agreement, the Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Shares; (iii) all expenses in connection with the qualification of the Shares for offering and sale under state securities laws as provided in Section 5(b) hereof, including the fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky survey; (iv) all expenses incurred by the Company in connection with any "road show" presentation to potential investors (provided that all expenses related to chartered aircraft in connection with any "road show" presentation shall be split 50% by the Company and 50% by the Underwriters); (v) all fees and expenses in connection with listing the Shares on the Exchange; (vi) the filing fees incident to, and the fees and disbursements of counsel for the Underwriters in connection with, any required review by FINRA of the terms of the sale of the Shares (provided such fees and disbursements of counsel do not exceed $50,000 in the aggregate); (vii) the cost of preparing stock certificates; (viii) the cost and charges of any transfer agent or registrar; (ix) all costs and expenses of Merrill Lynch , including the fees and disbursements of counsel for Merrill Lynch in an amount not to exceed $20,000, in connection with matters related to the Reserved Securities which are designated by the Company for sale to Invitees; 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 Underwriters will pay all of their own costs and expenses, including the fees of their counsel, stock transfer taxes on resale of any of the Shares by them and any advertising expenses connected with any offers they may make.

8. The obligations of the Underwriters hereunder, as to the Shares to be delivered at each Time of Delivery, shall be subject, in their discretion, to the condition that all representations and warranties and other statements of the Company herein are, at and as of the Applicable Time and such Time of Delivery, true and correct, the condition that the Company shall have performed all of its obligations hereunder theretofore to be performed, and the following additional conditions:

(a) The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) under the Act within the applicable time period prescribed for such filing by the rules and regulations under the Act and in accordance with Section 5(a) hereof; all material required to be filed by the Company pursuant to Rule 433(d) under the Act shall have been filed with the Commission within the applicable time period prescribed for such filing by Rule 433; if the Company has elected to rely upon Rule 462(b) under the Act, the Rule 462(b) Registration

Statement shall have become effective by 10:00 P.M., Washington, D.C. time, on the date of this Agreement; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose or pursuant to Section 8A of the Act shall have been initiated or threatened by the Commission; no stop order suspending or preventing the use of the Pricing Prospectus, Prospectus or any Issuer Free Writing Prospectus shall have been initiated or threatened by the Commission; and all requests for additional information on the part of the Commission shall have been complied with to your reasonable satisfaction;

(b) Latham & Watkins LLP, counsel for the Underwriters, shall have furnished to you such written opinion or opinions (a form of each such opinion is attached as Annex I(a) hereto), dated such Time of Delivery, in form and substance satisfactory to you, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;

(c) Vinson & Elkins L.L.P., counsel for the Company, shall have furnished to you their written opinion (a draft of such opinion is attached as Annex I(b) hereto), dated such Time of Delivery, in form and substance satisfactory to you, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;

(d) On the date of the Prospectus at a time prior to the execution of this Agreement, at [9:30] a.m., New York City time, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at each Time of Delivery, Ernst & Young LLP shall have furnished to you a letter or letters, dated the respective dates of delivery thereof, in form and substance satisfactory to you;

(e) On the date of the Prospectus and at each Time of Delivery, John T. Boyd Company shall have furnished to you a letter or letters, dated the respective dates of delivery thereof, in form and substance reasonably satisfactory to you;

(f) (i) Neither the Company nor any of its subsidiaries shall have sustained since the date of the latest audited financial statements included in the Pricing Prospectus 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 Prospectus, and (ii) since the respective dates as of which information is given in the Pricing Prospectus there shall not have been any change in the capital stock or long-term debt of the Company or any of its subsidiaries or any change or effect, or any development involving a prospective change or effect, in or affecting (A) the business, properties, general affairs, management, financial position, stockholders' equity or results of operations of the Company and its subsidiaries, taken as a whole, except as set forth or contemplated in the Pricing Prospectus, or (B) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Shares, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus, 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 public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(g) On or after the Applicable Time (i) no downgrading shall have occurred in the rating accorded the Company's debt securities or preferred stock by any "nationally recognized statistical rating organization," as that term is defined by the Commission under Section 3(a)(62) of the Exchange 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 Company's debt securities or preferred stock;

(h) 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 Exchange or on the Nasdaq Stock Market; (ii) a suspension or material limitation in trading in the Company's securities on the Exchange; (iii) a general moratorium on commercial banking activities declared by either federal or New York 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 public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(i) The Shares to be sold at such Time of Delivery shall have been duly listed,subject to notice of issuance, on the Exchange;

(j) The Company shall have obtained and delivered to the Underwriters executed copies of an agreement from each officer, director and stockholder of the Company listed on Schedule III hereto, substantially to the effect set forth in Annex III hereto in form and substance satisfactory to you;

(k) The Company shall have complied with the provisions of Section 5(c) hereof with respect to the furnishing of prospectuses on the New York Business Day next succeeding the date of this Agreement; and

(l) The Company shall have furnished or caused to be furnished to you at such Time of Delivery certificates of officers of the Company 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 of all of its obligations hereunder to be performed at or prior to such Time of Delivery, as to the matters set forth in subsections (a) and (g) of this Section and as to such other matters as you may reasonably request.

9. (a) The Company will indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter 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 the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any "roadshow" as defined in Rule 433(h) under the Act (a "roadshow"), any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Act or any Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in the case of the Registration Statement, or arise out of or are based upon the omission or alleged omission 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, in the case of any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any roadshow, any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Act or any

Testing-the-Waters Communication, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that the Company 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 the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus or any Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information.

(b) Each Underwriter, severally and not jointly, will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company 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 the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow or any Testing-the-Waters Communication, 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 the Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow or any Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in the case of the Registration Statement, or arise out of or are based upon the omission or alleged omission 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, in the case of any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any roadshow, any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Act or any Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information; and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending any such action or claim as such expenses are incurred. As used in this Agreement with respect to an Underwriter and an applicable document, "Underwriter Information" shall mean the written information furnished to the Company by such Underwriter through the Representatives expressly for use therein; it being understood and agreed upon that the only such information furnished by any Underwriter consists of the following information in the Prospectus furnished on behalf of each Underwriter: the concession and reallowance figures appearing in the fifth paragraph under the caption "Underwriting," and the information contained in the nineth, thirteenth, fourteenth and fifteenth paragraphs relating to stabilization by the Underwriters under the caption "Underwriting."

(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, notify the indemnifying party in writing of the commencement thereof; provided, however, that the failure to notify the indemnifying party shall not relieve it from any liability that it may have under the preceding 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 provided further that 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 the preceding subsection (a) or (b) above. 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. No indemnifying party shall, without the prior 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 on the one hand and the Underwriters on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, 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 on the one hand and the Underwriters 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 Company on the one hand and the Underwriters 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 Underwriters, in each case as set forth in the table on the cover page of the Prospectus. 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 Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters 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 Underwriters 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 Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) The obligations of the Company under this Section 9 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each employee, officer and director of each Underwriter and each person, if any, who controls any Underwriter within the meaning of the Act and each broker-dealer or other affiliate of any Underwriter; and the obligations of the Underwriters under this Section 9 shall be in addition to any liability which the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each officer and director of the Company (including any person who, with his or her consent, is named in the Registration Statement as about to become a director of the Company) and to each person, if any, who controls the Company within the meaning of the Act.

10. (a) If any Underwriter shall default in its obligation to purchase the Shares which it has agreed to purchase hereunder at a Time of Delivery, you may in your discretion arrange for you or another party or other parties to purchase such Shares on the terms contained herein. If within thirty-six hours after such default by any Underwriter you do not arrange for the purchase of such Shares, 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 Shares 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 Shares, or the Company notifies you that it has so arranged for the purchase of such Shares, you or the Company shall have the right to postpone such 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 Registration Statement or the Prospectus, or in any other documents or arrangements, and the Company agrees to file promptly any amendments or supplements to the Registration Statement or the Prospectus which in your opinion may thereby be made necessary. The term "Underwriter" 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 Shares.

(b) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you or the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased does not exceed one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of shares which such Underwriter agreed to purchase hereunder at such Time of Delivery and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Shares which such Underwriter agreed to purchase hereunder) of the Shares of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from any liability it may have to the Company or any non-defaulting Underwriter for damages caused by its default.

(c) If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased exceeds one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, or if the Company shall not exercise the right described in subsection (b) above to require non-defaulting Underwriters to purchase the Shares of a defaulting Underwriter or Underwriters, then this

Agreement (or, with respect to the Second Time of Delivery, the obligations of the Underwriters to purchase and of the Company to sell the Optional Shares) shall thereupon terminate, without liability on the part of any non-defaulting Underwriter or the Company, except for the expenses to be borne by the Company and the Underwriters as provided in Section 7 hereof and the indemnity and contribution agreements in Section 9 hereof; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

11. The respective indemnities, rights of contribution, agreements, representations, warranties and other statements of the Company and the several Underwriters, 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 termination of this Agreement or any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or any director, officer, employee, affiliate or controlling person of any Underwriter, or the Company, or any officer or director or controlling person of the Company, and shall survive delivery of and payment for the Shares.

12. If this Agreement shall be terminated pursuant to Section 10 hereof, the Company shall not then be under any liability to any Underwriter except as provided in Sections 7 and 9 hereof; but, if for any other reason, any Shares are not delivered by or on behalf of the Company as provided herein or the Underwriters decline to purchase the Shares for any reason permitted under this Agreement, the Company will reimburse the Underwriters through you for all out-of-pocket expenses approved in writing by you, including fees and disbursements of counsel, reasonably incurred by the Underwriters in making preparations for the purchase, sale and delivery of the Shares not so delivered, but the Company shall then be under no further liability to any Underwriter except as provided in Sections 7 and 9 hereof. For avoidance of doubt, if this Agreement is terminated pursuant to Section 10, the Company shall have no obligation to reimburse a defaulting Underwriter for out of pocket costs and expenses (including the fees and expenses of their counsel) incurred by such defaulting Underwriter in connection with this Agreement and the offering contemplated hereby.

13. In all dealings hereunder, the Representatives shall act on behalf of each of the Underwriters, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Underwriter made or given by you jointly or by the Representatives on behalf of you as the Representatives.

All statements, requests, notices and agreements hereunder shall be in writing, and if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the representatives in care of Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Registration Department; BofA Securities, Inc., One Bryant Park, New York, New York 10036, email: dg.ecm_execution_services@bofa.comm, Attention: Syndicate Department, with a copy to dg.ecm_legal@bofa.com, Attention: ECM Legal; or Piper Sandler & Co., 800 Nicollet Mall, Minneapolis, Minnesota 55402, Attention: Registration Department; and if to the Company to Atlas Energy Solutions Inc., 5918 W. Courtyard Drive, Suite 500, Austin, Texas 78730, email: dvoelter@atlassand.com, Attention: Dathan Voelter, with a copy to Vinson & Elkins L.L.P., 200 West 6th Street, Suite 2500, Austin, Texas 78701, email: tzentner@velaw.com, Attention: Thomas G. Zentner; provided, however, that any notice to an Underwriter pursuant to Section 9(c) hereof shall be delivered or sent by mail, telex or facsimile transmission to such Underwriter at its address set forth in its Underwriters' Questionnaire, or telex constituting such Questionnaire, which address will be supplied to the Company by you upon request; provided, however, that notices under subsection 5(g) shall be in writing, and if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the representatives in care of

Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Control Room; BofA Securities, Inc., One Bryant Park, New York, New York 10036, email: dg.ecm_execution_services@bofa.com, Attention: Syndicate Department, with a copy to dg.ecm_legal@bofa.com, Attention: ECM Legal; or Piper Sandler & Co., 800 Nicollet Mall, Minneapolis, Minnesota 55402. 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 underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the underwriters to properly identify their respective clients.

14. This Agreement shall be binding upon, and inure solely to the benefit of, the Underwriters, the Company and, to the extent provided in Sections 9 and 11 hereof, the officers and directors of the Company and each person who controls the Company or any Underwriter, or any director, officer, employee or affiliate of any Underwriter, 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 Shares from any Underwriter shall be deemed a successor or assign merely by reason of such purchase.

15. Time shall be of the essence of this Agreement. As used herein, the term "business day" shall mean any day when the Commission's office in Washington, D.C. is open for business.

16. The Company acknowledges and agrees that (i) the purchase and sale of the Shares pursuant to this Agreement is anarm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other, (ii) in connection therewith and with the process leading to such transaction each Underwriter is acting solely as a principal and not the agent or fiduciary of the Company, (iii) no Underwriter has assumed an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) or any other obligation to the Company except the obligations expressly set forth in this Agreement, (iv) the Company has consulted its own legal and financial advisors to the extent it deemed appropriate and (v) none of the activities of the Underwriters in connection with the transactions contemplated herein constitute a recommendation, investment advice or solicitation of any action by the Underwriters with respect to any entity or natural person. The Company agrees that it will not claim that the Underwriters have rendered advisory services of any nature or respect, or owe a fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

17. This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company and the Underwriters, or any of them, with respect to the subject matter hereof.

18. **This Agreement and any transaction contemplated by this Agreement and any claim, controversy or dispute arising under or related thereto 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 results in the application of any other law than the laws of the State of New York. The Company agrees that any suit or proceeding arising in respect of this Agreement or any transaction contemplated by this Agreement 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 Company agrees to submit to the jurisdiction of, and to venue in, such courts.**

19. The Company and each of the Underwriters 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 counterparts shall together constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

21. Notwithstanding anything herein to the contrary, the Company is authorized to disclose to any persons the U.S. federal and state income 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 Company relating to that treatment and structure, without the Underwriters 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 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 Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter 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 Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter 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 (A) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (B) 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 one for the Company and each of the Representatives plus one for each counsel counterparts hereof, and upon the acceptance hereof by you, on behalf of each of the Underwriters, this letter and such acceptance hereof shall constitute a binding agreement between each of the Underwriters and the Company. It is understood that your acceptance of this letter on behalf of each of the Underwriters is pursuant to the authority set forth in a form of Agreement among Underwriters, 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.

Very truly yours,

Atlas Energy Solutions Inc.

By: _____
Name:
Title:

Accepted as of the date hereof:

Goldman Sachs & Co. LLC

By: _____
Name:
Title:

BofA Securities, Inc.

By: _____
Name:
Title:

Piper Sander & Co.

By: _____
Name:
Title:

On behalf of each of the Underwriters

SCHEDULE I

Underwriter	Total Number of Firm Shares to be Purchased	Number of Optional Shares to be Purchased if Maximum Option Exercised
Goldman Sachs & Co. LLC	[•]	[•]
BofA Securities, Inc.	[•]	[•]
Piper Sandler & Co.	[•]	[•]
RBC Capital Markets, LLC	[•]	[•]
Citigroup Global Markets, Inc.	[•]	[•]
Barclays Capital Inc.	[•]	[•]
Raymond James & Associates, Inc.	[•]	[•]
Johnson Rice & Company LLC	[•]	[•]
Capital One Securities, Inc.	[•]	[•]
Stephens, Inc.	[•]	[•]
Pickering Energy Partners, Inc.	[•]	[•]
Drexel Hamilton, LLC	[•]	[•]
Total	[•]	[•]

SCHEDULE II

(a) Issuer Free Writing Prospectuses not included in the Pricing Disclosure Package:

Electronic roadshow dated [•].

(b) Information other than the Pricing Prospectus that comprise the Pricing Disclosure Package:

The initial public offering price per share for the Shares is $[•].

The number of Shares purchased by the Underwriters is [•].

(c) Written Testing-the-Waters Communications:

Testing-the-Waters Presentation dated June 2022.

Testing-the-Waters Presentation dated June 2022.

Testing-the-Waters Presentation dated February 2023.

SCHEDULE III

[TO COME]

FORM OF OPINION FOR COUNSEL FOR THE UNDERWRITERS

[TO COME]

ANNEX I(b)

FORM OF OPINION OF COUNSEL FOR THE COMPANY

[TO COME]

[Form of Press Release]

Atlas Energy Solutions Inc.
[DATE]

Atlas Energy Solutions Inc. (the "Company") announced today that Goldman Sachs & Co. LLC, BofA Securities and Piper Sandler, the lead book-running managers in the Company's recent public sale of shares of Class A common stock, are [waiving] [releasing] a lock-up restriction with respect to shares of the Company's Class A common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on , 20[_], and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

ANNEX III

[FORM OF LOCK-UP AGREEMENT]

[TO COME]

FORM OF LOCK-UP PROVISIONS

(a) Amended and Restated Charter

SECTION 4.4. Restrictions on Transfer.

(A) No holder of Common Stock that acquired its shares thereof prior to the consummation of the initial public offering of Class A Common Stock (the "***IPO***," and each such holder an "***Initial Stockholder***") shall be permitted to, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise transfer or dispose of (collectively, a "***Disposition***") any Common Stock, or any securities convertible into or exercisable or exchangeable for, or any rights to purchase or otherwise acquire, which includes engaging in any hedging, collar (whether or not for any consideration) or other transaction that is designed to or reasonably expected to lead or result in a Disposition, any Common Stock held by such Initial Stockholder or acquired by such Initial Stockholder immediately after the consummation of the IPO, or that may be deemed to be beneficially owned by such Initial Stockholder (collectively, the "***Lock-Up***"), pursuant to the Securities Act of 1933, as amended (the "***Securities Act***"), and the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), for a period of 180 days following the consummation of the IPO (the "***Lock-Up Period***"), without the prior written consent of Goldman Sachs & Co. LLC, BofA Securities, Inc. and Piper Sandler & Co. (the "***Representatives***"). If an Initial Stockholder executes a separate agreement covering any Dispositions during the Lock-Up Period as may be reasonably requested by the Representatives that is necessary to give further effect hereto, in the event of any conflict or inconsistency between the terms of such separate agreement and this Section 4.4, the terms of such separate agreement shall control. Following the expiration ofthe Lock-Up Period, the Initial Stockholders may effect a Disposition of all or any portion of their Common Stock, subject to compliance with applicable securities laws, policies of the Corporation, this Certificate of Incorporation, the bylaws of the Corporation and any other requirements imposed by the Corporation or the transfer agent and registrar with respect to the Common Stock.

(B) Notwithstanding Section 4.4(A), the Lock-Up shall not apply to (i) bona fide gifts, sales or other dispositions of shares of any class of the Corporation's capital stock, in each case, that are made exclusively between and among an Initial Stockholder and members of the Initial Stockholder's family, or affiliates of the Initial Stockholder, including its partners (if a partnership) or members (if a limited liability company); *provided* that it shall be a condition to any transfer pursuant to this clause (i) that (A) the transferee/donee, through its subsequent ownership of such transferred shares of Common Stock, is bound by the restrictions set forth in Section 4.4(A) to the same extent as the transferor/donor, (B) each party (donor, donee, transferor or transferee) shall not be required by law (including without limitation the disclosure requirements of the Securities Act and the Exchange Act) to make, and shall agree to not voluntarily make, any filing or public announcement of the transfer or disposition prior to the expiration of the Lock-Up Period, and (C) the Initial Stockholder notifies the Representatives at least two business days prior to the proposed transfer or disposition; (ii) any exercise of options or vesting or exercise of any other equity-based award, in each case, under the Corporation's equity incentive plan or any other plan or agreement described in the prospectus included in the registration statement on Form S-1 filed in connection with the IPO, including any Common Stock withheld by the Corporation for the payment of taxes due upon such exercise or vesting; *provided* that (A) no filing or public announcement by any party under the Exchange Act or otherwise shall be required or shall be voluntarily made in connection with such exercise or vesting and (B) any Common Stock received

upon such exercise or vesting, following any applicable net settlement or net withholding, will also be subject to the Lock-Up; and (iii) the establishment of any contract, instruction or plan that satisfies all of the requirements of Rule 10b5-1 (a "***Rule 10b5-1 Plan***") under the Exchange Act; *provided*, *however*, that no sales of Common Stock or securities convertible into, or exchangeable or exercisable for, Common Stock, shall be made pursuant to a Rule 10b5-1 Plan prior to the expiration of the Lock-Up Period; *provided further*, that the Corporation is not required to report the establishment of such Rule 10b5-1 Plan in any public report or filing with the U.S. Securities and Exchange Commission under the Exchange Act during the Lock-Up Period and does not otherwise voluntarily effect any such public filing or report regarding such Rule 10b5-1 Plan.

(C) Unless the written approval of the Representatives is obtained with respect to a Disposition after the consummation of the IPO until the expiration of the Lock-Up Period, such purported Disposition shall not be effective to transfer record, beneficial, legal or any other ownership of such Common Stock, and the transferee shall not be entitled to any rights as a stockholder of the Corporation with respect to the Common Stock purported to be purchased, acquired or transferred in the Disposition (including, without limitation, the right to vote or to receive dividends with respect thereto). Each such share of Common Stock subject to the Lock-Up Period shall bear the following legend (or any substantially similar legend):

THE SHARES REPRESENTED HEREBY ARE SUBJECT TO A LOCK-UP PERIOD AS SET FORTH IN THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ATLAS ENERGY SOLUTIONS INC.

Exhibit 2.1

MASTER REORGANIZATION AGREEMENT

by and among

Atlas Sand Management Company, LLC,

Atlas Sand Company, LLC,

Atlas Sand Holdings, LLC,

Atlas Sand Operating, LLC,

Atlas Sand Holdings II, LLC,

Atlas Sand Management Company II, LLC,

Atlas Sand Merger Sub, LLC,

and

Atlas Energy Solutions Inc.

[•], 2023

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ARTICLE V
MISCELLANEOUS

MASTER REORGANIZATION AGREEMENT

This Master Reorganization Agreement (this "Agreement"), dated effective as of [•], 2023, is entered into by and among Atlas Sand Management Company, LLC, a Texas limited liability company ("ASMC"), Atlas Sand Company, LLC, a Delaware limited liability company ("Atlas Sand LLC"), Atlas Sand Holdings, LLC, a Delaware limited liability company ("Holdings"), Atlas Sand Operating, LLC, a Delaware limited liability company ("Atlas Operating"), Atlas Sand Holdings II, LLC, a Delaware limited liability company ("Holdings II"), Atlas Sand Management Company II, LLC, a Delaware limited liability company ("ASMC II"), Atlas Sand Merger Sub, LLC, a Delaware limited liability company ("Merger Sub"), and Atlas Energy Solutions Inc., a Delaware corporation ("PubCo" and, together with each other signatory to this Agreement, each, a "Party" and collectively, the "Parties").

RECITALS

WHEREAS, the Parties wish to facilitate an initial public offering (the "IPO") of PubCo, which will be effected using an "Up-C" structure that entails, among other things, offering to the public shares of the Class A common stock of PubCo, par value $0.01 per share ("Class A Shares"), pursuant to, and as more fully described in, a registration statement filed with the U.S. Securities and Exchange Commission, Registration No. 333-269488; and

WHEREAS, in connection with the IPO, the Parties desire to effect the restructurings and other transactions set forth in this Agreement, which will occur on the terms and in the sequence set forth herein.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties hereby agree as follows, and further agree that the actions set forth in ARTICLE II will be deemed to take place in the sequence in which they appear in ARTICLE II except as otherwise expressly set forth herein.

ARTICLE I
DEFINITIONS AND CONSTRUCTION

Section 1.1. Definitions. In addition to terms defined in the body of this Agreement, the following capitalized terms have the following meanings:

"ASMC Class A Units" means ASMC Units designated as "Class A Units" pursuant to the ASMC LLC Agreement.

"ASMC Class B Units" means ASMC Units designated as "Class B Units" pursuant to the ASMC LLC Agreement.

"ASMC LLC Agreement" means the Second Amended and Restated Limited Liability Company Agreement of ASMC LLC, dated as of [•], 2023, as amended, supplemented or otherwise modified prior to date of this Agreement.

"ASMC LTIP Units" means the ASMC Units designated as "Class P Units" pursuant to the ASMC LLC Agreement.

"ASMC Units" means units representing limited liability company interests in ASMC.

"ASMC Upstairs Holders" means certain Persons holding ASMC Class A Units and/or ASMC Class B Units as of immediately prior to the consummation of the transactions contemplated by Section 2.5 and identified on Schedule 1.1(a) hereto.

"ASMC II Interests" means the limited liability company interests in ASMC II.

"ASMC II LLC Agreement" means the Limited Liability Company Agreement of ASMC II, dated as of November 18, 2022, as amended, supplemented or otherwise modified prior to the date of this Agreement.

"Atlas Operating LLC Agreement" means the Limited Liability Company Agreement of Atlas Operating, dated as of November 18, 2022, as amended, supplemented or otherwise modified prior to the date of this Agreement.

"Atlas Sand Class A Units" means Atlas Sand Units designated as "Class A Units" pursuant to the Atlas Sand LLC Agreement.

"Atlas Sand Class C Units" means Atlas Sand Units designated as "Class C Units" pursuant to the Atlas Sand LLC Agreement.

"Atlas Sand Class D Units" means Atlas Sand Units designated as "Class D Units" pursuant to the Atlas Sand LLC Agreement.

"Atlas Sand LLC Agreement" means the Fourth Amended and Restated Limited Liability Company Agreement of Atlas Sand LLC, dated as of [•], 2023, as amended, supplemented or otherwise modified prior to date of this Agreement.

"Atlas Sand LTIP Units" means Atlas Sand Units designated as "Class P Units" pursuant to the Atlas Sand LLC Agreement.

"Atlas Sand Members" means the holders of the Atlas Sand Units issued and outstanding as of immediately prior to the Merger Effective Time.

"Atlas Sand Units" means units representing limited liability company interests in Atlas Sand LLC.

"Class B Shares" means shares of the Class B common stock of PubCo, par value $0.01 per share.

"Code" means the Internal Revenue Code of 1986, as amended.

"Form 8-A" means the registration statement on Form 8-A filed by PubCo with the U.S. Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended, to register the Class A Shares.

"Governmental Authority" means the United States of America and any foreign country, any state, commonwealth, territory or possession thereof and any political subdivision or quasi-governmental authority of any of the same, including any court, tribunal, department, commission, board, bureau, agency, county, municipality, province, parish or other instrumentality of any of the foregoing.

"Holdings Interests" means the limited liability company interests in Holdings.

"Holdings LLC Agreement" means the Limited Liability Company Agreement of Holdings, dated as of November 18, 2022, as amended, supplemented or otherwise modified prior to date of this Agreement.

"Holdings Upstairs Holders" means certain Persons holding Holdings Class A Units and/or Holdings Class C Units as of immediately prior to the consummation of the transactions contemplated by Section 2.5 and identified on Schedule 1.1(b) hereto.

"Holdings II Interests" means the limited liability company interests in Holdings II.

"Holdings II LLC Agreement" means the Limited Liability Company Agreement of Holdings II, dated as of November 18, 2022, as amended, supplemented or otherwise modified prior to date of this Agreement.

"IPO Pricing" means such date and time as the board of directors of PubCo or a pricing committee thereof determines the public offering price of shares of Class A Shares in the IPO, such date and time to be no later than immediately prior to the execution of the Underwriting Agreement.

"Law" means any applicable federal, state, provincial, municipal, local or foreign statute, law, treaty, ordinance, regulation, rule, code, order or rule of common law.

"LTIP Holders" means the Persons holding ASMC LTIP Units and/or Holdings LTIP Units as of immediately prior to the consummation of the transactions contemplated by Section 2.5 and set forth on Schedule 1.1(c) hereto.

"Person" means any natural person, limited liability company, corporation, limited partnership, general partnership, joint stock company, joint venture, association, company, trust, bank trust company, land trust, business trust, or other organization, whether or not a legal entity, and any government or agency or political subdivision thereof.

"Redeemed ASMC LTIP Units" means, with respect to each LTIP Holder, a number of the ASMC LTIP Units held by such LTIP Holder as of immediately prior to the consummation of the transactions contemplated by Section 2.5(a)(iii) as is set forth opposite such LTIP Holder's name on Schedule 1.1(c) hereto under the heading entitled "Redeemed ASMC LTIP Units."

"Redeemed Holdings LTIP Units" means, with respect to each LTIP Holder, a number of the Holdings LTIP Units held by such LTIP Holder as of immediately prior to the consummation of the transactions contemplated by Section 2.5(a)(iii) as is set forth opposite such LTIP Holder's name on Schedule 1.1(c) hereto under the heading entitled "Redeemed Holdings LTIP Units."

"Treasury Regulations" means the regulations promulgated under the Code, as such regulations may be amended from time to time.

Section 1.2. Effective Time; Closing Time. This Agreement is effective at the time all Parties have released the signatures hereto as of the date hereof, which, for the avoidance of doubt, is on the date of IPO Pricing and prior to the time at which the Form 8-A becomes effective. References to the "Closing Time" in this Agreement refer to 12:01 a.m. Austin, Texas time on the date of the initial closing of the IPO.

Section 1.3. Heading; References; Interpretation. All Article and Section headings in this Agreement are for convenience only and will not be deemed to control or affect the meaning or construction of any of the provisions hereof. The words "hereof," "herein" and "hereunder" and words of similar import, when used in this Agreement, refer to this Agreement as a whole, including, without limitation, all Exhibits attached hereto, and not to any particular provision of this Agreement. All references herein to Articles, Sections and Exhibits will, unless the context requires a different construction, be deemed to be references to the Articles and Sections of this Agreement and the Exhibits attached hereto, and all such Exhibits attached hereto are hereby incorporated herein and made a part hereof for all purposes. All personal pronouns used in this Agreement, whether used in the masculine, feminine or neuter gender, will include all other genders, and the singular will include the plural and vice versa. The use herein of the word "including" following any general statement, term or matter will not be construed to limit such statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation," "but not limited to," or words of similar import) is used with reference thereto, but rather will be deemed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such general statement, term or matter.

ARTICLE II
RESTRUCTURING ACTIONS AND RELATED MATTERS

Section 2.1. The Merger Transactions.

(a) Pursuant to the certificate of merger in the form attached hereto as Exhibit A (the "Certificate of Merger"), which was filed with the Delaware Secretary of State on the date hereof and became effective at the time of its filing (the "Merger Effective Time"), Merger Sub merged with and into Atlas Sand LLC, with Atlas Sand LLC surviving the merger (the "Merger") as a wholly owned direct subsidiary of Atlas Operating.

(b) In connection with the Merger, effective as of the Merger Effective Time and simultaneously with the consummation of the transactions contemplated by Section 2.1(c), (i) the Holdings LLC Agreement is hereby amended and restated in the form attached hereto as Exhibit B (the "Holdings A&R LLC Agreement") in order to, among other things, recapitalize the Holdings Interests to be represented by four classes of units designated thereunder as "Class A Units" ("Holdings Class A Units"), "Class C Units" ("Holdings Class C Units"), "Class D Units" ("Holdings Class D Units") and "Class P Units" ("Holdings LTIP Units"), having the respective rights and obligations ascribed thereto as provided under the Holdings A&R LLC Agreement; and (ii) Holdings shall adopt the "Holdings Long Term Incentive Plan" in substantially the form attached as Exhibit B to the Holdings A&R LLC Agreement in order to govern the Holdings LTIP Units.

(c) By virtue of the Merger, and in each case effective as of the Merger Effective Time and simultaneously with the consummation of the transactions contemplated by Section 2.1(b):

(i) the Atlas Sand Class A Units held by the Atlas Sand Members as of immediately prior to the Merger Effective Time shall be exchanged on a one-for-one basis, for Holdings Class A Units;

(ii) the Atlas Sand Class C Units held by the Atlas Sand Members as of immediately prior to the Merger Effective Time shall be exchanged on a one-for-one basis for Holdings Class C Units;

(iii) the Atlas Sand Class D Units held by the Atlas Sand Members as of immediately prior to the Merger Effective Time shall be exchanged on a one-for-one basis for Holdings Class D Units; and

(iv) the Atlas Sand LTIP Units held by the Atlas Sand Members as of immediately prior to the Merger Effective Time will be exchanged on a one-for-one basis for Holdings LTIP Units.

(d) By virtue of the Merger and effective as of the Merger Effective Time, (i) all outstanding limited liability company interests in Merger Sub (all of which shall be owned by Atlas Operating as of immediately prior to the Merger Effective Time) shall automatically be cancelled and extinguished, (ii) in exchange therefor, Atlas Operating shall receive all of the outstanding limited liability company interests in Atlas Sand LLC, and (iii) the separate existence of Merger Sub shall cease.

(e) This Section 2.1, together with any related definitions and other provisions of this Agreement, constitutes an agreement and plan of merger for purposes of the Certificate of Merger and applicable Law.

(f) The Parties intend, for U.S. federal and applicable state and local income tax purposes, that the Merger shall be treated as a continuation of a partnership (Atlas Sand LLC) under Section 708(a) of the Code in accordance with the principles of Revenue Rulings 66-264, 84-52 and 95-37, with Holdings being treated as the continuation of Atlas Sand LLC and the persons holding equity securities in Atlas Sand LLC immediately prior to giving effect to the Merger being treated as continuing members in the same partnership (now Holdings).

Section 2.2. Amendment and Restatement of Atlas Sand LLC Agreement, Atlas Operating LLC Agreement, Holdings II LLC Agreement and ASMC II LLC Agreement.

(a) Immediately following the consummation of the transactions contemplated by Section 2.1, the Atlas Sand LLC Agreement is hereby amended and restated in the form attached hereto as Exhibit C, in order to, among other things, reflect the admission of Atlas Operating as the sole member of Atlas Sand LLC as a result of the Merger and to provide for the classification of Atlas Sand LLC as an entity disregarded as separate from Holdings for U.S. federal income tax purposes.

(b) Immediately following the consummation of the transactions contemplated by Section 2.1, the Atlas Operating LLC Agreement is hereby amended and restated in the form attached hereto as Exhibit D, in order to set forth certain terms in contemplation of the IPO and transactions contemplated hereby, including those providing for the limited liability company interests in Atlas Operating being represented by a single class of units designated as "Common Units" ("Operating Units"), initially consisting of [•] Operating Units, and for the designation of PubCo as the managing member of Atlas Operating upon PubCo's admission as a member in connection with the consummation of the transactions contemplated by Section 2.6(a).

(c) Immediately following the consummation of the transactions contemplated by Section 2.1, (i) the Holdings II LLC Agreement is hereby amended and restated in the form attached hereto as Exhibit E (the "Holdings II A&R LLC Agreement") in order to, among other things, recapitalize the Holdings II Interests to be represented by three classes of units designated thereunder as "Class A Units" ("Holdings II Class A Units"), "Class C Units" ("Holdings II Class C Units") and "Class P Units" ("Holdings II LTIP Units"), in each case, having the respective rights and obligations ascribed thereto as provided under the Holdings II A&R LLC Agreement; and (ii) Holdings II shall adopt the "Holdings II Long Term Incentive Plan" in substantially the form attached as Exhibit B to the Holdings II A&R LLC Agreement in order to govern the Holdings II LTIP Units.

(d) Immediately following the consummation of the transactions contemplated by Section 2.1, (i) the ASMC II LLC Agreement is hereby amended and restated in the form attached hereto as Exhibit F (the "ASMC II A&R LLC Agreement") in order to, among other things, recapitalize the ASMC II Interests to be represented by three classes of units designated thereunder as "Class A Units" ("ASMC II Class A Units"), "Class C Units" ("ASMC II Class B Units") and "Class P Units" ("ASMC II LTIP Units"), in each case, having the respective rights and obligations ascribed thereto as provided under the ASMC II A&R LLC Agreement; and (ii) ASMC II shall adopt the "ASMC II Long Term Incentive Plan" in substantially the form attached as Exhibit B to the ASMC II A&R LLC Agreement in order to govern the ASMC II LTIP Units.

Section 2.3. First Contribution Transactions. Immediately following the consummation of the transactions contemplated by Section 2.2, Holdings hereby contributes, conveys, transfers and delivers (a) to ASMC II, all right, title and interest in and to [•] of the Operating Units held by Holdings (the "Subject Operating Units"), and (b) to Holdings II, all right, title and interest in and to [•] of the Operating Units held by Holdings.

Section 2.4. Second Contribution Transactions. Immediately following the consummation of the transactions contemplated by Section 2.3, ASMC II hereby contributes, conveys, transfers and delivers to Holdings II all right, title and interest in and to all of the Subject Operating Units. Immediately following the transactions contemplated by this Section 2.4, Holdings and Holdings II shall own collectively 100% of the Operating Units then issued and outstanding.

Section 2.5. Distribution Transactions.

(a) Immediately following the consummation of the transactions contemplated by Section 2.4, the following transactions shall be consummated in the order in which they appear below:

(i) in exchange for and in redemption of [•] of the Holdings Class A Units held by ASMC, Holdings hereby distributes 100% of the ASMC II Interests then issued and outstanding to ASMC;

(ii) (A) in exchange for and in full redemption of the Holdings Class A Units then held by any Holdings Upstairs Holder, Holdings hereby distributes to such Holdings Upstairs Holder in accordance with the Holdings A&R LLC Agreement an equal number of Holdings II Class A Units, and (B) in exchange for and in full redemption of the Holdings Class C Units then held by any Holdings Upstairs Holder, Holdings hereby distributes to such Holdings Upstairs Holder in accordance with the Holdings A&R LLC Agreement an equal number of Holdings II Class C Units;

(iii) in exchange for and in redemption of the Redeemed Holdings LTIP Units of each LTIP Holder, Holdings hereby distributes to each LTIP Holder in accordance with the Holdings A&R LLC Agreement a number of Holdings II LTIP Units equal to the Redeemed Holdings LTIP Units as set forth opposite such LTIP Holder's name on Schedule 1.1(c) hereto under the heading entitled "Redemption Holdings II LTIP Units";

(iv) (A) in exchange for and in full redemption of the ASMC Class A Units then held by any ASMC Upstairs Holder, ASMC hereby distributes to such ASMC Upstairs Holder in accordance with the ASMC LLC Agreement an equal number of ASMC II Class A Units, and (B) in exchange for and in full redemption of the ASMC Class B Units then held by any ASMC Upstairs Holder, ASMC hereby distributes to such ASMC Upstairs Holder in accordance with the ASMC LLC Agreement an equal number of ASMC II Class B Units; and

(v) in exchange for and in redemption of the Redeemed ASMC LTIP Units of each LTIP Holder, ASMC hereby distributes to each LTIP Holder in accordance with the ASMC LLC Agreement a number of ASMC II LTIP Units equal to the Redeemed ASMC LTIP Units as set forth opposite such LTIP Holder's name on Schedule 1.1(c) hereto under the heading entitled "Redemption ASMC II LTIP Units."

(b) The Parties intend, for U.S. federal and applicable state and local income tax purposes, that the transactions contemplated by Section 2.3, Section 2.4 and Section 2.5(a), taken together:

(i) (A) shall constitute a partnership division governed by Section 708(b)(2)(B) of the Code and Treasury Regulations §1.708-1(d), with Holdings constituting the "divided partnership" and the division taking the "assets-over" form with Holdings II (a new partnership) for such purposes, and (B) in connection with the "assets-over" form described in the foregoing clause (A), consistent with the deemed transactions described in Revenue Ruling 99-5, 1999-1 C.B. 434, each of Holdings and Holdings II will then be deemed to contribute its portion of Atlas Operating's assets (the underlying assets of Atlas Sand LLC) to Atlas Operating (a new partnership) in exchange for Operating Units pursuant to Section 721 of the Code; and

(ii) shall constitute a partnership division governed by Section 708(b)(2)(B) of the Code and Treasury Regulations §1.708-1(d), with ASMC constituting the "divided partnership" and the division taking the "assets-over" form with ASMC II (a new partnership) for such purposes.

Section 2.6. Third Contribution Transactions.

(a) Immediately following the consummation of the transactions contemplated by Section 2.5:

(i) (A) Holdings II hereby contributes, conveys, transfers and delivers to PubCo all right, title and interest in and to [•] Operating Units, which constitute all of the Operating Units held by Holdings II immediately prior to such contribution, and (B) in consideration therefor, PubCo hereby issues [•] Class A Shares to Holdings II; and then

(ii) (A) Holdings hereby contributes, conveys, transfers and delivers to PubCo all right, title and interest in and to [•] of the Operating Units (and retains [•] of the Operating Units) and all voting rights with respect to the Operating Units retained by Holdings and (B) in consideration therefor, PubCo hereby issues [•] Class A Shares and [•] Class B Shares to Holdings.

(b) Immediately following the transactions contemplated by Section 2.6(a), (i) PubCo and Holdings shall collectively own 100% of the Operating Units then issued and outstanding and (ii) PubCo shall be admitted as the managing member of Atlas Operating.

(c) The Parties intend, for U.S. federal and applicable state and local income tax purposes, that the transactions contemplated by Section 2.6(a), together with the exchange of cash for Class A Shares in the IPO, shall constitute a tax-deferred contribution under Section 351 of the Code.

Section 2.7. Cancellation of Common Stock. Immediately following the consummation of the transactions contemplated by Section 2.6, PubCo hereby redeems from Atlas Sand LLC, and Atlas Sand LLC hereby conveys, transfers and delivers to PubCo, the 1,000 shares of common stock of PubCo, par value $0.01 per share, issued to Atlas Sand LLC in connection with the incorporation of PubCo on February 3, 2022 (the "Initial Shares") for an aggregate redemption price of $10.00. Atlas Sand LLC hereby irrevocably constitutes and appoints the Secretary of PubCo to transfer the Initial Shares on the books of PubCo with full power of substitution in the premises. Following their transfer to PubCo, the Initial Shares shall be deemed to have been cancelled and no longer be outstanding effective simultaneously with the issuance and sale by PubCo of Class A Shares at the initial closing of the IPO.

ARTICLE III
INITIAL PUBLIC OFFERING AND RELATED MATTERS

Section 3.1. Underwriting Agreement. Prior to the Closing Time, PubCo shall have entered into an underwriting agreement relating to the IPO (the "Underwriting Agreement") with Goldman Sachs & Co. LLC, BofA Securities, Inc. and Piper Sandler & Co., as representatives of the several underwriters named in Schedule I thereto (the "Underwriters"); subject to the right of each party to elect to not enter into an Underwriting Agreement at it sole discretion. Each Party agrees that all of the transactions contemplated by this Agreement shall be conditioned upon and subject to the Underwriters being willing and able to close the IPO in accordance with the Underwriting Agreement.

Section 3.2. Registration Rights Agreement. Effective immediately following the transactions described in ARTICLE II, PubCo shall enter into a Registration Rights Agreement, in the form attached hereto as Exhibit G (the "RRA"), with the Initial Holders (as defined in the RRA) named therein, pursuant to which, among other things, PubCo shall agree to provide the Initial Holders with certain rights with respect to the registrable securities under the RRA, on the terms and subject to the conditions set forth therein.

Section 3.3. Stockholders' Agreement. Effective immediately following the transactions described in ARTICLE II, PubCo shall enter into a Stockholders' Agreement, in the form attached hereto as Exhibit H (the "SHA"), with the Principal Stockholders (as defined in the SHA) named therein, pursuant to which the parties thereto shall set forth certain understandings among themselves, as provided therein.

Section 3.4. Use of IPO Proceeds.

(a) PubCo shall contribute all of the net cash proceeds received by it from the IPO to Atlas Operating in exchange for the issuance by Atlas Operating to PubCo of a number of Operating Units equal to the number of Class A Shares issued and sold by PubCo to the Underwriters in connection with the initial closing of the IPO. Atlas Operating shall, immediately following its receipt of such net cash proceeds from PubCo, contribute all of such net cash proceeds to Atlas Sand LLC for no consideration.

(b) PubCo shall, immediately following any closing of the issuance and sale of Class A Shares pursuant to the Underwriters' option to purchase additional Class A Shares in the IPO (the "Option"), contribute all of the net cash proceeds received by it pursuant to the Option to Atlas Operating in exchange for the issuance by Atlas Operating to PubCo of a number of the Operating Units equal to the number of Class A Shares issued and sold by PubCo to the Underwriters in connection with the closing of such exercise of the Option. Atlas Operating shall, immediately following its receipt of such net cash proceeds from PubCo, contribute all of such net cash proceeds to Atlas Sand LLC for no consideration.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES

Each Party hereby represents and warrants, solely with respect to itself, to the other Parties as follows:

Section 4.1. Organization. Such Party is a corporation, limited partnership or limited liability company, as applicable, duly organized, validly existing and in good standing (where such concept exists) under the Laws of the jurisdiction of its organization, and has all requisite corporate, partnership or limited liability company, as applicable, power and authority and all necessary governmental approvals to own, lease and operate its properties and to carry on its business as now being conducted, except where the failure to have such power, authority and governmental approvals would not have, individually or in the aggregate, a material adverse effect on such Party or on the consummation of the transactions contemplated hereby.

Section 4.2. Authority; Enforceability. Such Party has the requisite corporate, limited partnership, limited liability company or other power and authority, as applicable, to execute and deliver this Agreement and to perform its obligations hereunder. The execution, delivery and performance by such Party of this Agreement and the consummation of the transactions have been duly authorized by its board of directors or other governing body, as applicable, and no other action is necessary to authorize the execution and delivery by it of this Agreement or the performance of its obligations hereunder. This Agreement has been duly executed and delivered by such Party, and, assuming due and valid authorization, execution and delivery hereof by the other Parties hereto, this Agreement is a valid and binding obligation, enforceable against it in accordance with its terms.

Section 4.3. Consents and Approvals; No Violations. None of the execution, delivery or performance of this Agreement by such Party, or compliance by it with any of the provisions hereof, do, nor will, (a) conflict with or result in any breach of any provision of the certificate of incorporation and by-laws, partnership agreement, limited liability company agreement or similar organizational documents of such Party, as applicable, (b) require any filing with, or permit, authorization, consent or approval of, any Governmental Authority or (c) violate any Law applicable to such Party or any of its properties or assets, excluding from the foregoing clauses (b) and (c) such filings, permits, authorizations, consents, violations, breaches, defaults, rights, obligations or encumbrances that (x) have been obtained or made or will be obtained or made at the time so required or (y) would not, individually or in the aggregate, have a material adverse effect on such Party or on the consummation of the transactions contemplated hereby.

Section 4.4. Ownership of Interests. Each Party contributing, issuing, delivering or exchanging interests hereby, owns all such interests free and clear of all liens, encumbrances, security interest, equities, charges or claims, other than as disclosed in the IPO registration statement. There are no preferential rights to purchase, rights of first refusal or similar rights that are applicable to the contribution, issuance, delivery or exchange of such interests in connection with the transactions contemplated hereby which have not been waived by the Person holding such rights.

Section 4.5. Bankruptcy. There are no bankruptcy, reorganization, receivership or other insolvency type proceedings pending, being contemplated by or, to such Party's knowledge, threatened against such Party.

Section 4.6. Litigation. No suit, action or litigation by any Person by or before any tribunal or Governmental Authority is pending or, to such Party's knowledge, threatened against such Party or its affiliates that would, individually or in the aggregate, reasonably be expected to have a material adverse effect upon the ability of such Party to perform its obligations hereunder or consummate the transactions contemplated hereby.

Section 4.7. Independent Investigation. Each Party has reviewed with, or has had opportunity to consult with, their own independent legal and tax advisors regarding the transactions contemplated hereby, including the U.S. federal, state, local, foreign and other tax consequences of the transactions contemplated hereby and hereby acknowledges that none of PubCo, Atlas Sand LLC or any of their respective advisors (including Vinson & Elkins L.L.P.) has provided to such Party any such legal or tax advice regarding the transactions contemplated hereby.

Section 4.8. No Tax Representations. Each Party acknowledges and agrees that PubCo and Atlas Sand LLC are making no representation or warranty as to the U.S. federal, state, local, foreign or other tax consequences to any Party hereto as a result of the transactions contemplated by this Agreement. Each Party understands that such Party (and PubCo or Atlas Sand LLC) will be responsible for such Party's own tax liability that may arise as a result of the transactions contemplated hereby.

ARTICLE V
MISCELLANEOUS

Section 5.1. Consents; Deemed Amendment to Agreements. To the extent required under applicable Law or the governing documents of any of the Parties or any documents to which they are party, each Party hereby acknowledges that this Agreement constitutes the written consent of such Party to each of the agreements and transactions described herein, including in its capacity as a member or manager of any other Party.

Section 5.2. Deed; Bill of Sale; Assignment. To the extent required and permitted by applicable Law, this Agreement will also constitute a "deed," "bill of sale," "stock power" or "assignment" of the assets, shares and membership and other interests referenced herein, as well as an amendment of the relevant agreements, without the need for any further assignment or transfer document.

Section 5.3. Further Assurances. Each of the Parties hereby agrees to execute, acknowledge and deliver all such additional assignments, stock or unit powers, conveyances, instruments, notices and other documents, and to do all such other acts and things, all in accordance with applicable Law, as may be necessary or appropriate (a) to more fully assure that the applicable Parties own all of the properties, rights, titles, interests, estates, remedies, powers and privileges granted by this Agreement, or which are intended to be so granted, (b) to more fully and effectively vest in the applicable Parties and their respective successors and assigns beneficial and record title to the interests and shares contributed and assigned by this Agreement or intended to be so and (c) to more fully and effectively carry out the purposes and intent of this Agreement.

Section 5.4. Termination. This Agreement shall terminate and be of no further force or effect if the IPO has not been completed by 11:59 p.m. Austin, Texas time on [•], 2023.

Section 5.5. Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be personally delivered, sent by nationally recognized overnight courier, mailed by registered or certified mail or be sent by facsimile or electronic mail to such Party at 5918 W. Courtyard Drive, Suite 500, Austin, Texas 78730 (or such other address as shall be specified by like notice).

Section 5.6. Successors and Assigns; No Third Party Rights This Agreement will be binding upon and inure to the benefit of the Parties and their respective successors and assigns. This Agreement is not intended to, and does not, create rights in any other Person, and no Person is or is intended to be a third-party beneficiary of any of the provisions of this Agreement.

Section 5.7. Severability. If any of the provisions of this Agreement are held by any court of competent jurisdiction to contravene, or to be invalid under, the Laws of any political body having jurisdiction over the subject matter hereof, such contravention or invalidity will not invalidate the entire Agreement. Instead, this Agreement will be construed as if it did not contain the particular provision or provisions held to be invalid, and an equitable adjustment will be made and necessary provision added so as to give effect to the intention of the Parties as expressed in this Agreement at the time of execution of this Agreement.

Section 5.8. Waivers and Amendments. Any waiver of any term or condition of this Agreement, or any amendment or supplement to this Agreement, will be effective only if in writing and signed by the Parties. A waiver of any breach or failure to enforce any of the terms or conditions of this Agreement will not in any way affect, limit or waive a Party's rights hereunder at any time to enforce strict compliance thereafter with every term or condition of this Agreement.

Section 5.9. Entire Agreement; Survival. This Agreement, together with the agreements and other documents referenced herein, constitutes the entire agreement among the Parties pertaining to the transactions contemplated hereby and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the Parties pertaining thereto. The provisions of this Agreement (including the representations and warranties hereunder) shall survive the initial closing of the IPO, and shall continue indefinitely.

Section 5.10. Governing Law. This Agreement will be governed by, and construed in accordance with, the Laws of the State of Delaware.

Section 5.11. Counterparts. This Agreement may be executed in any number of counterparts (including by facsimile or other electronic means) with the same effect as if all Parties had signed the same document.

[Signature Pages Follow]

IN WITNESS WHEREOF, this Agreement has been duly executed by each of the Parties as of the date first written above.

ATLAS SAND MANAGEMENT COMPANY, LLC

By: _____
Name:
Title:

ATLAS SAND COMPANY, LLC

By: _____
Name:
Title:

ATLAS SAND HOLDINGS, LLC

By: _____
Name:
Title:

ATLAS SAND OPERATING, LLC

By: _____
Name:
Title:

ATLAS SAND HOLDINGS II, LLC

By: _____
Name:
Title:

ATLAS SAND MANAGEMENT COMPANY II, LLC

By: _____
Name:
Title:

ATLAS SAND MERGER SUB, LLC

By: _____
Name:
Title:

ATLAS ENERGY SOLUTIONS INC.

By: _____
Name:
Title:

[SIGNATURE PAGE TO MASTER REORGANIZATION AGREEMENT]

Schedule 1.1(a)

ASMC Upstairs Holders

[To come.]

Schedule 1.1(b)

Holdings Upstairs Holders

[To come.]

Schedule 1.1(c)

LTIP Unit Redemptions

[To come.]

EXHIBIT A

Form of Certificate of Merger

See attached.

EXHIBIT B

Form of A&R LLC Agreement of Holdings

See attached.

EXHIBIT C

Form of Fifth A&R LLC Agreement of Atlas Sand LLC

See attached.

EXHIBIT D

Form of A&R LLC Agreement of Atlas Operating

See attached.

EXHIBIT E

Form of A&R LLC Agreement of Holdings II

See attached.

EXHIBIT F

Form of A&R LLC Agreement of ASMC II

See attached.

EXHIBIT G

Form of Registration Rights Agreement

See attached.

EXHIBIT H

Form of Stockholders' Agreement

See attached.

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ATLAS ENERGY SOLUTIONS INC.

Atlas Energy Solutions Inc. (the "***Corporation***"), a corporation organized and existing under the General Corporation Law of the State of Delaware as set forth in Title 8 of the Delaware Code (as it currently exists or may hereafter be amended, the "***DGCL***"), hereby certifies as follows:

1. The original Certificate of Incorporation of the Corporation (the "***Original Certificate of Incorporation***") was filed with the Secretary of State of the State of Delaware on February 3, 2022.

2. This Amended and Restated Certificate of Incorporation, which restates, integrates and also further amends the Original Certificate of Incorporation, has been declared advisable by the board of directors of the Corporation (the "***Board***"), duly adopted by the stockholders of the Corporation and duly executed and acknowledged by an authorized officer of the Corporation in accordance with Sections 103, 228, 242 and 245 of the DGCL. References to this "***Certificate of Incorporation***" herein refer to this Amended and Restated Certificate of Incorporation, as amended, restated, supplemented and otherwise modified from time to time (including by any Preferred Stock Designation as defined in this Certificate of Incorporation).

3. The Original Certificate of Incorporation is hereby amended, integrated and restated in its entirety to read as follows:

ARTICLE I
NAME

SECTION 1.1. Name. The name of the Corporation is Atlas Energy Solutions Inc.

ARTICLE II
REGISTERED AGENT

SECTION 2.1. Registered Agent. The address of its registered office in the State of Delaware is 251 Little Falls Drive, City of Wilmington, County of New Castle, Delaware 19808. The name of the Corporation's registered agent at such address is Corporation Services Company.

ARTICLE III
PURPOSE

SECTION 3.1. Purpose. The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL, and the Corporation shall have the power to perform all lawful acts and activities.

ARTICLE IV
CAPITALIZATION

SECTION 4.1. Number of Shares.

(A) The total number of shares of stock that the Corporation shall have the authority to issue is 2,000,000,000 shares of stock, classified as:

(i) 500,000,000 shares of preferred stock, par value $0.01 per share ("***Preferred Stock***");

(ii) 1,000,000,000 shares of Class A common stock, par value $0.01 per share ("***Class A Common Stock***"); and

(iii) 500,000,000 shares of Class B common stock, par value $0.01 per share ("***Class B Common Stock***" and, together with the Class A Common Stock, the "***Common Stock***").

(B) Subject to the rights of the holders of any outstanding series of Preferred Stock, the number of authorized shares of Preferred Stock, Class A Common Stock or Class B Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding or reserved for the exercise of outstanding options or warrants or conversion of any authorized and outstanding convertible securities) by the affirmative vote of the holders of a majority in voting power of the outstanding shares of stock of the Corporation entitled to vote irrespective of the provisions of Section 242(b)(2) of the DGCL (or any successor provision thereto), and no vote of the holders of either Preferred Stock, Class A Common Stock or Class B Common Stock voting separately as a class shall be required therefor. For purposes of this Certificate of Incorporation, beneficial ownership of shares shall be determined in accordance with Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended.

SECTION 4.2. Provisions Relating to Preferred Stock.

(A) Preferred Stock may be issued from time to time in one or more series, the shares of each series to have such designations and powers, preferences, privileges and rights, and qualifications, limitations and restrictions thereof, as are stated and expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board as hereafter prescribed (a "***Preferred Stock Designation***").

(B) Subject to any limitations prescribed by law and the rights of any series of the Preferred Stock then outstanding, if any, authority is hereby expressly granted to and vested in the Board to authorize the issuance of Preferred Stock from time to time in one or more series, and with respect to each series of Preferred Stock, to fix and state by the Preferred Stock Designation the designations and powers, preferences, privileges and rights, and qualifications, limitations and restrictions relating to each series of Preferred Stock, including, but not limited to, the following:

(i) whether or not the series is to have voting rights, full, special or limited, or is to be without voting rights, and whether or not such series is to be entitled to vote as a separate series either alone or together with the holders of one or more other classes or series of stock;

(ii) the number of shares to constitute the series and the designation thereof;

(iii) the preferences and relative, participating, optional or other special rights, if any, and the qualifications, limitations or restrictions thereof, if any, with respect to any series;

(iv) whether or not the shares of any series shall be redeemable at the option of the Corporation or the holders thereof or upon the happening of any specified event, and, if redeemable, the redemption price or prices (which may be payable or issuable in the form of cash, notes, securities or other property), and the time or times at which, and the terms and conditions upon which, such shares shall be redeemable and the manner of redemption;

(v) whether or not the shares of a series shall be subject to the operation of retirement or sinking funds to be applied to the purchase or redemption of such shares for retirement, and, if such retirement or sinking fund or funds are to be established, the annual amount thereof, and the terms and provisions relative to the operation thereof;

(vi) the dividend rate, whether dividends are payable in cash, stock of the Corporation or other property, the conditions upon which and the times when such dividends are payable, the

preference to or the relation to the payment of dividends payable on any other class or classes or series of stock, whether or not such dividends shall be cumulative or noncumulative, and if cumulative, the date or dates from which such dividends shall accumulate;

(vii) the preferences, if any, and the amounts thereof which the holders of any series thereof shall be entitled to receive upon the voluntary or involuntary liquidation, dissolution or winding up of, or upon any distribution of the assets of, the Corporation;

(viii) whether or not the shares of any series, at the option of the Corporation or the holder thereof or upon the happening of any specified event, shall be convertible into or exchangeable or redeemable for, the shares of any other class or classes or of any other series of the same or any other class or classes or series of stock, securities or other property of the Corporation and the conversion price or prices or ratio or ratios or the rate or rates at which such exchange or redemption may be made, with such adjustments, if any, as shall be stated and expressed or provided for in such resolution or resolutions; and

(ix) such other powers, preferences, privileges and rights, protective provisions and qualifications, limitations and restrictions with respect to any series as may to the Board seem advisable.

(C) The shares of each series of Preferred Stock may vary from the shares of any other series thereof in any or all of the foregoing respects. The Board may increase the number of shares of the Preferred Stock designated for any existing series by a resolution adding to such series authorized and unissued shares of the Preferred Stock not designated for any other series. Unless otherwise provided in the Preferred Stock Designation, the Board may decrease the number of shares of the Preferred Stock designated for any existing series by a resolution subtracting from such series authorized and unissued shares of the Preferred Stock designated for such existing series, and the shares so subtracted shall become authorized, unissued and undesignated shares of the Preferred Stock.

SECTION 4.3. Provisions Relating to Common Stock.

(A) Except as may otherwise be provided in this Certificate of Incorporation, each share of Common Stock shall have identical rights and privileges in every respect. Common Stock shall be subject to the express terms of Preferred Stock and any series thereof. Except as may otherwise be provided in this Certificate of Incorporation or by applicable law, the holders of shares of Common Stock shall be entitled to one vote for each such share on all matters to which stockholders are entitled to vote, the holders of shares of Common Stock shall have the exclusive right to vote for the election of directors and on all other matters upon which stockholders are entitled to vote, and the holders of Preferred Stock shall not be entitled to vote at or receive notice of any meeting of stockholders, other than as provided in any Preferred Stock Designation. Each holder of Common Stock shall be entitled to notice of any stockholders' meeting in accordance with the bylaws of the Corporation (as in effect at the time in question) and applicable law on all matters put to a vote of the stockholders of the Corporation. Except as otherwise required in this Certificate of Incorporation (including any Preferred Stock Designation) or by applicable law, the holders of Common Stock shall vote together as a single class on all actions to be taken by the stockholders of the Corporation (or, if any holders of Preferred Stock are entitled to vote together with the holders of Common Stock, the holders of Common Stock and the Preferred Stock shall vote together as a single class).

(B) Notwithstanding the foregoing, except as otherwise required by applicable law, holders of Class A Common Stock or Class B Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate of Incorporation (including any Preferred Stock Designation) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation (including any Preferred Stock Designation) or pursuant to the DGCL.

(C) Subject to the prior rights and preferences, if any, applicable to shares of Preferred Stock or any series thereof, the holders of shares of Class A Common Stock shall be entitled to receive ratably in proportion to the number of shares of Class A Common Stock held by them such dividends (payable in

cash, stock or otherwise), if any, as may be declared thereon by the Board at any time and from time to time out of any funds of the Corporation legally available therefor. Dividends shall not be declared or paid on the Class B Common Stock unless (i) the dividend consists of shares of Class B Common Stock or of rights, options, warrants or other securities convertible or exercisable into or exchangeable or redeemable for shares of Class B Common Stock paid proportionally with respect to each outstanding share of Class B Common Stock and (ii) a dividend consisting of shares of Class A Common Stock or of rights, options, warrants or other securities convertible or exercisable into or exchangeable or redeemable for shares of Class A Common Stock on equivalent terms is simultaneously paid to the holders of Class A Common Stock. If dividends are declared on the Class A Common Stock or the Class B Common Stock that are payable in shares of Common Stock, or securities convertible or exercisable into or exchangeable or redeemable for Common Stock in accordance with this Section 4.3(C), the dividends payable to the holders of Class A Common Stock shall be paid only in shares of Class A Common Stock (or securities convertible or exercisable into or exchangeable or redeemable for Class A Common Stock), the dividends payable to the holders of Class B Common Stock shall be paid only in shares of Class B Common Stock (or securities convertible or exercisable into or exchangeable or redeemable for Class B Common Stock), and such dividends shall be paid in the same number of shares (or fraction thereof) on a per share basis of the Class A Common Stock and Class B Common Stock, respectively (or securities convertible or exercisable into or exchangeable or redeemable for the same number of shares (or fraction thereof) on a per share basis of the Class A Common Stock and Class B Common Stock, respectively). In no event shall the shares of either Class A Common Stock or Class B Common Stock be split, subdivided, combined or reclassified unless the outstanding shares of the other class shall be concurrently proportionately split, subdivided, combined or reclassified in a manner that maintains the same proportionate equity ownership between the holders of the outstanding Class A Common Stock and Class B Common Stock on the record or effective date for such split, division or combination or reclassification; *provided, however*, that shares of one such class may be split, subdivided, combined or reclassified in a different or disproportionate manner if such split, subdivision, combination or reclassification is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A Common Stock and Class B Common Stock, each voting separately as a class.

(D) In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Corporation, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of Preferred Stock or any series thereof, and subject to the right of participation, if any, of the holders of shares of Preferred Stock in any dividends, the holders of shares of Class A Common Stock shall be entitled to receive all of the remaining assets of the Corporation available for distribution to its stockholders, ratably in proportion to the number of shares of Class A Common Stock held by them. The holders of shares of Class B Common Stock, as such, shall not be entitled to receive any assets of the Corporation in the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation. A dissolution, liquidation or winding-up of the Corporation, as such terms are used in this paragraph (D), shall not be deemed to be occasioned by or to include any consolidation or merger of the Corporation with or into any other corporation or corporations or other entity or a sale, lease, exchange or conveyance of all or a part of the assets of the Corporation.

(E) Shares of Class B Common Stock may be issued or transferred only in connection with the simultaneous issuance or transfer of an identical number of Units (as defined below). Any purported issuance or transfer of shares of Class B Common Stock not accompanied by an issuance or transfer of the identical number of Units shall be null and void and of no force or effect. For this purpose "Unit" means a membership interest of Atlas Sand Operating, LLC, a Delaware limited liability company, or any successor entity, that constitutes a "Unit" as defined in the in the Amended and Restated Limited Liability Company Agreement of Atlas Sand Operating, LLC dated as of [●], 2023, or the limited liability company agreement or other similar document of such successor entity, as the relevant agreement may be further amended, restated, supplemented or otherwise modified from time to time (the "***LLC Agreement***"). The Corporation will at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, such number of shares of Class A Common Stock that shall from time to time be sufficient

to effect the redemption of all outstanding Units that are subject to the Redemption Right (as defined in the LLC Agreement) for shares of Class A Common Stock; provided that nothing contained herein shall be construed to preclude the Corporation from satisfying its obligations in respect of any such redemption by delivery of cash in lieu of shares of Class A Common Stock in the amount permitted by and provided in the LLC Agreement or shares of Class A Common Stock which are held in the treasury of the Corporation. All shares of Class A Common Stock that shall be issued upon any such redemption will, upon issuance in accordance with the LLC Agreement, be validly issued, fully paid and non-assessable.

(F) No stockholder shall, by reason of the holding of shares of any class or series of capital stock of the Corporation, have any preemptive or preferential right to acquire or subscribe for any shares or securities of any class or series, whether now or hereafter authorized, which may at any time be issued, sold or offered for sale by the Corporation, unless specifically provided for in a Preferred Stock Designation.

SECTION 4.4. Restrictions on Transfer.

(A) No holder of Common Stock that acquired its shares thereof prior to the consummation of the initial public offering of Class A Common Stock (the "***IPO***," and each such holder an "***Initial Stockholder***") shall be permitted to, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise transfer or dispose of (collectively, a "***Disposition***") any Common Stock, or any securities convertible into or exercisable or exchangeable for, or any rights to purchase or otherwise acquire, which includes engaging in any hedging, collar (whether or not for any consideration) or other transaction that is designed to or reasonably expected to lead or result in a Disposition, any Common Stock held by such Initial Stockholder or acquired by such Initial Stockholder immediately after the consummation of the IPO, or that may be deemed to be beneficially owned by such Initial Stockholder (collectively, the "***Lock-Up***"), pursuant to the Securities Act of 1933, as amended (the "***Securities Act***"), and the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), for a period of 180 days following the consummation of the IPO (the "***Lock-Up Period***"), without the prior written consent of Goldman Sachs & Co. LLC, BofA Securities, Inc. and Piper Sandler & Co. (the "***Representatives***"). If an Initial Stockholder executes a separate agreement covering any Dispositions during theLock-Up Period as may be reasonably requested by the Representatives that is necessary to give further effect hereto, in the event of any conflict or inconsistency between the terms of such separate agreement and this Section 4.4, the terms of such separate agreement shall control. Following the expiration of the Lock-Up Period, the Initial Stockholders may effect a Disposition of all or any portion of their Common Stock, subject to compliance with applicable securities laws, policies of the Corporation, this Certificate of Incorporation, the bylaws of the Corporation and any other requirements imposed by the Corporation or the transfer agent and registrar with respect to the Common Stock.

(B) Notwithstanding Section 4.4(A), the Lock-Up shall not apply to (i) bona fide gifts, sales or other dispositions of shares of any class of the Corporation's capital stock, in each case, that are made exclusively between and among an Initial Stockholder and members of the Initial Stockholder's family, or affiliates of the Initial Stockholder, including its partners (if a partnership) or members (if a limited liability company); *provided* that it shall be a condition to any transfer pursuant to this clause (i) that (A) the transferee/donee, through its subsequent ownership of such transferred shares of Common Stock, is bound by the restrictions set forth in Section 4.4(A) to the same extent as the transferor/donor, (B) each party (donor, donee, transferor or transferee) shall not be required by law (including without limitation the disclosure requirements of the Securities Act and the Exchange Act) to make, and shall agree to not voluntarily make, any filing or public announcement of the transfer or disposition prior to the expiration of the Lock-Up Period, and (C) the Initial Stockholder notifies the Representatives at least two business days prior to the proposed transfer or disposition; (ii) any exercise of options or vesting or exercise of any other equity-based award, in each case, under the Corporation's equity incentive plan or any other plan or agreement described in the prospectus included in the registration statement on Form S-1 filed in connection with the IPO, including any Common Stock withheld by the Corporation for the payment of taxes due upon such exercise or vesting; *provided* that (A) no filing or public announcement by any party under the Exchange Act or otherwise shall be required or shall be voluntarily made in connection with such exercise or vesting and (B) any Common Stock received upon such exercise or vesting, following any applicable net settlement or net withholding, will also be subject to the Lock-Up; and (iii) the establishment of any contract, instruction or plan that satisfies all of the requirements of Rule 10b5-1 (a "***Rule 10b5-1 Plan***") under the Exchange Act; *provided*, *however*, that no sales of Common Stock or securities convertible into, or exchangeable or exercisable for, Common Stock, shall be made pursuant to a Rule 10b5-1 Plan prior to the expiration of the Lock-Up Period; *provided further*, that the Corporation is not required to report the establishment of suchRule 10b5-1 Plan in any public report or filing with the U.S. Securities and Exchange Commission under the Exchange Act during the Lock-Up Period and does not otherwise voluntarily effect any such public filing or report regarding such Rule 10b5-1 Plan.

(C) Unless the written approval of the Representatives is obtained with respect to a Disposition after the consummation of the IPO until the expiration of the Lock-Up Period, such purported Disposition shall not be effective to transfer record, beneficial, legal or any other ownership of such Common Stock, and the transferee shall not be entitled to any rights as a stockholder of the Corporation with respect to the Common Stock purported to be purchased, acquired or transferred in the Disposition (including, without limitation, the right to vote or to receive dividends with respect thereto). Each such share of Common Stock subject to the Lock-Up Period shall bear the following legend (or any substantially similar legend):

THE SHARES REPRESENTED HEREBY ARE SUBJECT TOA LOCK-UP PERIOD AS SET FORTH IN THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ATLAS ENERGY SOLUTIONS INC.

ARTICLE V
DIRECTORS

SECTION 5.1. Term and Classes.

(A) The business and affairs of the Corporation shall be managed by or under the direction of the Board. In addition to the powers and authority expressly conferred upon them by statute or by this Certificate of Incorporation or the bylaws of the Corporation, the directors are hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation.

(B) The directors, other than those who may be elected by the holders of any series of Preferred Stock as specified in the related Preferred Stock Designation, shall be divided, with respect to the time for which they severally hold office, into three classes designated as "***Class I Directors***," "***Class II Directors***" and "***Class III Directors***," as nearly equal in number as is reasonably possible, with the initial term of office of the Class I Directors to expire at the first annual meeting of stockholders following the time at which the initial classification of the Board becomes effective, the initial term of office of the Class II Directors to expire at the second annual meeting of stockholders following the time at which the initial classification of the Board becomes effective, and the initial term of office of the Class III Directors to expire at the third annual meeting of stockholders following the time at which the initial classification of the Board becomes effective, with each director to hold office until such director's successor shall have been duly elected and qualified, subject, however, to such director's earlier death, resignation, disqualification or removal, and the Board shall be authorized to assign members of the Board, other than those directors who may be elected by the holders of any series of Preferred Stock, to such classes. At each annual meeting of stockholders, directors elected to succeed those directors whose terms then expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election, with each director to hold office until their successor shall have been duly elected and qualified, subject, however, to such director's earlier death, resignation, disqualification or removal.

SECTION 5.2. Vacancies. Subject to applicable law, the rights of the holders of any series of Preferred Stock then outstanding and the terms of the Stockholders' Agreement among the Corporation and certain of its stockholders, dated as of [●], 2023 (as amended, restated, supplemented or otherwise modified from time to time, the "***Stockholders' Agreement***"), any newly created directorship that results from an increase in the number of directors or any vacancy on the Board that results from the death, resignation, retirement, disqualification or removal of any director or from any other cause shall, unless otherwise required by law, be filled solely by the affirmative vote of a majority of the directors then in office, even if less than a quorum, or by a

sole remaining director, and shall not be filled by the stockholders. Any director elected to fill a vacancy not resulting from an increase in the number of directors shall hold office for the remaining term of such director's predecessor, or if it is a newly created directorship, shall be included in the class as designated by the Board and shall hold office until the first meeting of

stockholders held after their election for the purpose of electing directors of that class and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal from office. No decrease in the number of authorized directors constituting the Board shall shorten the term of any incumbent director.

SECTION 5.3. Removal. Subject to the rights of the holders of shares of any series of Preferred Stock, if any, to elect additional directors pursuant to this Certificate of Incorporation (including any Preferred Stock Designation) and subject to the terms of the Stockholders' Agreement, (A) prior to the Trigger Date (as defined below), any director may be removed from office with or without cause, upon the affirmative vote of the holders of at least a majority of the voting power of the outstanding shares of stock of the Corporation entitled to vote generally for the election of directors and (B) from and after the Trigger Date, any director may be removed only for cause, upon the affirmative vote of the holders of at least 66 2/3% of the voting power of the outstanding shares of stock of the Corporation entitled to vote generally for the election of directors.

SECTION 5.4. Additional Preferred Stock Directors. During any period when the holders of one or more series of Preferred Stock have the separate right to elect additional directors as provided for or fixed pursuant to the provisions of this Certificate of Incorporation (including any Preferred Stock Designation), and upon commencement and for the duration of the period during which such right continues: (A) the then otherwise total authorized number of directors of the Corporation shall automatically be increased by such number of directors that the holders of any series of Preferred Stock have a right to elect, and the holders of such Preferred Stock shall be entitled to elect the additional directors so provided for or fixed pursuant to said provisions; and (B) each such additional director shall serve until such director's successor shall have been duly elected and qualified, or until such director's right to hold such office terminates pursuant to said provisions, whichever occurs earlier, subject to such additional director's earlier death, resignation, disqualification or removal. Except as otherwise provided for or fixed pursuant to the provisions of this Certificate of Incorporation (including any Preferred Stock Designation), whenever the holders of one or more series of Preferred Stock having a separate right to elect additional directors cease to have or are otherwise divested of such right pursuant to said provisions, the terms of office of all such additional directors elected by the holders of such series of Preferred Stock, or elected to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional directors, shall forthwith terminate (in which case each such additional director shall cease to be qualified as a director and shall cease to be a director) and the total authorized number of directors of the Corporation shall be automatically reduced accordingly.

SECTION 5.5 Number. Subject to the rights of the holders of any series of Preferred Stock to elect directors under specified circumstances, if any, and the terms of the Stockholders' Agreement, the number of directors shall be fixed from time to time exclusively pursuant to a resolution adopted by the affirmative vote of a majority of the Whole Board. Unless and except to the extent that the bylaws of the Corporation so provide, the election of directors need not be by written ballot. For purposes of this Certificate of Incorporation, the term "***Whole Board***" shall mean the total number of authorized directors whether or not there exist any vacancies in previously authorized directorships.

SECTION 5.6. Committees. The Board may designate and appoint from among its members one or more committees, which may have one or more members, and may designate one or more of its members as alternate members, who may, subject to any limitations imposed by the Board, replace absent or disqualified members at any meeting of such committee. The stockholders of the Corporation shall have no power to appoint or remove directors as members of committees of the Board, nor to abrogate the power of the Board to establish any such committees or the power of any such committee to exercise the powers and authority of the Board.

ARTICLE VI
STOCKHOLDER ACTION

SECTION 6.1. Stockholder Consents.

(A) Prior to the date on which the stockholders party to the Stockholders' Agreement (collectively, the "***Principal Stockholders***") and their respective Affiliates (as such term is defined in Section 10.2) no longer collectively beneficially own more than a majority of the outstanding shares of Common Stock (the

"***Trigger Date***"), any action required or permitted to be taken at any annual meeting or special meeting of the stockholders of the Corporation may be taken without a meeting, without prior notice and without a vote of stockholders, if a consent or consents, setting forth the action so taken, is or are signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and such consent or consents are delivered to the Corporation.

(B) On and after the Trigger Date, subject to the rights of holders of any series of Preferred Stock with respect to such series of Preferred Stock, any action required or permitted to be taken by the stockholders of the Corporation must be taken at a duly held annual or special meeting of stockholders and may not be taken by any consent of such stockholders.

ARTICLE VII
SPECIAL MEETINGS

SECTION 7.1. Special Meetings. Special meetings of stockholders of the Corporation, and any proposals to be considered at such meetings, may be called and proposed only by the Executive Chairman, the Chief Executive Officer or, pursuant to a resolution adopted by the affirmative vote of a majority of the Whole Board, by the Board; *provided*, *however*, that prior to the Trigger Date, special meetings of the stockholders of the Corporation may also be called by the Secretary of the Corporation at the request of the holders of record of a majority of the outstanding shares of Common Stock. The Board shall fix the date, time and place, if any, of such special meeting. On and after the Trigger Date, subject to the rights of holders of any series of Preferred Stock, the stockholders of the Corporation shall not have the power to call or request a special meeting of stockholders of the Corporation. Business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting. The Board may postpone, reschedule or cancel any special meeting of the stockholders previously.

ARTICLE VIII
BYLAWS

SECTION 8.1. Bylaws. In furtherance of, and not in limitation of, the powers conferred by the laws of the State of Delaware, the Board is expressly authorized to adopt, amend or repeal the bylaws of the Corporation. Any adoption, amendment or repeal of the bylaws of the Corporation by the Board shall require the approval of a majority of the Whole Board. Stockholders shall also have the power to adopt, amend or repeal the bylaws of the Corporation; *provided*, *however*, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Certificate of Incorporation, the bylaws of the Corporation may be adopted, altered, amended or repealed by the stockholders of the Corporation only (A) prior to the Trigger Date, by the affirmative vote of holders of not less than a majority of the voting power of the then-outstanding shares of stock entitled to vote thereon, voting together as a single class, and (B) on and after the Trigger Date, by the affirmative vote of holders of not less than 66 2/3% in voting power of the then-outstanding shares of stock entitled to vote thereon, voting together as a single class. Notwithstanding the foregoing, nothing in the bylaws of the Corporation shall be deemed to limit the ability of the parties to the Stockholders' Agreement to amend, alter or repeal any provision of the Stockholders' Agreement pursuant to the terms thereof, provided that no amendment to the Stockholders' Agreement (whether or not such amendment modifies any provision of the Stockholders' Agreement to which the bylaws of the Corporation are subject) shall amend the bylaws of the Corporation. The bylaws of the Corporation shall not contain any provision inconsistent with this Certificate of Incorporation. No bylaws hereafter made or adopted, nor any repeal of or amendment thereto, shall invalidate any prior act of the Board that was valid at the time it was taken.

ARTICLE IX
LIMITATION OF DIRECTOR AND OFFICER LIABILITY

SECTION 9.1. Limitation of Director and Officer Liability. No director or officer of the Corporation shall be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, as applicable, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL as it now exists or may hereafter be amended. Any amendment, repeal or modification of this Article IX that purports to limit the liability of a director or officer shall be prospective only and shall not affect any limitation on liability of a director or officer, as applicable, for acts or omissions occurring prior to the date of such amendment, repeal or modification.

ARTICLE X
CORPORATE OPPORTUNITY

SECTION 10.1.

(A) Designated Parties (defined below) may own substantial equity interests in other entities and may make investments and enter into advisory service agreements and other agreements from time to time. Certain Designated Parties may also serve as employees, partners, officers or directors of other companies and, at any given time, certain Designated Parties may be in direct or indirect competition with the Corporation and/or its subsidiaries. The Corporation renounces, to the maximum extent permitted by law and in accordance with Section 122(17) of the DGCL, all interest and expectancy that it otherwise would be entitled to have in, and all rights to be offered an opportunity to participate in, any business opportunity that from time to time may be presented to the Designated Parties. To the maximum extent permitted by law, no Designated Party shall have any obligation to refrain from: (A) engaging in or managing the same or similar activities or lines of business as the Corporation or any of its subsidiaries or developing or marketing any products or services that compete (directly or indirectly) with those of the Corporation or any of its subsidiaries; (B) investing in or owning any (public or private) interest in any Person engaged in the same or similar activities or lines of business as, or otherwise in competition with, the Corporation or any of its subsidiaries (including any Designated Party, a "***Competing Person***"); (C) developing a business relationship with any Competing Person; or (D) entering into any agreement to provide any service(s) to any Competing Person or acting as an officer, director, member, manager or advisor to, or other principal of, any Competing Person, regardless (in the case of each of (A) through (D)) of whether such activities are in direct or indirect competition with the business or activities of the Corporation or any of its subsidiaries (the activities described in (A) through (D) are referred to herein as "***Specified Activities***"). To the maximum extent permitted by law, if any Designated Party acquires knowledge of a potential transaction or other business opportunity which may be a corporate opportunity both for such Designated Party or any of his or her respective Affiliates, on the one hand, and for the Corporation or its subsidiaries, on the other hand, such Designated Party shall have no duty to communicate or offer such transaction or business opportunity to the Corporation or its subsidiaries and such Designated Party may take any and all such transactions or opportunities for itself or offer such transactions or opportunities to any other Person. Notwithstanding the foregoing, this Section 10.1(A) shall not apply to any potential transaction or business opportunity that is expressly offered to a director, officer or employee of the Corporation or its subsidiaries, solely in his or her capacity as a director, officer or employee of the Corporation or its subsidiaries.

(B) Neither the amendment nor repeal of this Article X, nor the adoption of any provision of this Certificate of Incorporation, nor, to the fullest extent permitted by Delaware law, any modification of law, shall eliminate, reduce or otherwise adversely affect any right or protection of any person granted pursuant hereto existing at, or arising out of or related to any event, act or omission that occurred prior to, the time of such amendment, repeal, adoption or modification (regardless of when any proceeding (or part thereof) relating to such event, act or omission arises or is first threatened, commenced or completed).

(C) If any provision or provisions of this Article X shall be held to be invalid, illegal or unenforceable as applied to any circumstance or any reason whatsoever, (i) the validity, legality and enforceability of such provisions in any other circumstance and the remaining provisions of this Article X (including, without limitation, each portion of any paragraph of this Article X containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and (ii) to the fullest extent possible,

the provisions of this Article X (including, without limitation, each such portion of any paragraph of this Article X containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to permit the Corporation to protect its directors, officers, employees and agents from personal liability in respect of their good faith service to or for the benefit of the Corporation to the fullest extent permitted by applicable law.

(D) To the fullest extent permitted by applicable law, any Person purchasing or otherwise acquiring or holding any interest in any shares of capital stock of the Corporation shall be deemed to have notice of, and to have consented to, the provisions of this Article X. This Article X shall not limit any protections or defenses available to, or indemnification or advancement rights of, any director or officer of the Corporation under this Certificate of Incorporation, the bylaws of the Corporation or any applicable law.

SECTION 10.2. Definitions. For purposes of this Article X, the following terms have the following definitions:

(A) "***Affiliate***" means, with respect to a specified Person, a Person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, such specified Person; with respect to any Designated Party, an "Affiliate" shall include (i) any Person who is the direct or indirect ultimate holder of "equity securities" (as such term is described in Rule 405 under the Securities Act of 1933, as amended) of such Designated Party, and (ii) any investment fund, alternative investment vehicle, special purpose vehicle or holding company that is directly or indirectly managed, advised or controlled by such Designated Party.

(B) "***control***," including the terms "***controlling***," "***controlled by***" and "***under common control with***," means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of the then-outstanding shares of stock entitled to vote, by contract, or otherwise. A person who is the owner of 20% or more of the then-outstanding shares of stock entitled to vote of the Corporation, partnership, unincorporated association or other entity shall be presumed to have control of such entity, in the absence of proof by a preponderance of the evidence to the contrary. Notwithstanding the foregoing, a presumption of control shall not apply where such person holds the then-outstanding shares of stock entitled to vote, in good faith and not for the purpose of circumventing this Section 10.2, as an agent, bank, broker, nominee, custodian or trustee for one or more owners who do not individually or as a group have control of such entity.

(C) "***Designated Parties***" means the Principal Stockholders and any member of the Board who is not at the time an officer of the Corporation, and their respective Affiliates (other than the Corporation) and all of their respective interests in other entities (existing and future) that participate in the energy industry, as applicable.

(D) "***Person***" means any individual, corporation, partnership, limited liability company, joint venture, firm, association, trust, estate or other entity.

ARTICLE XI
BUSINESS COMBINATIONS WITH INTERESTED STOCKHOLDERS

SECTION 11.1. Business Combinations with Interested Stockholders. The Corporation shall not be governed by Section 203 of the DGCL (or any successor provision thereto) ("***Section 203***"), and the restrictions contained in Section 203 shall not apply to the Corporation, until immediately following the time at which both of the following conditions exist (if ever): (a) Section 203 by its terms would, but for the provisions of this Article XI, apply to the Corporation; and (b) none of the Principal Stockholders own (as defined in Section 203) shares of capital stock of the Corporation representing at least fifteen percent (15%) of the voting power of all the then outstanding shares of capital stock of the Corporation, and the Corporation shall thereafter be governed by Section 203 if and for so long as Section 203 by its terms shall apply to the Corporation.

ARTICLE XII
AMENDMENT OF CERTIFICATE OF INCORPORATION

SECTION 12.1. Amendments.

(A) The Corporation shall have the right, subject to any express provisions or restrictions contained in this Certificate of Incorporation, from time to time, to amend this Certificate of Incorporation or any provision hereof in any manner now or hereafter provided by applicable law, and all rights and powers of any kind conferred upon a director or stockholder of the Corporation by this Certificate of Incorporation or any amendment hereof are subject to such right of the Corporation.

(B) Notwithstanding any other provision of this Certificate of Incorporation (and in addition to any other vote that may be required by applicable law or this Certificate of Incorporation), on and after the Trigger Date, the affirmative vote of the holders of at least 66 2/3% in voting power of the outstanding shares of stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to amend, alter or repeal any provision of this Certificate of Incorporation; *provided*, *however*, that the amendment, alteration or repeal of Section 4.1 shall only require the affirmative vote of the holders of a majority in voting power of the outstanding shares of stock of the Corporation entitled to vote thereon, voting together as a single class.

(C) Notwithstanding any other provision of this Certificate of Incorporation (and in addition to any other vote that may be required by applicable law or this Certificate of Incorporation), prior to, on and after the Trigger Date, the affirmative vote of the holders of at least [75]% in voting power of the outstanding shares of stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to (i) amend, alter or repeal any provision of this Certificate of Incorporation to (a) include a provision authorized by Section 362(a)(1) of the DGCL (or any successor provision thereof) in order for the Corporation to become a "public benefit corporation" (as defined in Section 362(a) of the DGCL (or any successor provision thereof)) or (b) otherwise cause or allow the Corporation to become a "public benefit corporation" or similar entity; (ii) merge or consolidate with or into, or convert into, another entity if, as a result of such merger, consolidation or conversion, any class or series of capital stock of the Corporation would become, or be converted into or exchanged for the right to receive, shares or other equity interests in a domestic or foreign "public benefit corporation" or similar entity; or (iii) amend, alter or repeal (by merger, consolidation, conversion or otherwise) this Section 12.1(C).

(D) Notwithstanding the foregoing, nothing in this Certificate of Incorporation shall be deemed to limit the ability of the parties to the Stockholders' Agreement to amend, alter or repeal any provision of the Stockholders' Agreement pursuant to the terms thereof, provided that no amendment to the Stockholders' Agreement (whether or not such amendment modifies any provision of the Stockholders' Agreement to which this Certificate of Incorporation is subject) shall amend this Certificate of Incorporation.

ARTICLE XIII
FORUM SELECTION

SECTION 13.1. Exclusive Forum. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the Superior Court of the State of Delaware, or, if the Superior Court of the State of Delaware does not have jurisdiction, the United States District Court for the District of Delaware, in each case, subject to that court having personal jurisdiction over the indispensable parties named defendants therein) shall, to the fullest extent permitted by applicable law, be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (A) any derivative action or proceeding brought on behalf of the Corporation,

(B) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer, employee or stockholder of the Corporation to the Corporation or the Corporation's stockholders, (C) any action asserting a claim arising pursuant to any provision of the DGCL, this Certificate of Incorporation or by the bylaws of the Corporation (as either may be amended or restated) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware, this Certificate of Incorporation or bylaws of the Corporation or (D) any action asserting a claim governed by the internal affairs doctrine. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article XIII. If any provision or provisions of this Article XIII shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article XIII (including, without limitation, each portion of any sentence of this Article XIII containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby. The provisions of this Article XIII shall not apply to actions brought to enforce any liability or duty created by the Exchange Act.

IN WITNESS WHEREOF, the undersigned has executed this Amended and Restated Certificate of Incorporation as of [●], 2023.

ATLAS ENERGY SOLUTIONS INC.

By: _____
Name:
Title:

Signature Page to Amended and Restated Certificate of Incorporation

Exhibit 10.1

ATLAS ENERGY SOLUTIONS, INC.

LONG TERM INCENTIVE PLAN

1. **Purpose**. The purpose of the Atlas Energy Solutions Inc. Long Term Incentive Plan (the "***Plan***") is to provide a means through which: (a) Atlas Energy Solutions Inc., a Delaware corporation (the "***Company***"), and the Affiliates may attract, retain and motivate qualified persons as employees, directors and consultants, thereby enhancing the profitable growth of the Company and the Affiliates; and (b) persons upon whom the responsibilities of the successful administration and management of the Company and the Affiliates rest, and whose present and potential contributions to the Company and the Affiliates are of importance, can acquire and maintain stock ownership or awards the value of which is tied to the performance of the Company, thereby strengthening their concern for the Company and the Affiliates. Accordingly, the Plan provides for the grant of Options, SARs, Restricted Stock, Restricted Stock Units, Stock Awards, Dividend Equivalents, Other Stock-Based Awards, Cash Awards, Substitute Awards, or any combination of the foregoing, as determined by the Committee in its sole discretion.

2. **Definitions**. For purposes of the Plan, the following terms shall be defined as set forth below:

(a) "***Affiliate***" means any corporation, partnership, limited liability company, limited liability partnership, association, trust or other organization that, directly or indirectly, controls, is controlled by, or is under common control with, the Company. For purposes of the preceding sentence, "control" (including, with correlative meanings, the terms "controlled by" and "under common control with"), as used with respect to any entity or organization, shall mean the possession, directly or indirectly, of the power (i) to vote more than 50% of the securities having ordinary voting power for the election of directors of the controlled entity or organization or (ii) to direct or cause the direction of the management and policies of the controlled entity or organization, whether through the ownership of voting securities, by contract, or otherwise.

(b) "***ASC Topic 718***" means the Financial Accounting Standards Board Accounting Standards Codification Topic 718, *Compensation – Stock Compensation*, as amended or any successor accounting standard.

(c) "***Award***" means any Option, SAR, Restricted Stock, Restricted Stock Unit, Stock Award, Dividend Equivalent, Other Stock-Based Award, Cash Award, or Substitute Award, together with any other right or interest, granted under the Plan.

(d) "***Award Agreement***" means any written instrument (including any employment, severance or change in control agreement) that sets forth the terms, conditions, restrictions and/or limitations applicable to an Award, in addition to those set forth under the Plan.

(e) "***Board***" means the Board of Directors of the Company.

(f) "***Cash Award***" means an Award denominated in cash granted under Section 6(i).

(g) "***Change in Control***" means, except as otherwise provided in an Award Agreement, the occurrence of any of the following events after the Effective Date:

(i) The acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act) of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of either (x) the then-outstanding shares of Stock (the "***Outstanding Stock***") or (y) the combined voting power of the then-outstanding voting securities of the Company entitled to vote generally in the election of directors (the "***Outstanding Company Voting Securities***"); provided, however, that for purposes of this clause (i), the following acquisitions shall not constitute a Change in Control: (A) any acquisition directly from the Company, (B) any acquisition by the Company or its subsidiaries, (C) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any entity controlled by the Company or (D) any acquisition by any entity pursuant to a transaction that complies with clauses (A), (B) and (C) of clause (iii) below;

(ii) The individuals constituting the Board on the Effective Date (the "***Incumbent Directors***") cease for any reason (other than death or disability) to constitute at least majority of the Board; provided, however, that any individual becoming a director subsequent to the Effective Date whose election, or nomination for election, by the Company's stockholders was approved by a vote of at least two-thirds of the Incumbent Directors (either by a specific vote or by approval of the proxy statement of the Company in which such person is named as a nominee for director, without objection to such nomination) will be considered as though such individual were an Incumbent Director, but excluding, for purposes of this proviso, any such individual whose initial assumption of office occurs as a result of an actual or threatened proxy contest with respect to election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a "person" (as used in Section 13(d) of the Exchange Act), in each case, other than the Board, which individual, for the avoidance of doubt, shall not be deemed to be an Incumbent Director for purposes of this definition, regardless of whether such individual was approved by a vote of at least two-thirds of the Incumbent Directors;

(iii) Consummation of a reorganization, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company or an acquisition of assets of another entity (a "***Business Combination***"), in each case, unless, following such Business Combination, (A) the Outstanding Stock and Outstanding Company Voting Securities immediately prior to such Business Combination represent or are converted into or exchanged for securities which represent or are convertible into more than 50% of, respectively, the then-outstanding shares of common stock or common equity interests and the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors or other governing body, as the case may be, of the entity resulting from such Business Combination (including, without limitation, an entity which as a result of such transaction owns the Company, or all or substantially all of the Company's assets either directly or through one or more subsidiaries), (B) no individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act), excluding the Company, its subsidiaries and any employee benefit plan (or related trust) sponsored or maintained by the Company or the entity resulting from such Business Combination (or any entity controlled by either the Company or the entity resulting from such Business Combination), beneficially owns, directly or indirectly, 50% or more of, respectively, the then-outstanding shares of common stock or common equity interests of the entity resulting from

such Business Combination or the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors or other governing body of such entity except to the extent that such ownership results solely from direct or indirect ownership of the Company that existed prior to the Business Combination, and (C) at least a majority of the members of the board of directors or similar governing body of the entity resulting from such Business Combination were Incumbent Directors at the time of the execution of the initial agreement, or of the action of the Board, providing for such Business Combination; or

(iv) Approval by the stockholders of the Company of a complete liquidation or dissolution of the Company.

Notwithstanding any provision of this Section 2(g), for purposes of an Award that provides for a deferral of compensation under the Nonqualified Deferred Compensation Rules, to the extent the impact of a Change in Control on such Award would subject a Participant to additional taxes under the Nonqualified Deferred Compensation Rules, a Change in Control described in subsection (i), (ii), (iii) or (iv) above with respect to such Award will mean both a Change in Control and a "change in the ownership of a corporation," "change in the effective control of a corporation," or a "change in the ownership of a substantial portion of a corporation's assets" within the meaning of the Nonqualified Deferred Compensation Rules as applied to the Company.

(h) "***Change in Control Price***" means the amount determined in the following clause (i), (ii), (iii), (iv) or (v), whichever the Committee determines is applicable, as follows: (i) the price per share offered to holders of Stock in any merger or consolidation, (ii) the per share Fair Market Value of the Stock immediately before the Change in Control or other event without regard to assets sold in the Change in Control or other event and assuming the Company has received the consideration paid for the assets in the case of a sale of the assets, (iii) the amount distributed per share of Stock in a dissolution transaction, (iv) the price per share offered to holders of Stock in any tender offer or exchange offer whereby a Change in Control or other event takes place, or (v) if such Change in Control or other event occurs other than pursuant to a transaction described in clauses (i), (ii), (iii), or (iv) of this Section 2(h), the value per share of the Stock that may otherwise be obtained with respect to such Awards or to which such Awards track, as determined by the Committee as of the date determined by the Committee to be the date of cancellation and surrender of such Awards. In the event that the consideration offered to stockholders of the Company in any transaction described in this Section 2(h) or in Section 8(e) consists of anything other than cash, the Committee shall determine the fair cash equivalent of the portion of the consideration offered which is other than cash and such determination shall be binding on all affected Participants to the extent applicable to Awards held by such Participants.

(i) "***Code***" means the Internal Revenue Code of 1986, as amended from time to time, including the guidance and regulations promulgated thereunder and successor provisions, guidance and regulations thereto.

(j) "***Committee***" means a committee of two or more directors designated by the Board to administer the Plan;provided, however, that, unless otherwise determined by the Board, the Committee shall consist solely of two or more Qualified Members.

(k) "***Dividend Equivalent***" means a right, granted to an Eligible Person under Section 6(g), to receive cash, Stock, other Awards or other property equal in value to dividends paid with respect to a specified number of shares of Stock, or other periodic payments.

(l) "***Effective Date***" means [•], 2023.

(m) "***Eligible Person***" means any individual who, as of the date of grant of an Award, is an officer or employee of the Company or of any Affiliate, and any other person who provides services to the Company or any Affiliate, including directors of the Company; provided, however, that, any such individual must be an "employee" of the Company or any of its parents or subsidiaries within the meaning of General Instruction A.1(a) to Form S-8 if such individual is granted an Award that may be settled in Stock. An employee on leave of absence may be an Eligible Person.

(n) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended from time to time, including the guidance, rules and regulations promulgated thereunder and successor provisions, guidance, rules and regulations thereto.

(o) "***Fair Market Value***" of a share of Stock means, as of any specified date, (i) if the Stock is listed on a national securities exchange, the closing sales price of the Stock, as reported on the stock exchange composite tape on that date (or if no sales occur on such date, on the last preceding date on which such sales of the Stock are so reported); (ii) if the Stock is not traded on a national securities exchange but is traded over the counter on such date, the average between the reported high and low bid and asked prices of Stock on the most recent date on which Stock was publicly traded on or preceding the specified date; or (iii) in the event Stock is not publicly traded at the time a determination of its value is required to be made under the Plan, the amount determined by the Committee in its discretion in such manner as it deems appropriate, taking into account all factors the Committee deems appropriate, including the Nonqualified Deferred Compensation Rules. Notwithstanding this definition of Fair Market Value, with respect to one or more Award types, or for any other purpose for which the Committee must determine the Fair Market Value under the Plan, the Committee may elect to choose a different measurement date or methodology for determining Fair Market Value so long as the determination is consistent with the Nonqualified Deferred Compensation Rules and all other applicable laws and regulations.

(p) "***ISO***" means an Option intended to be and designated as an "incentive stock option" within the meaning of Section 422 of the Code.

(q) "***Nonqualified Deferred Compensation Rules***" means the limitations and requirements of Section 409A of the Code, as amended from time to time, including the guidance and regulations promulgated thereunder and successor provisions, guidance and regulations thereto.

(r) "***Nonstatutory Option***" means an Option that is not an ISO.

(s) "***Option***" means a right, granted to an Eligible Person under Section 6(b), to purchase Stock at a specified price during specified time periods, which may either be an ISO or a Nonstatutory Option.

(t) "***Other Stock-Based Award***" means an Award granted to an Eligible Person under Section 6(h).

(u) "***Participant***" means a person who has been granted an Award under the Plan that remains outstanding, including a person who is no longer an Eligible Person.

(v) "***Qualified Member***" means a member of the Board who is (i) a "non-employee director" within the meaning of Rule 16b-3(b)(3), and (ii) "independent" under the listing standards or rules of the securities exchange upon which the Stock is traded, but only to the extent such independence is required in order to take the action at issue pursuant to such standards or rules.

(w) "***Restricted Stock***" means Stock granted to an Eligible Person under Section 6(d) that is subject to certain restrictions and to a risk of forfeiture.

(x) "***Restricted Stock Unit***" means a right, granted to an Eligible Person under Section 6(e), to receive Stock, cash or a combination thereof at the end of a specified period (which may or may not be coterminous with the vesting schedule of the Award).

(y) "***Rule 16b-3***" means Rule 16b-3, promulgated by the SEC under Section 16 of the Exchange Act.

(z) "***SAR***" means a stock appreciation right granted to an Eligible Person under Section 6(c).

(aa) "***SEC***" means the Securities and Exchange Commission.

(bb) "***Securities Act***" means the Securities Act of 1933, as amended from time to time, including the guidance, rules and regulations promulgated thereunder and successor provisions, guidance, rules and regulations thereto.

(cc) "***Stock***" means the Company's Common Stock, par value $0.01 per share, and such other securities as may be substituted (or re-substituted) for Stock pursuant to Section 8.

(dd) "***Stock Award***" means unrestricted shares of Stock granted to an Eligible Person under Section 6(f).

(ee) "***Substitute Award***" means an Award granted under Section 6(j).

3. **Administration**.

(a) Authority of the Committee. The Plan shall be administered by the Committee except to the extent the Board elects to administer the Plan, in which case references herein to the "Committee" shall be deemed to include references to the "Board." Subject to the express provisions of the Plan, Rule 16b-3 and other applicable laws, the Committee shall have the authority, in its sole and absolute discretion, to:

(i) designate Eligible Persons as Participants;

(ii) determine the type or types of Awards to be granted to an Eligible Person;

(iii) determine the number of shares of Stock or amount of cash to be covered by Awards;

(iv) determine the terms and conditions of any Award, including whether, to what extent and under what circumstances Awards may be vested, settled, exercised, cancelled or forfeited (including conditions based on continued employment or service requirements or the achievement of one or more performance goals);

(v) modify, waive or adjust any term or condition of an Award that has been granted, which may include the acceleration of vesting, waiver of forfeiture restrictions, modification of the form of settlement of the Award (for example, from cash to Stock or vice versa), early termination of a performance period, or modification of any other condition or limitation regarding an Award;

(vi) determine the treatment of an Award upon a termination of employment or other service relationship;

(vii) impose a holding period with respect to an Award or the shares of Stock received in connection with an Award;

(viii) interpret and administer the Plan and any Award Agreement;

(ix) correct any defect, supply any omission or reconcile any inconsistency in the Plan, in any Award, or in any Award Agreement; and

(x) make any other determination and take any other action that the Committee deems necessary or desirable for the administration of the Plan.

The express grant of any specific power to the Committee, and the taking of any action by the Committee, shall not be construed as limiting any power or authority of the Committee. Any action of the Committee shall be final, conclusive and binding on all persons, including the Company, Affiliates, stockholders, Participants, beneficiaries, and permitted transferees under Section 7(a) or other persons claiming rights from or through a Participant.

(b) Exercise of Committee Authority. At any time that a member of the Committee is not a Qualified Member, any action of the Committee relating to an Award granted or to be granted to an Eligible Person who is then subject to Section 16 of the Exchange Act in respect of the Company where such action is not taken by the full Board may be taken either (i) by a subcommittee, designated by the Committee, composed solely of two or more Qualified Members, or (ii) by the Committee but with each such member who is not a Qualified Member abstaining or recusing himself or herself from such action; provided, however, that upon such abstention or recusal, the Committee remains composed solely of two or more Qualified Members. Such action, authorized by such a subcommittee or by the Committee upon the abstention or recusal of such non-Qualified Member(s), shall be the action of the Committee for purposes of the Plan. For the avoidance of doubt, the full Board may take any action relating to an Award granted or to be granted to an Eligible Person who is then subject to Section 16 of the Exchange Act in respect of the Company.

(c) Delegation of Authority. The Committee may delegate any or all of its powers and duties under the Plan to a subcommittee of directors or to any officer of the Company, including the power to perform administrative functions and grant Awards; provided, that such delegation does not (i) violate state or corporate law, or (ii) result in the loss of an exemption under Rule 16b-3(d)(1) for Awards granted to Participants subject to Section 16 of the Exchange Act in respect of the Company. Upon any such delegation, all references in the Plan to the "Committee," other than in Section 8, shall be deemed to include any subcommittee or officer of the Company to whom such powers have been delegated by the Committee. Any such delegation shall not limit the right of such subcommittee members or such an officer to receive Awards; provided, however, that such subcommittee members and any such officer may not grant Awards to himself or herself, a member of the Board, or any executive officer of the Company or an Affiliate, or take any action with respect to any Award previously granted to himself or herself, a member of the Board, or any executive officer of the Company or an Affiliate. The Committee may also appoint agents who are not executive officers of the Company or members of the Board to assist in administering the Plan, provided, however, that such individuals may not be delegated the authority to grant or modify any Awards that will, or may, be settled in Stock.

(d) Limitation of Liability. The Committee and each member thereof shall be entitled to, in good faith, rely or act upon any report or other information furnished to him or her by any officer or employee of the Company or any Affiliate, the Company's legal counsel, independent auditors, consultants or any other agents assisting in the administration of the Plan. Members of the Committee and any officer or employee of the Company or any Affiliate acting at the direction or on behalf of the Committee shall not be personally liable for any action or determination taken or made in good faith with respect to the Plan, and shall, to the fullest extent permitted by law, be indemnified and held harmless by the Company with respect to any such action or determination.

(e) Participants in Non-U.S. Jurisdictions. Notwithstanding any provision of the Plan to the contrary, to comply with applicable laws in countries other than the United States in which the Company or any Affiliate operates or has employees, directors or other service providers from time to time, or to ensure that the Company complies with any applicable requirements of foreign securities exchanges, the Committee, in its sole discretion, shall have the power and authority to: (i) determine which of the Affiliates shall be covered by the Plan; (ii) determine which Eligible Persons outside the United States are eligible to participate in the Plan; (iii) modify the terms and conditions of any Award granted to Eligible Persons outside the United States to comply with applicable foreign laws or listing requirements of any foreign exchange; (iv) establish sub-plans and modify exercise procedures and other terms and procedures, to the extent such actions may be necessary or advisable (any such sub-plans and/or modifications shall be attached to the Plan as appendices), provided, however, that no such sub-plans and/or modifications shall increase the share limitations contained in Section 4(a); and (v) take any action, before or after an Award is granted, that it deems advisable to comply with any applicable governmental regulatory exemptions or approval or listing requirements of any such foreign securities exchange. For purposes of the Plan, all references to foreign laws, rules, regulations or taxes shall be references to the laws, rules, regulations and taxes of any applicable jurisdiction other than the United States or a political subdivision thereof.

4. **Stock Subject to the Plan**.

(a) Number of Shares Available for Delivery. Subject to adjustment in a manner consistent with Section 8, [•] shares of Stock are reserved and available for delivery with respect to Awards, and such total shall be available for the issuance of shares upon the exercise of ISOs.

(b) Application of Limitation to Grants of Awards. Subject to Section 4(c), no Award may be granted if the number of shares of Stock that may be delivered in connection with such Award exceeds the number of shares of Stock remaining available under the Plan minus the number of shares of Stock issuable in settlement of or relating to then-outstanding Awards. The Committee may adopt reasonable counting procedures to ensure appropriate counting, avoid double counting (as, for example, in the case of tandem or Substitute Awards) and make adjustments if the number of shares of Stock actually delivered differs from the number of shares previously counted in connection with an Award.

(c) Availability of Shares Not Delivered under Awards. If all or any portion of an Award expires or is cancelled, forfeited, exchanged, settled in cash or otherwise terminated, or receives the functional equivalent of any of the preceding actions, the shares of Stock subject to such Award shall not be considered "delivered shares" under the Plan, shall be available for delivery with respect to Awards, and shall no longer be considered issuable or related to outstanding Awards for purposes of Section 4(b). If an Award may be settled only in cash, such Award need not be counted against any share limit under this Section 4.

(d) Shares Available Following Certain Transactions. Substitute Awards granted in accordance with applicable stock exchange requirements and in substitution or exchange for awards previously granted by a company acquired by the Company or any subsidiary or with which the Company or any subsidiary combines shall not reduce the shares authorized for issuance under the Plan or the limitations on grants to non-employee members of the Board under Section 5(b), nor shall shares subject to such Substitute Awards be added to the shares available for issuance under the Plan as provided above (whether or not such Substitute Awards are later cancelled, forfeited or otherwise terminated).

(e) Stock Offered. The shares of Stock to be delivered under the Plan shall be made available from (i) authorized but unissued shares of Stock, (ii) Stock held in the treasury of the Company, or (iii) previously issued shares of Stock reacquired by the Company, including shares purchased on the open market.

5. **Eligibility; Award Limitations for Non-Employee Members of the Board**.

(a) Awards may be granted under the Plan only to Eligible Persons.

(b) In each calendar year during any part of which the Plan is in effect, anon-employee member of the Board may not be granted Awards for such individual's service on the Board having a value (determined, if applicable, pursuant to ASC Topic 718) on the date of grant in excess of $750,000; provided, that for any calendar year in which anon-employee member of the Board (i) first commences service on the Board, (ii) serves on a special committee of the Board, or (iii) serves as lead director or chairman of the Board, additional Awards may be granted to such non-employee member of the Board in excess of such limit; provided, further, that the limit set forth in this Section 5(b) shall be applied without regard to (A) cash fees paid to a non-employee member of the Board during such calendar year (or grants of Awards, if any, made to anon-employee member of the Board in lieu of all or any portion of such cash fees) or (B) grants of Awards, if any, made to a non-employee member of the Board during any period in which such individual was an employee of the Company or any Affiliate or was otherwise providing services to the Company or to any Affiliate other than in the capacity as a director of the Company.

6. **Specific Terms of Awards**.

(a) General. Awards may be granted on the terms and conditions set forth in this Section 6. Awards granted under the Plan may, in the discretion of the Committee, be granted either alone, in addition to, or in tandem with any other Award. In addition, the Committee may impose on any Award or the exercise thereof, at the date of grant or thereafter (subject to Section 10), such additional terms and conditions, not inconsistent with the provisions of the Plan, as the Committee shall determine, including subjecting such awards to service- or performance-based vesting conditions. Without limiting the scope of the preceding sentence, with respect to any performance-based conditions, (i) the Committee may use one or more business criteria or other measures of performance as it may deem appropriate in establishing any performance goals applicable to an Award, (ii) any such performance goals may relate to the performance of the Participant, the Company (on a consolidated basis), or to specified subsidiaries, business or geographical units or operating areas of the Company, (iii) the performance period or periods over which performance goals will be measured shall be established by the Committee, and (iv) any such performance goals and performance periods may differ among Awards granted to any one Participant or to different Participants. Except to the extent provided in an Award Agreement, the Committee may exercise its discretion to reduce or increase the amounts payable under any Award. The Committee may also make appropriate adjustments to performance-based Awards, which may be based on one or more of the following: (A) items related to a change in accounting principle; (B) items relating to financing activities; (C) expenses for restructuring or productivity initiatives; (D) other non-operating items; (E) items related to acquisitions; (F) items attributable to the business operations of any entity acquired by the Company during the performance period; (G) items related to the disposal of a business or segment of a business; (H) items related to discontinued operations that do not qualify as a segment of a business under United States generally accepted accounting principles; (I) items attributable to any stock dividend, stock split, combination or exchange of shares occurring during the performance period; (J) any other items of significant income or expense which are determined to be appropriate adjustments; (K) items relating to unusual or extraordinary corporate transactions, events or developments; (L) items related to amortization of acquired intangible assets; (M) items that are outside the scope of the Company's core, on-going business activities; (N) items relating to any other unusual or nonrecurring events or changes in applicable laws, accounting principles or business conditions; or (O) any other appropriate adjustments selected by the Board.

(b) Options. The Committee is authorized to grant Options, which may be designated as either ISOs or Nonstatutory Options, to Eligible Persons on the following terms and conditions:

(i) Exercise Price. Each Award Agreement evidencing an Option shall state the exercise price per share of Stock (the "***Exercise Price***") established by the Committee; provided, however, that except as provided in Section 6(j) or in Section 8, the Exercise Price of an Option shall not be less than the greater of (A) the par value per share of the Stock or (B) 100% of the Fair Market Value per share of the Stock as of the date of grant of the Option (or in the case of an ISO granted to an individual who owns stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or its parent or any of its subsidiaries, 110% of the Fair Market Value per share of the Stock on the date of grant). Notwithstanding the foregoing, the Exercise Price of a Nonstatutory Option may be less than 100% of the Fair Market Value per share of Stock as of the date of grant of the Option if the Option (1) does not provide for a deferral of compensation by reason of satisfying the short-term deferral exception set forth in the Nonqualified Deferred Compensation Rules or (2) provides for a deferral of compensation and is compliant with the Nonqualified Deferred Compensation Rules.

(ii) Time and Method of Exercise; Other Terms. The Committee shall determine the methods by which the Exercise Price may be paid or deemed to be paid, the form of such payment, including cash or cash equivalents, Stock (including previously owned shares or through a cashless exercise, i.e., "net settlement", a broker-assisted exercise, or other reduction of the amount of shares otherwise issuable pursuant to the Option), other Awards or awards granted under other plans of the Company or any Affiliate, other property, or any other legal consideration the Committee deems appropriate (including notes or other contractual obligations of Participants to make payment on a deferred basis), the methods by or forms in which Stock will be delivered or deemed to be delivered to Participants, including the delivery of Restricted Stock subject to Section 6(d), and any other terms and conditions of any Option. In the case of an exercise whereby the Exercise Price is paid with Stock, such Stock shall be valued based on the Stock's Fair Market Value as of the date of exercise. No Option may be exercisable for a period of more than ten years following the date of grant of the Option (or in the case of an ISO granted to an individual who owns stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or its parent or any of its subsidiaries, for a period of more than five years following the date of grant of the ISO).

(iii) ISOs. The terms of any ISO granted under the Plan shall comply in all respects with the provisions of Section 422 of the Code. ISOs may only be granted to Eligible Persons who are employees of the Company or employees of a parent or any subsidiary corporation of the Company. Except as otherwise provided in Section 8, no term of the Plan relating to ISOs (including any SAR in tandem therewith) shall be interpreted, amended or altered, nor shall any discretion or authority granted under the Plan be exercised, so as to disqualify either the Plan or any ISO under Section 422 of the Code, unless notice has been provided to the Participant that such change will result in such disqualification. ISOs shall not be granted more than ten years after the earlier of the adoption of the Plan or the approval of the Plan by the Company's stockholders. Notwithstanding the foregoing, to the extent that the aggregate Fair Market Value of shares of Stock subject to an ISO and the aggregate Fair Market Value of shares of stock of any parent or subsidiary corporation (within the meaning of Sections 424(e) and (f) of the Code)

subject to any other incentive stock options of the Company or a parent or subsidiary corporation (within the meaning of Sections 424(e) and (f) of the Code) that are exercisable for the first time by a Participant during any calendar year exceeds $100,000, or such other amount as may be prescribed under Section 422 of the Code, such excess shall be treated as Nonstatutory Options in accordance with the Code. As used in the previous sentence, Fair Market Value shall be determined as of the date the ISO is granted. If a Participant shall make any disposition of shares of Stock issued pursuant to an ISO under the circumstances described in Section 421(b) of the Code (relating to disqualifying dispositions), the Participant shall notify the Company of such disposition within the time provided to do so in the applicable award agreement.

(c) SARs. The Committee is authorized to grant SARs to Eligible Persons on the following terms and conditions:

(i) Right to Payment. An SAR is a right to receive, upon exercise thereof, the excess of (A) the Fair Market Value of one share of Stock on the date of exercise over (B) the grant price of the SAR as determined by the Committee.

(ii) Grant Price. Each Award Agreement evidencing an SAR shall state the grant price per share of Stock established by the Committee; provided, however, that except as provided in Section 6(j) or in Section 8, the grant price per share of Stock subject to an SAR shall not be less than the greater of (A) the par value per share of the Stock or (B) 100% of the Fair Market Value per share of the Stock as of the date of grant of the SAR. Notwithstanding the foregoing, the grant price of an SAR may be less than 100% of the Fair Market Value per share of Stock subject to an SAR as of the date of grant of the SAR if the SAR (1) does not provide for a deferral of compensation by reason of satisfying the short-term deferral exception set forth in the Nonqualified Deferred Compensation Rules or (2) provides for a deferral of compensation and is compliant with the Nonqualified Deferred Compensation Rules.

(iii) Method of Exercise and Settlement; Other Terms. The Committee shall determine the form of consideration payable upon settlement, the method by or forms in which Stock (if any) will be delivered or deemed to be delivered to Participants, and any other terms and conditions of any SAR. SARs may be either free-standing or granted in tandem with other Awards. No SAR may be exercisable for a period of more than ten years following the date of grant of the SAR.

(iv) Rights Related to Options. An SAR granted in connection with an Option shall entitle a Participant, upon exercise, to surrender that Option or any portion thereof, to the extent unexercised, and to receive payment of an amount determined by multiplying (A) the difference obtained by subtracting the Exercise Price with respect to a share of Stock specified in the related Option from the Fair Market Value of a share of Stock on the date of exercise of the SAR, by (B) the number of shares as to which that SAR has been exercised. The Option shall then cease to be exercisable to the extent surrendered. SARs granted in connection with an Option shall be subject to the terms and conditions of the Award Agreement governing the Option, which shall provide that the SAR is exercisable only at such time or times and only to the extent that the related Option is exercisable and shall not be transferable except to the extent that the related Option is transferrable.

(d) Restricted Stock. The Committee is authorized to grant Restricted Stock to Eligible Persons on the following terms and conditions:

(i) Restrictions. Restricted Stock shall be subject to such restrictions on transferability, risk of forfeiture and other restrictions, if any, as the Committee may impose. Except as provided in Section 7(a)(iii) and Section 7(a)(iv), during the restricted period applicable to the Restricted Stock, the Restricted Stock may not be sold, transferred, pledged, hedged, hypothecated, margined or otherwise encumbered by the Participant.

(ii) Dividends and Splits. As a condition to the grant of an Award of Restricted Stock, the Committee may allow a Participant to elect, or may require, that any cash dividends paid on a share of Restricted Stock be automatically reinvested in additional shares of Restricted Stock, applied to the purchase of additional Awards or deferred without interest to the date of vesting of the associated Award of Restricted Stock. Stock distributed in connection with a Stock split or Stock dividend, and other property (other than cash) distributed as a dividend, shall be subject to restrictions and a risk of forfeiture to the same extent as the Restricted Stock with respect to which such Stock or other property has been distributed.

(e) Restricted Stock Units. The Committee is authorized to grant Restricted Stock Units to Eligible Persons on the following terms and conditions:

(i) Award and Restrictions. Restricted Stock Units shall be subject to such restrictions (which may include a risk of forfeiture) as the Committee may impose.

(ii) Settlement. Settlement of vested Restricted Stock Units shall occur upon vesting or upon expiration of the deferral period specified for such Restricted Stock Units by the Committee (or, if permitted by the Committee, as elected by the Participant). Restricted Stock Units shall be settled by delivery of (A) a number of shares of Stock equal to the number of Restricted Stock Units for which settlement is due, or (B) cash in an amount equal to the Fair Market Value of the specified number of shares of Stock equal to the number of Restricted Stock Units for which settlement is due, or a combination thereof, as determined by the Committee at the date of grant or thereafter.

(f) Stock Awards. The Committee is authorized to grant Stock Awards to Eligible Persons as a bonus, as additional compensation, or in lieu of cash compensation any such Eligible Person is otherwise entitled to receive, in such amounts and subject to such other terms as the Committee in its discretion determines to be appropriate.

(g) Dividend Equivalents. The Committee is authorized to grant Dividend Equivalents to Eligible Persons, entitling any such Eligible Person to receive cash, Stock, other Awards, or other property equal in value to dividends or other distributions paid with respect to a specified number of shares of Stock. Dividend Equivalents may be awarded on a free-standing basis or in connection with another Award (other than an Award of Restricted Stock or a Stock Award). The Committee may provide that Dividend Equivalents that are granted as free-standing awards shall be paid or distributed when accrued or at a later specified date and, if distributed at a later date, may be deemed to have been reinvested in additional Stock, Awards, or other investment vehicles or accrued in a bookkeeping account without interest, and subject to such restrictions on

transferability and risks of forfeiture, as the Committee may specify. With respect to Dividend Equivalents granted in connection with another Award, such Dividend Equivalents shall be subject to the same restrictions and risk of forfeiture as the Award with respect to which the dividends accrue and shall not be paid unless and until such Award has vested and been earned.

(h) Other Stock-Based Awards. The Committee is authorized, subject to limitations under applicable law, to grant to Eligible Persons such other Awards that may be denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, Stock, as deemed by the Committee to be consistent with the purposes of the Plan, including convertible or exchangeable debt securities, other rights convertible or exchangeable into Stock, purchase rights for Stock, Awards with value and payment contingent upon performance of the Company or any other factors designated by the Committee, and Awards valued by reference to the book value of Stock or the value of securities of, or the performance of, specified Affiliates. The Committee shall determine the terms and conditions of such Other Stock-Based Awards. Stock delivered pursuant to an Other-Stock Based Award in the nature of a purchase right granted under this Section 6(h) shall be purchased for such consideration, paid for at such times, by such methods, and in such forms, including cash, Stock, other Awards, or other property, as the Committee shall determine.

(i) Cash Awards. The Committee is authorized to grant Cash Awards, on a free-standing basis or as an element of, a supplement to, or in lieu of any other Award under the Plan to Eligible Persons in such amounts and subject to such other terms as the Committee in its discretion determines to be appropriate, including for purposes of any annual or short-term incentive or other bonus program.

(j) Substitute Awards; No Repricing. Awards may be granted in substitution or exchange for any other Award granted under the Plan or under another plan of the Company or an Affiliate or any other right of an Eligible Person to receive payment from the Company or an Affiliate. Awards may also be granted under the Plan in substitution for awards held by individuals who become Eligible Persons as a result of a merger, consolidation or acquisition of another entity or the assets of another entity by or with the Company or an Affiliate. Such Substitute Awards referred to in the immediately preceding sentence that are Options or SARs may have an exercise price that is less than the Fair Market Value of a share of Stock on the date of the substitution if such substitution complies with the Nonqualified Deferred Compensation Rules and other applicable laws and exchange rules. Except as provided in this Section 6(j) or in Section 8, without the approval of the stockholders of the Company, the terms of outstanding Awards may not be amended to (i) reduce the Exercise Price or grant price of an outstanding Option or SAR, (ii) grant a new Option, SAR or other Award in substitution for, or upon the cancellation of, any previously granted Option or SAR that has the effect of reducing the Exercise Price or grant price thereof, (iii) exchange any Option or SAR for Stock, cash or other consideration when the Exercise Price or grant price per share of Stock under such Option or SAR exceeds the Fair Market Value of a share of Stock or (iv) take any other action that would be considered a “repricing” of an Option or SAR under the applicable listing standards of the national securities exchange on which the Stock is listed (if any).

7. **Certain Provisions Applicable to Awards**.

(a) Limit on Transfer of Awards.

(i) Except as provided in Sections 7(a)(iii) and (iv), each Option and SAR shall be exercisable only by the Participant during the Participant's lifetime, or by the person to whom the Participant's rights shall pass by will or the laws of descent and distribution. Notwithstanding anything to the contrary in this Section 7(a), an ISO shall not be transferable other than by will or the laws of descent and distribution.

(ii) Except as provided in Sections 7(a)(i), (iii) and (iv), no Award, other than a Stock Award, and no right under any such Award, may be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by a Participant and any such purported assignment, alienation, pledge, attachment, sale, transfer or encumbrance shall be void and unenforceable against the Company or any Affiliate.

(iii) To the extent specifically provided by the Committee and permitted pursuant to FormS-8 and the instructions thereto, an Award may be transferred by a Participant on such terms and conditions as the Committee may from time to time establish; provided, however, that no Award (other than a Stock Award) may be transferred to a third-party financial institution for value.

(iv) An Award may be transferred pursuant to a domestic relations order entered or approved by a court of competent jurisdiction upon delivery to the Company of a written request for such transfer and a certified copy of such order.

(b) Form and Timing of Payment under Awards; Deferrals. Subject to the terms of the Plan and any applicable Award Agreement, payments to be made by the Company or any Affiliates upon the exercise or settlement of an Award may be made in such forms as the Committee shall determine in its discretion, including cash, Stock, other Awards or other property, and may be made in a single payment or transfer, in installments, or on a deferred basis (which may be required by the Committee or permitted at the election of the Participant on terms and conditions established by the Committee); provided, however, that any such deferred or installment payments will be set forth in the Award Agreement. Payments may include, without limitation, provisions for the payment or crediting of reasonable interest on installment or deferred payments or the grant or crediting of Dividend Equivalents or other amounts in respect of installment or deferred payments denominated in Stock.

(c) Evidencing Stock. The Stock or other securities of the Company delivered pursuant to an Award may be evidenced in any manner deemed appropriate by the Committee in its sole discretion, including in the form of a certificate issued in the name of the Participant or by book entry, electronic or otherwise, and shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations, and other requirements of the SEC, any stock exchange upon which such Stock or other securities are then listed, and any applicable federal, state or other laws, and the Committee may cause a legend or legends to be inscribed on any such certificates to make appropriate reference to such restrictions. Further, if certificates representing Restricted Stock are registered in the name of the Participant, the Company may retain physical possession of the certificates and may require that the Participant deliver a stock power to the Company, endorsed in blank, related to the Restricted Stock.

(d) Consideration for Grants. Awards may be granted for such consideration, including services, as the Committee shall determine, but shall not be granted for less than the minimum lawful consideration.

(e) Additional Agreements. Each Eligible Person to whom an Award is granted under the Plan may be required to agree in writing, as a condition to the grant of such Award or otherwise, to subject an Award that is exercised or settled following such Eligible Person's termination of employment or service to a general release of claims and/or a noncompetition or other restricted covenant agreement in favor of the Company and the Affiliates, with the terms and conditions of such agreement(s) to be determined in good faith by the Committee.

8. **Subdivision or Consolidation; Recapitalization; Change in Control; Reorganization**.

(a) Existence of Plans and Awards. The existence of the Plan and the Awards granted hereunder shall not affect in any way the right or power of the Company, the Board or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of debt or equity securities ahead of or affecting Stock or the rights thereof, the dissolution or liquidation of the Company or any sale, lease, exchange or other disposition of all or any part of its assets or business or any other corporate act or proceeding.

(b) Additional Issuances. Except as expressly provided herein, the issuance by the Company of shares of stock of any class, including upon conversion of shares or obligations of the Company convertible into such shares or other securities, and in any case whether or not for fair value, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number of shares of Stock subject to Awards theretofore granted or the purchase price per share of Stock, if applicable.

(c) Subdivision or Consolidation of Shares. The terms of an Award and the share limitations under the Plan shall be subject to adjustment by the Committee from time to time, in accordance with the following provisions:

(i) If at any time, or from time to time, the Company shall subdivide as a whole (by reclassification, by a Stock split, by the issuance of a distribution on Stock payable in Stock, or otherwise) the number of shares of Stock then outstanding into a greater number of shares of Stock or in the event the Company distributes an extraordinary cash dividend, then, as appropriate (A) the maximum number of shares of Stock available for delivery with respect to Awards and applicable limitations with respect to Awards provided in Section 4 and Section 5 (other than cash limits) shall be increased proportionately, and the kind of shares or other securities available for the Plan shall be appropriately adjusted, (B) the number of shares of Stock (or other kind of shares or securities) that may be acquired under any then-outstanding Award shall be increased proportionately, and (C) the price (including the Exercise Price or grant price) for each

share of Stock (or other kind of shares or securities) subject to then-outstanding Awards shall be reduced proportionately, without changing the aggregate purchase price or value as to which outstanding Awards remain exercisable or subject to restrictions; provided, however, that in the case of an extraordinary cash dividend that is not an Adjustment Event, the adjustment to the number of shares of Stock and the Exercise Price or grant price, as applicable, with respect to an outstanding Option or SAR may be made in such other manner as the Committee may determine that is permitted pursuant to applicable tax and other laws, rules and regulations. Notwithstanding the foregoing, Awards that already have a right to receive extraordinary cash dividends as a result of Dividend Equivalents or other dividend rights will not be adjusted as a result of an extraordinary cash dividend.

(ii) If at any time, or from time to time, the Company shall consolidate as a whole (by reclassification, by reverse Stock split, or otherwise) the number of shares of Stock then outstanding into a lesser number of shares of Stock, then, as appropriate (A) the maximum number of shares of Stock available for delivery with respect to Awards and applicable limitations with respect to Awards provided in Section 4 and Section 5 (other than cash limits) shall be decreased proportionately, and the kind of shares or other securities available for the Plan shall be appropriately adjusted, (B) the number of shares of Stock (or other kind of shares or securities) that may be acquired under any then-outstanding Award shall be decreased proportionately, and (C) the price (including the Exercise Price or grant price) for each share of Stock (or other kind of shares or securities) subject to then-outstanding Awards shall be increased proportionately, without changing the aggregate purchase price or value as to which outstanding Awards remain exercisable or subject to restrictions.

(d) Recapitalization. In the event of any change in the capital structure or business of the Company or other corporate transaction or event that would be considered an "equity restructuring" within the meaning of ASC Topic 718 and, in each case, that would result in an additional compensation expense to the Company pursuant to the provisions of ASC Topic 718, if adjustments to Awards with respect to such event were discretionary or otherwise not required (each such an event, an "***Adjustment Event***"), then the Committee shall equitably adjust (i) the aggregate number or kind of shares that thereafter may be delivered under the Plan, (ii) the number or kind of shares or other property (including cash) subject to an Award, (iii) the terms and conditions of Awards, including the purchase price or Exercise Price of Awards and performance goals, as applicable, and (iv) the applicable limitations with respect to Awards provided in Section 4 and Section 5 (other than cash limits) to equitably reflect such Adjustment Event ("***Equitable Adjustments***"). In the event of any change in the capital structure or business of the Company or other corporate transaction or event that would not be considered an Adjustment Event, and is not otherwise addressed in this Section 8, the Committee shall have complete discretion to make Equitable Adjustments (if any) in such manner as it deems appropriate with respect to such other event.

(e) Change in Control and Other Events. In the event of a Change in Control or other changes in the Company or the outstanding Stock by reason of a recapitalization, reorganization, merger, consolidation, combination, exchange or other relevant change occurring after the date of the grant of any Award, the Committee, acting in its sole discretion without the consent or approval of any holder, may exercise any power enumerated in Section 3 (including the power to accelerate vesting, waive any forfeiture conditions or otherwise modify or adjust any other condition or limitation regarding an Award) and may also effect one or more of the following alternatives, which may vary among individual holders and which may vary among Awards held by any individual holder, but shall not be contrary to the Award treatment set forth in Section 8(f) below:

(i) accelerate the time of exercisability of an Award so that such Award may be exercised in full or in part for a limited period of time on or before a date specified by the Committee, after which specified date all unexercised Awards and all rights of holders thereunder shall terminate.

(ii) redeem in whole or in part outstanding Awards by requiring the mandatory surrender to the Company by selected holders of some or all of the outstanding Awards held by such holders (irrespective of whether such Awards are then vested or exercisable) as of a date, specified by the Committee, in which event the Committee shall thereupon cancel such Awards and pay to each holder an amount of cash or other consideration per Award (other than a Dividend Equivalent or Cash Award, which the Committee may separately require to be surrendered in exchange for cash or other consideration determined by the Committee in its discretion) equal to the Change in Control Price, less the Exercise Price with respect to an Option and less the grant price with respect to an SAR, as applicable to such Awards; provided, however, that to the extent the Exercise Price of an Option or the grant price of an SAR exceeds the Change in Control Price, such Award may be cancelled for no consideration;

(iii) make such adjustments to Awards then outstanding as the Committee deems appropriate to reflect such Change in Control or other such event (including the substitution, assumption, or continuation of Awards by the successor company or a parent or subsidiary thereof);

provided, however, that so long as the event is not an Adjustment Event, the Committee may determine in its sole discretion that no adjustment is necessary to Awards then outstanding. If an Adjustment Event occurs, this Section 8(e) shall only apply to the extent it is not in conflict with Section 8(d).

(f) Vesting Upon Change in Control. Notwithstanding any other provision in this Plan to the contrary, including Section 8(e) above, unless expressly provided otherwise in the applicable Award Agreement, Awards granted under the Plan that are outstanding at the time of a Change in Control shall be immediately vested, fully earned and exercisable, as applicable, upon the occurrence of a Change in Control.

9. **General Provisions**.

(a) Tax Withholding. The Company and any Affiliate are authorized to withhold from any Award granted, or any payment relating to an Award, including from a distribution of Stock, taxes due or potentially payable in connection with any transaction involving an Award, and to take such other action as the Committee may deem advisable to enable the Company, the Affiliates and Participants to satisfy the payment of withholding taxes and other tax obligations relating to any Award in such amounts as may be determined by the Committee. The Committee shall determine, in its sole discretion, the form of payment acceptable for such tax

withholding obligations, including the delivery of cash or cash equivalents, Stock (including through delivery of previously owned shares, net settlement, a broker-assisted sale, or other cashless withholding or reduction of the amount of shares otherwise issuable or delivered pursuant to the Award), other property, or any other legal consideration the Committee deems appropriate. Any determination made by the Committee to allow a Participant who is subject to Rule 16b-3 to pay taxes with shares of Stock through net settlement or previously owned shares shall be approved by either a committee made up of solely two or more Qualified Members or the full Board. If such tax withholding amounts are satisfied through net settlement or previously owned shares, the maximum number of shares of Stock that may be so withheld or surrendered shall be the number of shares of Stock that have an aggregate Fair Market Value on the date of withholding or surrender equal to the aggregate amount of such tax liabilities determined based on the greatest withholding rates for federal, state, foreign and/or local tax purposes, including payroll taxes, that may be utilized without creating adverse accounting treatment for the Company with respect to such Award, as determined by the Committee.

(b) Limitation on Rights Conferred under Plan. Neither the Plan nor any action taken hereunder shall be construed as (i) giving any Eligible Person or Participant the right to continue as an Eligible Person or Participant or in the employ or service of the Company or any Affiliate, (ii) interfering in any way with the right of the Company or any Affiliate to terminate any Eligible Person's or Participant's employment or service relationship at any time, (iii) giving an Eligible Person or Participant any claim to be granted any Award under the Plan or to be treated uniformly with other Participants and/or employees and/or other service providers, or (iv) conferring on a Participant any of the rights of a stockholder of the Company unless and until the Participant is duly issued or transferred shares of Stock in accordance with the terms of an Award.

(c) Governing Law; Submission to Jurisdiction. All questions arising with respect to the provisions of the Plan and Awards shall be determined by application of the laws of the State of Delaware, without giving effect to any conflict of law provisions thereof, except to the extent Delaware law is preempted by federal law. The obligation of the Company to sell and deliver Stock hereunder is subject to applicable federal and state laws and to the approval of any governmental authority required in connection with the authorization, issuance, sale, or delivery of such Stock. With respect to any claim or dispute related to or arising under the Plan, the Company and each Participant who accepts an Award hereby consent to the exclusive jurisdiction, forum and venue of the state and federal courts located in Delaware.

(d) Severability and Reformation. If any provision of the Plan or any Award is or becomes or is deemed to be invalid, illegal, or unenforceable in any jurisdiction or as to any person or Award, or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to the applicable law or, if it cannot be construed or deemed amended without, in the determination of the Committee, materially altering the intent of the Plan or the Award, such provision shall be stricken as to such jurisdiction, person or Award and the remainder of the Plan and any such Award shall remain in full force and effect. If any of the terms or provisions of the Plan or any Award Agreement conflict with the requirements of Rule 16b-3 (as those terms or provisions are applied to Eligible Persons who are subject to Section 16 of the Exchange Act) or Section 422 of the Code (with respect to ISOs), then those conflicting terms or provisions shall be deemed inoperative to

the extent they so conflict with the requirements of Rule 16b-3 (unless the Board or the Committee, as appropriate, has expressly determined that the Plan or such Award should not comply with Rule 16b-3) or Section 422 of the Code, in each case, only to the extent Rule 16b-3 and such sections of the Code are applicable. With respect to ISOs, if the Plan does not contain any provision required to be included herein under Section 422 of the Code, that provision shall be deemed to be incorporated herein with the same force and effect as if that provision had been set out at length herein; provided, further, that, to the extent any Option that is intended to qualify as an ISO cannot so qualify, that Option (to that extent) shall be deemed a Nonstatutory Option for all purposes of the Plan.

(e) Unfunded Status of Awards; No Trust or Fund Created. The Plan is intended to constitute an "unfunded" plan for certain incentive awards. Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Company or any Affiliate and a Participant or any other person. To the extent that any person acquires a right to receive payments from the Company or any Affiliate pursuant to an Award, such right shall be no greater than the right of any general unsecured creditor of the Company or such Affiliate.

(f) Nonexclusivity of the Plan. Neither the adoption of the Plan by the Board nor its submission to the stockholders of the Company for approval shall be construed as creating any limitations on the power of the Board or a committee thereof to adopt such other incentive arrangements as it may deem desirable. Nothing contained in the Plan shall be construed to prevent the Company or any Affiliate from taking any corporate action which is deemed by the Company or such Affiliate to be appropriate or in its best interest, whether or not such action would have an adverse effect on the Plan or any Award made under the Plan. No employee, beneficiary or other person shall have any claim against the Company or any Affiliate as a result of any such action.

(g) Fractional Shares. No fractional shares of Stock shall be issued or delivered pursuant to the Plan or any Award, and the Committee shall determine in its sole discretion whether cash, other securities, or other property shall be paid or transferred in lieu of any fractional shares of Stock or whether such fractional shares of Stock or any rights thereto shall be cancelled, terminated, or otherwise eliminated with or without consideration.

(h) Interpretation. Headings are given to the Sections and subsections of the Plan solely as a convenience to facilitate reference. Such headings shall not be deemed in any way material or relevant to the construction or interpretation of the Plan or any provision thereof. Words in the masculine gender shall include the feminine gender, and, where appropriate, the plural shall include the singular and the singular shall include the plural. In the event of any conflict between the terms and conditions of an Award Agreement and the Plan, the provisions of the Plan shall control. The use herein of the word "including" following any general statement, term or matter shall not be construed to limit such statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation", "but not limited to", or words of similar import) is used with reference thereto, but rather shall be deemed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such general statement, term or matter. References herein to any agreement, instrument or other document means such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and not prohibited by the Plan.

(i) Facility of Payment. Any amounts payable hereunder to any individual under legal disability or who, in the judgment of the Committee, is unable to manage properly his financial affairs, may be paid to the legal representative of such individual, or may be applied for the benefit of such individual in any manner that the Committee may select, and the Company shall be relieved of any further liability for payment of such amounts.

(j) Conditions to Delivery of Stock. Nothing herein or in any Award Agreement shall require the Company to issue any shares with respect to any Award if that issuance would, in the opinion of counsel for the Company, constitute a violation of the Securities Act, any other applicable statute or regulation, or the rules of any applicable securities exchange or securities association, as then in effect. In addition, each Participant who receives an Award under the Plan shall not sell or otherwise dispose of Stock that is acquired upon grant, exercise or vesting of an Award in any manner that would constitute a violation of any applicable federal or state securities laws, the Plan or the rules, regulations or other requirements of the SEC or any stock exchange upon which the Stock is then listed. At the time of any exercise of an Option or SAR, or at the time of any grant of any other Award, the Company may, as a condition precedent to the exercise of such Option or SAR or settlement of any other Award, require from the Participant (or in the event of his or her death, his or her legal representatives, heirs, legatees, or distributees) such written representations, if any, concerning the holder's intentions with regard to the retention or disposition of the shares of Stock being acquired pursuant to the Award and such written covenants and agreements, if any, as to the manner of disposal of such shares as, in the opinion of counsel to the Company, may be necessary to ensure that any disposition by that holder (or in the event of the holder's death, his or her legal representatives, heirs, legatees, or distributees) will not involve a violation of the Securities Act, any other applicable state or federal statute or regulation, or any rule of any applicable securities exchange or securities association, as then in effect. Stock or other securities shall not be delivered pursuant to any Award until payment in full of any amount required to be paid pursuant to the Plan or the applicable Award Agreement (including any Exercise Price, grant price, or tax withholding) is received by the Company.

(k) Section 409A of the Code. It is the general intention, but not the obligation, of the Committee to design Awards to comply with or to be exempt from the Nonqualified Deferred Compensation Rules, and Awards will be operated and construed accordingly. Neither this Section 9(k) nor any other provision of the Plan is or contains a representation to any Participant regarding the tax consequences of the grant, vesting, exercise, settlement, or sale of any Award (or the Stock underlying such Award) granted hereunder, and should not be interpreted as such. In no event shall the Company be liable for all or any portion of any taxes, penalties, interest or other expenses that may be incurred by the Participant on account of non-compliance with the Nonqualified Deferred Compensation Rules. Notwithstanding any provision in the Plan or an Award Agreement to the contrary, in the event that a "specified employee" (as defined under the Nonqualified Deferred Compensation Rules) becomes entitled to a payment under an Award that would be subject to additional taxes and interest under the Nonqualified Deferred Compensation Rules if the Participant's receipt of such payment or benefits is not delayed until the earlier of (i) the date of the Participant's death, or (ii) the date that is six months after the Participant's "separation from service," as defined under the Nonqualified Deferred Compensation

Rules (such date, the "***Section 409A Payment Date***"), then such payment or benefit shall not be provided to the Participant until the Section 409A Payment Date. Any amounts subject to the preceding sentence that would otherwise be payable prior to the Section 409A Payment Date will be aggregated and paid in a lump sum without interest on the Section 409A Payment Date. The applicable provisions of the Nonqualified Deferred Compensation Rules are hereby incorporated by reference and shall control over any Plan or Award Agreement provision in conflict therewith.

(l) Clawback. The Plan and all Awards granted hereunder are subject to any written clawback policies that the Company, with the approval of the Board or an authorized committee thereof, may adopt either prior to or following the Effective Date, including any policy adopted to conform to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and rules promulgated thereunder by the SEC and that the Company determines should apply to Awards. Any such policy may subject a Participant's Awards and amounts paid or realized with respect to Awards to reduction, cancelation, forfeiture or recoupment if certain specified events or wrongful conduct occur, including an accounting restatement due to the Company's material noncompliance with financial reporting regulations or other events or wrongful conduct specified in any such clawback policy.

(m) Status under ERISA. The Plan shall not constitute an "employee benefit plan" for purposes of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended.

(n) Plan Effective Date and Term. The Plan was adopted by the Board to be effective on the Effective Date. No Awards may be granted under the Plan on and after the tenth anniversary of the Effective Date, which is [•]. However, any Award granted prior to such termination (or any earlier termination pursuant to Section 10), and the authority of the Board or Committee to amend, alter, adjust, suspend, discontinue, or terminate any such Award or to waive any conditions or rights under such Award in accordance with the terms of the Plan, shall extend beyond such termination until the final disposition of such Award.

10. **Amendments to the Plan and Awards.** The Committee may amend, alter, suspend, discontinue or terminate any Award or Award Agreement, the Plan or the Committee's authority to grant Awards without the consent of stockholders or Participants, except that any amendment or alteration to the Plan, including any increase in any share limitation, shall be subject to the approval of the Company's stockholders not later than the annual meeting next following such Committee action if such stockholder approval is required by any federal or state law or regulation or the rules of any stock exchange or automated quotation system on which the Stock may then be listed or quoted, and the Committee may otherwise, in its discretion, determine to submit other changes to the Plan to stockholders for approval; provided, that, without the consent of an affected Participant, no such Committee action may materially and adversely affect the rights of such Participant under any previously granted and outstanding Award. For purposes of clarity, any adjustments made to Awards pursuant to Section 8 will be deemed not to materially and adversely affect the rights of any Participant under any previously granted and outstanding Award and therefore may be made without the consent of affected Participants.

Exhibit 10.3

STOCKHOLDERS' AGREEMENT

This **STOCKHOLDERS' AGREEMENT** (this "***Agreement***"), dated as of [•], 2023, is entered into by and among Atlas Energy Solutions Inc., a Delaware corporation (the "***Company***"), and the Principal Stockholders (as defined herein).

WHEREAS, the Certificate of Incorporation and Bylaws of the Company have been amended and restated in connection with the Company's initial public offering (the "***IPO***") of shares of Class A Common Stock, par value $0.01 per share (the "***Class A Common Stock***"), by the Company (as amended and restated from time to time, the "***Certificate of Incorporation***" and "***Bylaws***," respectively);

WHEREAS, as of the closing of the IPO, as a result of the transactions described under the heading "Corporate Reorganization" in the final prospectus related to the IPO, Atlas Sand Holdings, LLC, a Delaware limited liability company ("***Holdings***"), and Atlas Sand Holdings II, LLC, a Delaware limited liability company ("***Holdings II***" and, together with Holdings, the "***Holdings Entities***"), directly hold all of the shares of Common Stock subject to this Agreement and shall constitute the Principal Stockholders hereunder;

WHEREAS, following the completion of the IPO and in accordance with the terms of the limited liability company agreements governing each of the Holdings Entities, each of the Holdings Entities will effect a series of distributions of all of the shares of Common Stock they each hold to their direct and indirect unitholders (collectively, the "***Distributions***");

WHEREAS, upon the effective date of the Distributions, each of the Holdings Entities will cease to hold all of the shares of Common Stock subject to this Agreement and to constitute Principal Stockholders hereunder, and their respective unitholders listed as signatories hereto, shall henceforth constitute Principal Stockholders under this Agreement; and

WHEREAS, in connection with, and effective upon, the completion of the IPO, the Principal Stockholders and the Company have entered into this Agreement to set forth certain understandings among themselves.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

ARTICLE I
DEFINITIONS

Section 1.1 Certain Definitions. As used in this Agreement, the following terms shall have the following meanings:

"***Affiliate***" means, with respect to any specified Person, a Person that directly or indirectly Controls or is Controlled by, or is under common Control with, such specified Person; *provided* that, for purposes of this Agreement, none of the Principal Stockholders shall be deemed to be Affiliates of the Company and its Affiliates. For purposes of this Agreement, no party to this Agreement shall be deemed to be an Affiliate of another party to this Agreement solely by reason of the execution and delivery of this Agreement.

"***Beneficial Owner***" of a security is a Person who directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares (a) voting power, which includes the power to vote, or to direct the voting of, such security and/or (b) investment power, which includes the power to dispose of, or to direct the disposition of, such security. The terms "***Beneficially Own***" and "***Beneficial Ownership***" shall have correlative meanings. For the avoidance of doubt, for purposes of this Agreement, each Principal Stockholder is deemed to Beneficially Own the shares of Common Stock owned by it and no party hereto is deemed to Beneficially Own shares of Common Stock of another party hereto, notwithstanding the fact that such shares are subject to this Agreement.

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

"***Brigham Director***" means any such individual whom the Brigham Representative shall nominate or designate pursuant to Section 2.1 and who is thereafter appointed or elected to the Board to serve as a director.

"***Brigham Representative***" means Ben M. Brigham; *provided* that in accordance with Section 2.5 in the event of Ben M. Brigham's Disability, it shall mean (i) Anne Brigham; (ii) upon each of Ben M. Brigham's and Anne Brigham's Disability, it shall mean David Brigham; and (iii) upon each of Ben M. Brigham's, Anne Brigham's and David Brigham's Disability, it shall mean Vince Brigham.

"***Bylaws***" has the meaning given to such term in the recitals hereto.

"***Certificate of Incorporation***" has the meaning given to such term in the recitals hereto.

"***Class A Common Stock***" has the meaning given to such term in the recitals hereto.

"***Class B Common Stock***" means the Class B Common Stock, par value $0.01 per share, of the Company.

"***Common Stock***" means the Class A Common Stock and the Class B Common Stock, considered as a single class.

"***Control***" (including the terms "***Controls***," "***Controlled by***" and "***under common Control with***") means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

"***Disability***" means the Brigham Representative's inability to (a) act prudently with respect to matters concerning the corporate governance of the Company, including in the exercise of the Brigham Representative's approval and designation rights under this Agreement, and (b) engage reasonably in discussions with other Principal Stockholders regarding the composition of the Board or any proposed action subject to the Brigham Representative's approval under Section 2.4, in each case, as a result of a mental or physical impairment that is continuing, or can reasonably

be expected to continue, for (i) 90 consecutive days or (ii) any 180 days, whether or not consecutive (or for any longer period as may be required by applicable law), in any 12-month period. A determination of whether a Disability exists shall be made following the delivery of a written notice by any Principal Stockholder to the other parties hereto and the Board including a statement that such Principal Stockholder in good faith believes that a question exists as to whether the Brigham Representative has a Disability and a request that a determination be made thereon, by mutual agreement of (A) an independent physician selected by the Brigham Representative (or a personal representative designated by the Brigham Representative) and (B) an independent physician selected by a majority of the directors then serving on Board that qualify as "independent" for purposes of the Exchange Act and rules and regulations of the principal exchange on which the Common Stock is then listed; provided, however, that, if the opinion of the Brigham Representative's physician and the Board's physician conflict, such physicians shall together agree upon and select a third independent physician, whose opinion shall be binding. In the event a question arises as to whether the Brigham Representative has a Disability, the Brigham Representative shall reasonably cooperate in all respects with the other Principal Stockholders and the Board in order to facilitate a determination thereon for purposes of this Agreement, including (x) submitting to examinations by any medical doctors or other health care specialists, (y) authorizing the disclosure and release of all supporting medical records to any such medical doctors or other specialists and (z) authorizing any such medical doctors or other specialists to discuss matters concerning the Brigham Representative's physical and mental condition with the Board and the other Principal Stockholders.

"***Distributions***" has the meaning given to such term in the recitals hereto.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

"***Holdings***" has the meaning given to such term in the recitals hereto.

"***Holdings II***" has the meaning given to such term in the recitals hereto.

"***Holdings Entities***" has the meaning given to such term in the recitals hereto.

"***IPO***" has the meaning given to such term in the recitals hereto.

"***Necessary Action***" means, with respect to a specified result, all actions (to the extent such actions are permitted by applicable law and within such party's control) necessary to cause such result, including (i) voting or providing a written consent or proxy with respect to shares of Common Stock, (ii) causing the adoption of stockholders' resolutions and amendments to the organizational documents of the Company, (iii) executing agreements and instruments and (iv) making, or causing to be made, with governmental, administrative or regulatory authorities, all filings, registrations or similar actions that are required to achieve such result.

"***Person***" means any individual, corporation, firm, partnership, joint venture, limited liability company, estate, trust, business association, organization, any court, administrative agency, regulatory body, commission or other governmental authority, board, bureau or instrumentality, domestic or foreign and any subdivision thereof or other entity, and also includes any managed investment account.

"***Principal Stockholder***" means (i) prior to the effective date of the Distributions, the Holdings Entities, and (ii) following the effective date of the Distributions, any of the stockholders identified on the signature pages hereto or any other Persons signatory hereto from time to time, including in accordance with Section 4.9 hereof (other than the Holdings Entities).

"***Transfer***" means, directly or indirectly (whether by merger, operation of law or otherwise), to sell, transfer, assign, pledge, hypothecate or otherwise dispose of or encumber any direct or indirect economic, voting or other rights in or to any Common Stock, including by means of (i) the Transfer of an interest in a Person that directly or indirectly holds such Common Stock or (ii) a hedge, swap or other derivative. "***Transferred***" and "***Transferring***" shall have correlative meanings.

Section 1.2 Rules of Construction.

(a) Unless the context requires otherwise: (i) any pronoun used in this Agreement shall include the corresponding masculine, feminine or neuter forms; (ii) references to Articles and Sections refer to articles and sections of this Agreement; (iii) the terms "include," "includes," "including" and words of like import shall be deemed to be followed by the words "without limitation"; (iv) the terms "hereof," "hereto," "herein" or "hereunder" refer to this Agreement as a whole and not to any particular provision of this Agreement; (v) unless the context otherwise requires, the term "or" is not exclusive and shall have the inclusive meaning of "and/or"; (vi) defined terms herein will apply equally to both the singular and plural forms and derivative forms of defined terms will have correlative meanings; (vii) references to any law or statute shall include all rules and regulations promulgated thereunder, and references to any law or statute shall be construed as including any legal and statutory provisions consolidating, amending, succeeding or replacing the applicable law or statute; (viii) references to any Person include such Person's successors and permitted assigns; and (ix) references to "days" are to calendar days unless otherwise indicated.

(b) The headings in this Agreement are for convenience and identification only and are not intended to describe, interpret, define or limit the scope, extent or intent of this Agreement or any provision thereof.

(c) This Agreement shall be construed without regard to any presumption or other rule requiring construction against the party that drafted or caused this Agreement to be drafted

ARTICLE II
GOVERNANCE MATTERS

Section 2.1 Designees.

(a) Brigham Designees.

(i) Following the closing of the IPO and for so long as the Principal Stockholders and any Affiliates of the Principal Stockholders collectively Beneficially Own greater than 50% of the outstanding shares of Common Stock, the Brigham Representative shall have the right, but not the obligation, to determine the size of the Board and designate all members of the Board, including the right to designate such number of individuals to be included in the slate of directors to be nominated by the Board for election by the stockholders of the Company.

(ii) Following the closing of the IPO and after the Principal Stockholders and any Affiliates of the Principal Stockholders collectively no longer Beneficially Own greater than 50% of the outstanding shares of Common Stock, the Brigham Representative shall have the right, but not the obligation, to designate the following number of members of the Board, including the right to designate such number of individuals to be included in the slate of directors to be nominated by the Board for election by the stockholders of the Company such that, after such election, the Board will include the number of directors set forth below:

(A) four (4) directors, so long as the Principal Stockholders and any Affiliates of the Principal Stockholders collectively Beneficially Own at least 35% of the outstanding shares of Common Stock;

(B) three (3) directors, so long as the Principal Stockholders and any Affiliates of the Principal Stockholders collectively Beneficially Own at least 25% but no greater than 35% of the outstanding shares of Common Stock;

(C) two (2) directors, so long as the Principal Stockholders and any Affiliates of the Principal Stockholders collectively Beneficially Own at least 10% but no greater than 25% of the outstanding shares of Common Stock; and

(D) one (1) director, so long as the Principal Stockholders and any Affiliates of the Principal Stockholders collectively Beneficially Own at least 5% but no greater than 10% of the outstanding shares of Common Stock. If the Principal Stockholders and any Affiliates of the Principal Stockholders collectively Beneficially Own less than 5% of the outstanding shares of Common Stock, the Brigham Representative shall not have any right pursuant to this Agreement to designate any individuals to the Board.

(iii) Notwithstanding anything in Section 2.1(a)(ii) to the contrary, if the authorized size of the Board is increased or decreased at any time to constitute other than nine (9) directors, the number of directors that the Brigham Representative is entitled to designate to the Board pursuant to Section 2.1(a)(ii) shall be proportionately increased or decreased, respectively, rounded to the nearest whole number. In the event that the Company's Certificate of Incorporation provides for a classified Board, then proper provision shall be made such that the individuals designated to the Board by the Brigham Representative are distributed as evenly as possible among the classes of directors.

(iv) The Company agrees, to the fullest extent permitted by applicable law, to take all Necessary Action to effectuate the above, and not to take any action that would be reasonably expected to result in any of the above not becoming effectuated, including by: (A) including the persons designated pursuant to this Section 2.1 in the slate of nominees recommended by the Board for election at any meeting of stockholders called for the purpose of electing directors; (B) nominating and recommending each such individual to be elected as a director as provided herein; (C) soliciting proxies or consents in favor thereof; (D) filling vacancies of the Board with individuals designated by the Brigham Representative; (E) if necessary,

expanding the size of the Board and filling any resulting vacancies with individuals designated by the Brigham Representative; and (F) causing any director resignation or similar policy of the Company to not be applicable to the Brigham Directors. The Company is entitled to identify each such individual nominated pursuant to this Section 2.1(a) as a Brigham Director pursuant to this Agreement. In order to facilitate the Company's performance of its obligations under this Section 2.1(a)(iv), the Brigham Representative agrees to provide to the Company, as reasonably requested by the Company, such information about any applicable designees of the Brigham Representative to ensure compliance with the Exchange Act, and other applicable securities laws and to enable the Board to make any determinations as to whether such designee is independent under the Exchange Act or other applicable securities laws or under the rules of the principal exchange on which the Common Stock is then listed.

(b) In the event that the Brigham Representative has designated to the Board fewer than the total number of individuals it is entitled to designate pursuant to Section 2.1(a), the Brigham Representative shall have the right, at any time, to designate such additional individuals to which it is entitled, in which case the Company and the directors shall take all Necessary Action, to the fullest extent permitted by applicable law, to (i) enable the Brigham Representative to designate and effect the election or appointment of such additional individuals, whether by increasing the size of the Board or otherwise, and (ii) designate each such additional individual nominated by the Brigham Representative to fill such newly-created vacancies or to fill any other existing vacancies.

(c) So long as the Brigham Representative is entitled to designate one or more nominees pursuant toSection 2.1(a), the Brigham Representative shall have the right to request the removal of any Brigham Director (with or without cause) designated by it, from time to time and at any time, from the Board, exercisable upon written notice to the Company, and the Company and the Principal Stockholders shall, and the Principal Stockholders shall cause any of their Affiliates to, take all Necessary Action to cause such removal.

(d) For so long as the Brigham Representative is entitled to designate any members of the Board pursuant toSection 2.1(a), the Company shall take all Necessary Action to cause each of the Audit Committee, Compensation Committee and the Nominating and Governance Committee of the Board to include in its membership at least one Brigham Director, except to the extent that such membership would violate applicable securities laws or stock exchange or stock market rules.

(e) Nothing in this Section 2.1 shall be deemed to require that any party hereto, or any Affiliate thereof, act or be in violation of any applicable provision of law, regulation, legal duty or requirement or stock exchange or stock market rule of any national securities exchange upon which the Class A Common Stock is admitted for trading.

(f) Vacancies. If a vacancy is created on the Board at any time by the death, disability, resignation or removal (whether by the Brigham Representative or otherwise in accordance with this Agreement or the Company's Certificate of Incorporation and Bylaws) of a Brigham Director, then the Brigham Representative shall be entitled to designate an individual to fill the vacancy so long as the total number of persons that will serve on the Board as Brigham Directors designated by the Brigham Representative immediately following the filling of such

vacancy will not exceed the total number of persons the Brigham Representative is entitled to designate pursuant to Section 2.1(a) on the date of such replacement designation. The Company and the Principal Stockholders shall, and the Principal Stockholders shall cause any of their Affiliates to, take all Necessary Action to cause such replacement Brigham Director to become a member of the Board pursuant to this Section 2.1(f).

(g) Compensation; Indemnification. Each Brigham Director shall be entitled to the same reimbursement, advancement, exculpation and indemnification in connection with his or her role as a director as the other members of the Board, as well as reimbursement for documented, reasonable, out-of-pocket expenses incurred in attending meetings of the Board or any committee of the Board of which such Brigham Director is a member, if any, in each case to the same extent as the other members of the Board. Each Brigham Director who is not an employee of the Company shall be also entitled to any retainer, equity compensation or other fees or compensation paid to the non-employee directors of the Company for their services as a director, including any service on any committee of the Board.

Section 2.2 Principal Stockholders' Agreement to Vote. From and after the date hereof, each Principal Stockholder shall, and each Principal Stockholder shall cause each of its Affiliates to:

(a) cause its respective shares of Common Stock to be present for quorum purposes at any meeting of stockholders of the Company at which directors shall be elected (or any action by stockholder consent to elect directors in lieu of a stockholder meeting); and

(b) cause its respective shares of Common Stock to be voted in favor of the election of each Brigham Director designated and nominated for election at such meeting in accordance with this Agreement (or any action by stockholder consent to elect directors in lieu of a stockholder meeting).

Section 2.3 Restrictions on Other Agreements. No Principal Stockholder shall, or permit any of its Affiliates to, directly or indirectly, grant any proxy or enter into or agree to be bound by any voting trust, agreement or arrangement of any kind with respect to its shares of Common Stock if and to the extent the terms thereof conflict with the provisions of this Agreement (whether or not such proxy, voting trust, agreement or agreements are with other Principal Stockholders, Affiliates of any Principal Stockholders or holders of shares of Common Stock that are not parties to this Agreement or otherwise).

Section 2.4 Certain Actions. So long as the Principal Stockholders or any Affiliates of the Principal Stockholders collectively Beneficially Own at least a majority of the outstanding shares of Common Stock, without the approval of the Brigham Representative, the Company shall not, and shall cause each of the Company's subsidiaries not to:

(a) adopt or propose any amendment, modification or restatement of or supplement to the Company's Certificate of Incorporation;

(b) adopt or propose any amendment, modification or restatement of or supplement to the Company's Bylaws;

(c) change the size of the Board, except as required by applicable law or pursuant to the terms of this Agreement, or upon the death, resignation, retirement, disqualification or removal from office of a member of the Board; or

(d) issue any class or series of equity securities of the Company, the terms of which expressly provide that such class or series will rank senior to the Common Stock as to voting rights, dividend rights or distribution rights upon the liquidation, winding up or dissolution of the Company.

Section 2.5 The Brigham Representative Succession. The Brigham Representative's designation rights described in Section 2.1 and the approval rights over certain Company actions described in Section 2.4 shall succeed as follows: (i) in the event of Ben M. Brigham's Disability, to Anne Brigham; (ii) upon each of Ben M. Brigham's and Anne Brigham's Disability, to David Brigham; (iii) upon each of Ben M. Brigham's, Anne Brigham's and David Brigham's Disability, to Vince Brigham; and (iv) upon each of Ben M. Brigham's, Anne Brigham's, David Brigham's and Vince Brigham's Disability, this Agreement shall terminate.

ARTICLE III
TERMINATION

Section 3.1 Termination. This Agreement shall irrevocably terminate with respect to (a) any Principal Stockholder at such time as such Principal Stockholder and its Affiliates no longer Beneficially Owns any shares of Common Stock, (b) all parties to this Agreement at such time as the Brigham Representative is no longer entitled to designate a nominee to the Board pursuant to Section 2.1(a) and (c) in accordance with Section 2.5. Upon a termination of this Agreement in respect of any Principal Stockholder, there shall be no continuing liability or obligation on the part of any Person that constitutes such Principal Stockholder or any other party in respect of such Principal Stockholder following such termination; *provided, however*, that the termination of this Agreement in respect of any Principal Stockholder shall not prevent any party from seeking any remedies (at law or in equity) against any other party for such party's breach of any terms of this Agreement occurring prior to such termination. Notwithstanding the foregoing, the Brigham Representative shall have the unilateral right to terminate this Agreement or waive any rights under this Agreement relating to the appointment of one or members of the Board or the consent over certain actions of the Company by written instrument duly executed by the Brigham Representative.

ARTICLE IV
MISCELLANEOUS

Section 4.1 Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be personally delivered, sent by nationally recognized overnight courier, mailed by registered or certified mail or be sent by facsimile or electronic mail to such party at the address set forth below or appearing on the signature pages hereto (or such other address as shall be specified by like notice). Notices will be deemed to have been duly given hereunder if (a) personally delivered, when received, (b) sent by nationally recognized overnight courier, one business day after deposit with the nationally recognized overnight courier, (c) mailed by registered or certified mail, five business days after the date on which it is so mailed, and (d) sent by facsimile or electronic mail, on the date sent so long as such communication is transmitted before 5:00 p.m. in the time zone of the receiving party on a business day, otherwise, on the next business day.

If to the Company, to:

Atlas Energy Solutions Inc.
5918 W. Courtyard Drive, Suite 500
Austin, Texas 78730
Attention: Dathan Voelter
E-mail: dvoelter@atlassand.com

Section 4.2 Severability. The provisions of this Agreement shall be deemed severable, and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application thereof to any Person or any circumstance, is found to be invalid or unenforceable in any jurisdiction, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

Section 4.3 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which, taken together, shall be considered one and the same agreement.

Section 4.4 Entire Agreement; No Third Party Beneficiaries. This Agreement (a) constitutes the entire agreement and supersedes all other prior agreements, both written and oral, among the parties with respect to the subject matter hereof and (b) is not intended to confer upon any Person, other than the parties, any rights or remedies hereunder.

Section 4.5 Further Assurances. Each party shall execute, deliver, acknowledge and file such other documents and take such further actions as may be reasonably requested from time to time by the other parties to give effect to and carry out the transactions contemplated herein.

Section 4.6 Governing Law; Equitable Remedies. THIS AGREEMENT AND ANY CLAIMS AND CAUSES OF ACTION HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF DELAWARE (WITHOUT GIVING EFFECT TO CONFLICT OF LAWS PRINCIPLES THEREOF). The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with its specific terms or was otherwise breached. It is accordingly agreed that the parties hereto shall be entitled to an injunction or injunctions and other equitable remedies to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any of the Selected Courts (as defined below), this being in addition to any other remedy to which they are entitled at law or in equity. Any requirements for the securing or posting of any bond with respect to such remedy are hereby waived by each of the parties hereto. Each party hereto further agrees that, in the event of any action for an injunction or other equitable remedy in respect of such breach or enforcement of specific performance, it will not assert the defense that a remedy at law would be adequate.

Section 4.7 Consent to Jurisdiction. With respect to any suit, action or proceeding ("***Proceeding***") arising out of or relating to this Agreement, each of the parties hereto hereby irrevocably (a) submits to the exclusive jurisdiction of the Court of Chancery of the State of Delaware and the United States District Court for the District of Delaware and the appellate courts therefrom (the "***Selected Courts***") and waives any objection to venue being laid in the Selected Courts whether based on the grounds of forum non conveniens or otherwise and hereby agrees not to commence any such Proceeding other than before one of the Selected Courts; *provided*, *however*, that a party may commence any Proceeding in a court other than a Selected Court solely for the purpose of enforcing an order or judgment issued by one of the Selected Courts; (b) consents, to the fullest extent permitted by law, to service of process in any Proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, or by recognized international express carrier or delivery service, to their respective addresses referred to in Section 4.1 hereof; *provided*, *however*, that nothing herein shall affect the right of any party hereto to serve process in any other manner permitted by law; and (c) TO THE EXTENT NOT PROHIBITED BY APPLICABLE LAW THAT CANNOT BE WAIVED, WAIVES, AND COVENANTS THAT IT WILL NOT ASSERT (WHETHER AS PLAINTIFF, DEFENDANT OR OTHERWISE) ANY RIGHT TO TRIAL BY JURY IN ANY ACTION ARISING IN WHOLE OR IN PART UNDER OR IN CONNECTION WITH THIS AGREEMENT, WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE, AND AGREES THAT ANY OF THEM MAY FILE A COPY OF THIS PARAGRAPH WITH ANY COURT AS WRITTEN EVIDENCE OF THE KNOWING, VOLUNTARY AND BARGAINED-FOR AGREEMENT AMONG THE PARTIES IRREVOCABLY TO WAIVE THE RIGHT TO TRIAL BY JURY IN ANY PROCEEDING WHATSOEVER BETWEEN THEM RELATING TO THIS AGREEMENT AND TO HAVE ALL MATTERS RELATING TO THIS AGREEMENT BE TRIED IN A COURT OF COMPETENT JURISDICTION BY A JUDGE SITTING WITHOUT A JURY.

Section 4.8 Amendments; Waivers.

(a) No provision of this Agreement may be amended, modified or supplemented without a written instrument duly executed by the Company, the Brigham Representative and each of the Principal Stockholders; provided that any such amendment, modification or supplement that only affects the rights or obligations of a particular party shall only require the consent of such affected party, the Company and the Brigham Representative.

(b) No failure or delay by any party in exercising any right, power or privilege hereunder shall operate as waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by law.

Section 4.9 Assignment; Restrictions on Transferability; Affiliate Joinder.

(a) Neither this Agreement nor any of the rights, restrictions or obligations hereunder shall be assigned by any of the Parties.

(b) No Principal Stockholder shall Transfer any shares of Common Stock to any of its Affiliates, or to any Person for estate planning purposes, unless such transferee has executed a joinder to this Agreement, in a form reasonably acceptable to the Brigham Representative and the Company, to become a party to this Agreement as a Principal Stockholder and, as such, become subject to the rights, restrictions and obligations applicable to Principal Stockholders for all purposes of this Agreement (a "***Principal Stockholder Joinder***"); *provided* that no such Transfer shall relieve the Principal Stockholders from any obligations under this Agreement. Any Transfer in violation of this Agreement shall be void *ab initio* and of no force or effect. Notwithstanding the foregoing, the Distributions shall not constitute a Transfer hereunder.

(c) In the event that any Affiliate of a Principal Stockholder acquires any shares of Common Stock not subject to this Agreement, if such Affiliate is not a party to this Agreement, such Principal Stockholder shall cause such Affiliate to promptly execute a Principal Stockholder Joinder.

Section 4.10 Information.

(a) Upon the request of the Company or the Brigham Representative, each Principal Stockholder shall use commercially reasonable efforts to promptly provide to the Company or the Brigham Representative, as applicable, the number of shares of Common Stock such Principal Stockholder Beneficially Owns in the aggregate and the number of shares of Common Stock Beneficially Owned by each Person constituting such Principal Stockholder.

(b) Upon the execution of any transaction by a Principal Stockholder or any Affiliates of a Principal Stockholder that results in an increase or decrease in the amount of shares of Common Stock Beneficially Owned by such Principal Stockholder or any Affiliates of such Principal Stockholder, such Principal Stockholder shall immediately notify the Company and the Brigham Representative of such transaction and include the number of shares of Common Stock such Principal Stockholder or any Affiliates of such Principal Stockholder Beneficially Owns in the aggregate and the number of shares of Common Stock Beneficially Owned by each Person constituting such Principal Stockholder or any Affiliates of such Principal Stockholder as a result of the transaction.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

COMPANY

ATLAS ENERGY SOLUTIONS INC.

By: _____
Name: [•]
Title: [•]

[*Signature Page to Stockholders' Agreement*]

PRINCIPAL STOCKHOLDERS:

Name: Ben M. Brigham

Address for Notice:

[•]

By:
Name:
Title:

Address for Notice:

[•]

Acknowledge & Agreed:

BRIGHAM REPRESENTATIVE:

Name: Ben M. Brigham
Address for Notice:
[•]

Name: Anne Brigham
Address for Notice:
[•]

Name: David Brigham
Address for Notice:
[•]

Name: Vince Brigham
Address for Notice:
[•]

Exhibit 10.5

LOAN, SECURITY AND GUARANTY AGREEMENT

Dated as of February 22, 2023

ATLAS SAND COMPANY, LLC,
as a Borrower,

AND CERTAIN OF ITS SUBSIDIARIES,
as Guarantors,

BANK OF AMERICA, N.A.,
as Agent

and

BANK OF AMERICA, N.A.,
as Sole Lead Arranger and Sole Bookrunner

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LIST OF EXHIBITS AND SCHEDULES

LOAN, SECURITY AND GUARANTY AGREEMENT

THIS LOAN, SECURITY AND GUARANTY AGREEMENT is dated as of February 22, 2023 (as amended, modified or supplemented from time to time, this "Agreement"), among **ATLAS SAND COMPANY, LLC**, a Delaware limited liability company (the "Company" and a "Borrower", and together with any Restricted Subsidiary of the Company that becomes party to this Agreement as an additional Borrower after the date hereof, collectively, "Borrowers"), and certain of their Subsidiaries, as Guarantors, the financial institutions party to this Agreement from time to time as Lenders, and **BANK OF AMERICA, N.A.,** a national banking association ("Bank of America"), as agent for the Lenders (in such capacity, "Agent").

R E C I T A L S:

Borrowers have requested that Lenders provide a credit facility to Borrowers to finance their mutual and collective business enterprise. Lenders are willing to provide the credit facility on the terms and conditions set forth in this Agreement.

NOW, **THEREFORE**, for valuable consideration hereby acknowledged, the parties agree as follows:

Section 1. DEFINITIONS; RULES OF CONSTRUCTION.

1.1 Definitions. As used herein, the following terms have the meanings set forth below:

ABL Priority Collateral: as defined in the Intercreditor Agreement.

Accounts Formula Amount: the sum of (a) 90% of the Value of Eligible Accounts and (b) the lesser of (i) 80% of the Value of Eligible Unbilled Accounts and (ii) 15% of the Borrowing Base.

Acquisition: a transaction or series of transactions resulting in (a) the acquisition of (i) a business, division or substantially all assets of a Person or (ii) record or beneficial ownership of 50% or more of the Equity Interests of a Person or (b) the merger, consolidation or combination of an Obligor or Restricted Subsidiary with another Person.

Affected Financial Institution: any EEA Financial Institution or UK Financial Institution.

Affiliate: with respect to a specified Person, any other Person that directly, or indirectly through intermediaries, Controls, is Controlled by or is under common Control with the specified Person. Without limitation to the foregoing, any Person that directly or indirectly holds 10% or more of the Equity Interests of another Person shall be deemed to be an Affiliate of that Person for purposes of this Agreement.

Agent: as defined in the introductory paragraph hereof.

Agent Indemnitees: Agent and its officers, directors, employees, Affiliates and Agent Professionals.

Agent Professionals: attorneys, accountants, appraisers, auditors, advisors, consultants, agents, service providers, business valuation experts, environmental engineers or consultants, turnaround consultants, and other professionals, experts and representatives retained or used by Agent.

Agreement: as defined in the introductory paragraph hereof.

Allocable Amount: as defined in **Section 5.10.3**.

Anti-Corruption Law: any law relating to bribery or corruption, including the U.S. Foreign Corrupt Practices Act of 1977, UK Bribery Act 2010 and Patriot Act.

Anti-Terrorism Law: any law relating to terrorism or money laundering, including the Patriot Act.

Applicable Law: all laws, rules, regulations and governmental guidelines applicable to the Person or matter in question, including statutory law, common law and equitable principles, as well as provisions of constitutions, treaties, statutes, rules, regulations, orders and decrees of Governmental Authorities.

Applicable Margin: the margin set forth below, as determined by the average daily Availability as a percentage of the Borrowing Base for the last Fiscal Quarter:

Level	Average Daily Availability as a Percentage of the Borrowing Base	Base Rate Loans	Term SOFR Loans
I	> 67%	0.50%	1.50%
II	> 33% < 67%	0.75%	1.75%
III	< 33%	1.00%	2.00%

Until March 31, 2023, margins shall be determined as if Level I were applicable. Thereafter, margins shall be subject to increase or decrease by Agent on the first day of the calendar month following each Fiscal Quarter end. If Agent is unable to calculate average daily Availability for a Fiscal Quarter due to Borrowers' failure to deliver a Borrowing Base Report when required hereunder, then, at the option of Agent or Required Lenders, margins shall be determined as if Level III were applicable until the first day of the calendar month following its receipt.

Applicable Reporting Entity: (a) at any time prior to an IPO Event, the Company and (b) at any time from and after the occurrence of an IPO Event, the public Parent Entity of the Company; provided that the calculations of Consolidated Net Income, Consolidated Net Tangible Assets, the Consolidated Leverage Ratio, Consolidated Total Debt, Consolidated Total Net Debt, Consolidated Interest Expense, EBITDA, Fixed Charges, the Fixed Charge Coverage Ratio and any component of the foregoing shall only include amounts attributable to the Company and its Restricted Subsidiaries.

Applicable Trigger: the greater of $7,500,000 or 12.5% of the Borrowing Base.

Approved Fund: any entity owned or Controlled by a Lender or Affiliate of a Lender, if such entity is engaged in making or investing in commercial bank asset based revolving loans in its ordinary course of activities.

Assignment: an assignment agreement between a Lender and Eligible Assignee, in the form of **Exhibit A** or otherwise satisfactory to Agent.

Availability: the Borrowing Base minus Revolver Usage.

Availability Reserve: the sum (without duplication) of (a) the Inventory Reserve; (b) the Rent and Charges Reserve; (c) the Bank Product Reserve; (d) the aggregate amount of liabilities secured by Liens on Collateral that are senior to Agent's Liens (but imposition of any such reserve shall not waive an Event of Default arising therefrom); (e) the Dilution Reserve; (f) reserves for taxes; (g) royalty reserves; and (h) additional reserves in amounts and with respect to matters as Agent may establish from time to time in its Permitted Discretion upon, so long as no Event of Default is continuing, two (2) Business Days' prior written notice (which may be by email) to Borrower Agent (which notice shall include a reasonably detailed description of such reserve being established). During such two (2) Business Day period, (i) Agent shall, if requested by Borrower Agent, discuss any such reserve or change with Borrower Agent and Borrower Agent may take such action as may be required so that the event, condition or matter that is the basis for such reserve or change no longer exists or exists in a manner that would result in the establishment of a lower reserve or result in a lesser change, in each case, in a manner and to the extent satisfactory to Agent in its Permitted Discretion and (ii) no Loan or Letter of Credit may be requested if an Overadvance would result therefrom assuming implementation of such reserve or change. Notwithstanding anything to the contrary herein, (x) the amount of any such reserve shall have a reasonable relationship to the event, condition or other matter that is the basis for such reserve, (y) no reserves shall be duplicative of reserves already accounted for through eligibility criteria, and (z) no notice shall be required for changes in the amount of existing reserves resulting solely from mathematical calculations.

Available Equity Amount: as of any date of determination, an amount equal to, without duplication, but only to the extent Not Otherwise Applied, the amount of any capital contributions or proceeds from issuances of Equity Interests, in each case, received in cash by the Company after the Closing Date (excluding any Pass-Through Equity Contribution) and either (a) substantially contemporaneously applied upon receipt as a usage of the Available Equity Amount or (b) deposited into and continuously maintained in a segregated Deposit Account until applied as a usage of the Available Equity Amount, but excluding, in each case, all proceeds from the issuance of Disqualified Equity Interests, proceeds from any IPO Event and Cure Amounts; provided that during a Trigger Period the Available Equity Amount shall not be available to be used.

Bail-In Action: the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

Bail-In Legislation: with respect to (a) any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule, or (b) the United Kingdom, Part I of the United Kingdom Banking Act 2009 and any other law applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

Bank of America: as defined in the introductory paragraph hereof.

Bank of America Indemnitees: Bank of America and its officers, directors, employees, Affiliates, agents, advisors, attorneys, consultants, service providers and other representatives.

Bank Product: any of the following products or services extended to an Obligor or Restricted Subsidiary of an Obligor by a Lender or any of its Affiliates: (a) Cash Management Services; (b) Swaps; (c) commercial credit card and merchant card services; and (d) other banking products or services, other than Letters of Credit.

Bank Product Reserve: the aggregate amount of reserves established by Agent from time to time in its Permitted Discretion with respect to Secured Bank Product Obligations.

Bankruptcy Code: Title 11 of the United States Code.

Base Rate: for any day, a per annum rate equal to the greater of (a) the Prime Rate for such day; (b) the Federal Funds Rate for such day, plus 0.50%; or (c) Term SOFR for a one month interest period as of such day, plus 1.0%; provided, that in no event shall the Base Rate be less than 1.0%.

Base Rate Loan: a Loan that bears interest based on the Base Rate.

Beneficial Ownership Certification: a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation, in form and substance satisfactory to Agent.

Beneficial Ownership Regulation: as defined in 31 C.F.R. §1010.230.

Benefit Plan: any (a) employee benefit plan (as defined in ERISA) subject to Title I of ERISA, (b) plan (as defined in and subject to Section 4975 of the Code), or (c) Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such employee benefit plan or plan.

Borrowed Money: with respect to any Obligor or Subsidiary, without duplication, (a) any obligation that (i) arises from the lending of money by any Person to such Obligor or Subsidiary, (ii) is evidenced by notes, loan agreements, drafts, bonds, debentures, credit documents or similar instruments, (iii) accrues interest or is a type upon which interest charges are customarily paid (excluding trade payables owing in the Ordinary Course of Business and not more than 90 days past due), or (iv) was issued or assumed as full or partial payment for Property or services; (b) Capital Leases; (c) non-contingent letter of credit reimbursement obligations; and (d) guaranties of any of the foregoing owing by another Person.

Borrower Agent: as defined in **Section 4.4**.

Borrower Materials: Borrowing Base Reports, Compliance Certificates, Notices of Borrowing, Notices of Conversion/Continuation, and other information, reports, financial statements and materials delivered by Obligors under the Loan Documents, as well as Reports and other information provided by Agent to Lenders in connection with the credit facility established by this Agreement.

Borrowers: as defined in the introductory paragraph hereof, together with any additional borrower joined following the Closing Date pursuant to **Section 10.1.9**.

Borrowing: Loans made or converted together on the same day, with the same interest option and, if applicable, Interest Period.

Borrowing Base: on any date of determination and based on the most recent Borrowing Base Report (as it may be adjusted hereunder), an amount equal to the lesser of (a) the aggregate Commitments; or (b) the sum of the Accounts Formula Amount, plus the Inventory Formula Amount, minus the Availability Reserve.

Borrowing Base Report: a report of the Borrowing Base, in form and substance reasonably satisfactory to Agent, by which Borrowers certify as to the calculation of the Borrowing Base.

Brigham Exploration: any of (a) Brigham Exploration Company, LLC, (b) BEXP I GP, LLC and/or (c) BEXP I, LP.

Brigham Family: collectively: (a) the lineal descendants by blood or adoption of Bud Brigham ("descendants"), and the spouses and surviving spouses of such descendants, (b) any estate, trust, guardianship, custodian or other fiduciary arrangement for the primary benefit of any one or more individuals described in clause (a) of this definition, and (c) any corporation, partnership, limited liability company or other business organization so long as (i) one or more individuals or entities described in clause (a) or (b) of this definition possess, directly or indirectly, the power to direct or cause the direction of the management and policies of such corporation, partnership, limited liability company or other business organization, and (ii) substantially all of the ownership, beneficial or other Equity Interests in such corporation, partnership, limited liability company or other business organization are owned, directly or indirectly, by one or more individuals or entities described in clause (a) or clause (b) of this definition (any such corporation, partnership, limited liability company or other business organization, the "Eligible Affiliates").

Business Day: any day except a Saturday, Sunday or other day on which commercial banks are authorized to close under the laws of, or are in fact closed in, North Carolina or New York City.

Capital Expenditures: for any period of determination, the sum of (a) the aggregate of all expenditures incurred by the Company and its Restricted Subsidiaries during such period for purchases of property, plant and equipment or similar items (other than repairs in the Ordinary Course of Business that are expensed as income statement items) which, in accordance with GAAP, are or should be included in the statement of cash flows of the Company and its Restricted Subsidiaries during such period, net of (b) proceeds received by the Company or its Restricted Subsidiaries from dispositions of property, plant and equipment or similar items reflected in the statement of cash flows of the Company and its Restricted Subsidiaries during such period; provided that the term "Capital Expenditures" shall not include:

(i) expenditures made in connection with the replacement, substitution, restoration or repair of assets to the extent financed from insurance proceeds or compensation or condemnation awards paid on account of a casualty or condemnation event,

(ii) the purchase price of equipment that is purchased simultaneously with thetrade-in of existing equipment to the extent that the gross amount of such purchase price is reduced by the credit granted by the seller of such equipment for the equipment being traded in at such time,

(iii) the purchase of property, plant or equipment to the extent financed with the proceeds of dispositions of assets outside the Ordinary Course of Business,

(iv) expenditures that constitute any part of consolidated lease expense to the extent relating to operating leases,

(v) any expenditures made as payments of the consideration for a Permitted Acquisition (or Investments similar to those made for a Permitted Acquisition and Permitted Parent Entity Investments), and

(vi) expenditures to the extent the Company or any of its Restricted Subsidiaries has received reimbursement in cash from a Person that is not an Affiliate of any of the Obligors and for which neither the Company nor any of its Restricted Subsidiaries has provided or is required to provide or incur, directly or indirectly, any consideration or obligation to such Person or any other Person.

Capital Lease: any financing lease or lease required to be capitalized for financial reporting purposes in accordance with GAAP, subject to **Section 1.2**.

Cash Collateral: cash delivered to Agent to Cash Collateralize any Obligations, and all interest, dividends, earnings and other proceeds relating thereto.

Cash Collateralize: the delivery of cash to Agent, as security for the payment of Obligations, in an amount equal to (a) 103% of LC Obligations, and (b) with respect to any inchoate, contingent or other Obligations (including fees, expenses, indemnification obligations and Secured Bank Product Obligations), Agent's good faith estimate of the amount due or to become due. "Cash Collateralization" has a correlative meaning.

Cash Equivalents: (a) marketable obligations issued or unconditionally guaranteed by, and backed by the full faith and credit of, the U.S. government, maturing within 12 months of the date of acquisition; (b) certificates of deposit, time deposits and bankers' acceptances maturing within 12 months of the date of acquisition, and overnight bank deposits, in each case which are issued by Bank of America or a commercial bank organized under the laws of the United States or any state or district thereof, rated A-1 (or better) by S&P or P-1 (or better) by Moody's at the time of acquisition, and (unless issued by a Lender) not subject to offset rights; (c) repurchase obligations with a term of not more than 30 days for underlying investments of the types described in clauses (a) and (b) entered into with any bank described in clause (b); (d) commercial paper issued by Bank of America or rated A-1 (or better) by S&P or P-1 (or better) by Moody's, and maturing within one year of the date of acquisition; and (e) shares of any money market fund that has not less than 90% of its assets invested continuously in the types of investments referred to above.

Cash Management Services: services relating to operating, collections, payroll, trust, or other depository or disbursement accounts, including automated clearinghouse, e-payable, electronic funds transfer, wire transfer, controlled disbursement, overdraft, depository, information reporting, blocked account, lockbox and stop payment services.

Casualty Event: means any loss, casualty or other insured damage to, or any nationalization, taking under power of eminent domain or by condemnation or similar proceeding of, any Property of any Obligor.

CERCLA: the Comprehensive Environmental Response Compensation and Liability Act (42 U.S.C. §9601 et seq.).

Change in Law: the occurrence, after the date hereof, of (a) the adoption, taking effect or phasing in of any law, rule, regulation or treaty; (b) any change in any law, rule, regulation or treaty or in the administration, interpretation or application thereof; or (c) the making, issuance or application of any request, guideline, requirement or directive (whether or not having the force of law) by any Governmental Authority; provided, that "Change in Law" shall include, regardless of the date enacted, adopted or issued, all requests, rules, guidelines, requirements or directives (i) under or relating to the Dodd-Frank Wall Street Reform and Consumer Protection Act, or (ii) promulgated pursuant to Basel III by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any similar authority) or any other Governmental Authority.

Change of Control: (a) at any time prior to the consummation of an IPO Event, (i) Bud Brigham and/or the Brigham Family shall cease to have the authority, directly or indirectly, to appoint a majority of the members of the board of managers of the Company or (ii) Bud Brigham and/or the Brigham Family shall cease to own, directly or indirectly, more than 50% of the Equity Interests of the Company held, directly or indirectly, by Bud Brigham and the Brigham Family in the Company as of the Closing Date; (b) at any time after the consummation of an IPO Event, any Person, entity or "group" (within the meaning of Section 13(d) or 14(d) of the Securities Exchange Act of 1934, as amended), that does not include Bud Brigham or the Brigham Family, shall at any time have acquired, beneficially or of record, direct or indirect ownership (as defined in SEC Rules 13(d)-3 and 13(d)-5 under the Securities Exchange Act of 1934, as amended) of 50% or more of the economic and/or voting interest in the Equity Interests in the Company (other than as a result of the direct or indirect acquisition by a Parent Entity of additional Equity Interests in the Company); (c) the Company ceases to own and control, beneficially and of record, directly or indirectly, all Equity Interests in all other Borrowers; or (d) a "change of control" or similar event occurs under the Term Loan Agreement or any other Material Debt.

Claims: subject to the Legal Expenses Limitation, all claims, liabilities, obligations, losses, damages, penalties, judgments, proceedings, interest, costs and expenses of any kind (including remedial response costs, reasonable out-of-pocket attorneys' fees and Extraordinary Expenses) at any time (including after Full Payment of the Obligations or exit of Agent or any Lender) incurred by or asserted against any Indemnitee by an Obligor or other Person, relating to any (a) Loan, Letter of Credit, Loan Document, Borrower Materials or related transaction, (b) action taken or omitted in connection with this credit facility, (c) existence or perfection of Liens or realization on Collateral, (d) exercise of rights or remedies under a Loan Document or Applicable Law, (e) failure by an Obligor to perform or observe any term of a Loan Document, or (f) reliance by an Indemnitee on an electronic signature, record or Communication, in each case including all reasonable and documented out-of-pocket costs and expenses relating to any investigation, litigation, arbitration or other proceeding (including an appeal or Insolvency Proceeding), whether or not an Indemnitee or Obligor is a party.

Closing Date: as defined in **Section 6.1**.

CME: CME Group Benchmark Administration Limited.

Code: the Internal Revenue Code of 1986.

Collateral: all Property described in **Section 7.1**, all Property described in any Security Documents as security for any Obligations, and all other Property that now or hereafter secures (or is intended to secure) any Obligations.

Commitment: for any Lender, its obligation to make Loans and to participate in LC Obligations up to the maximum principal amount shown on **Schedule 1.1**, as hereafter modified pursuant to **Section 2.1.7** or an Assignment to which it is a party. "Commitments" means the aggregate amount of all Lenders' Commitments. As of the Closing Date, the aggregate amount of the Commitments is $75,000,000.

Commodity Exchange Act: the Commodity Exchange Act (7 U.S.C. §1 et seq.).

Communication: any notice, request, election, representation, certificate, report, disclosure, statement, authorization, approval, consent, waiver, document, amendment or transmittal of information of any kind in connection with a Loan Document, including any Borrower Materials or Modification of a Loan Document.

Compliance Certificate: a certificate, in the form of **Exhibit B** or otherwise reasonably satisfactory to Agent, by which Obligors (a) make certain representations and warranties and (b) certify (i) compliance with **Section 10.3**, (ii) that no Default or Event of Default has occurred and is continuing, and (iii) certain financial statements.

Conforming Changes: with respect to use, administration of or conventions associated with SOFR, Term SOFR or any proposed Successor Rate, as applicable, any conforming changes to the definitions of Base Rate, SOFR, Term SOFR and Interest Period, timing and frequency of determining rates and making payments of interest and other technical, administrative or operational matters (including, for the avoidance of doubt, the definitions of Business Day and U.S. Government Securities Business Day, timing of borrowing requests or prepayment, conversion or continuation notices, and length of lookback periods) as may be appropriate, in Agent's discretion, to reflect the adoption and implementation of such applicable rate(s) and to permit the administration thereof by Agent in a manner substantially consistent with market practice (or, if Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of such rate exists, in such other manner of administration as Agent determines is reasonably necessary in connection with the administration of any Loan Document).

Connection Income Taxes: Other Connection Taxes that are imposed on or measured by net income (however denominated) or are franchise or branch profits Taxes.

Consolidated Interest Expense: for any period of determination, total interest expense of the Company and its Restricted Subsidiaries on a consolidated basis with respect to all of the outstanding Debt of the Company and its Restricted Subsidiaries (excluding interest paid-in-kind, amortization of financing fees, and other non-cash interest expense and net of cash interest income).

Consolidated Leverage Ratio: as of any date of determination, the ratio of (a) Consolidated Total Net Debt to (b) EBITDA for the four Fiscal Quarter period most recently ended, in each case calculated based on the financial statements most recently delivered whether as Historical Financial Statements or pursuant to **Section 10.1.2(a)** or **10.1.2(b)**.

Consolidated Net Income: for any period of determination, the consolidated net income (or loss) of the Company and the Restricted Subsidiaries on a consolidated basis in accordance with GAAP; provided, that there shall be excluded the income (or deficit) of any Person accrued prior to the date it becomes a Restricted Subsidiary or is merged into or consolidated with Company or any of its Restricted Subsidiaries. For the avoidance of doubt, Consolidated Net Income shall exclude the income or loss of Unrestricted Subsidiaries (including by equity method accounting) other than to the extent set forth in the last sentence of the definition of EBITDA.

Consolidated Net Tangible Assets: at any date of determination, the total amount of consolidated assets of the Company and its Restricted Subsidiaries on a consolidated basis (including the Sand Reserves Value) after deducting, without duplication, therefrom: (a) all current liabilities (excluding (i) any current liabilities that by their terms are extendable or renewable at the option of the obligor thereon to a time more than 12 months after the time as of which the amount thereof is being computed and (ii) current maturities of long-term debt) and (b) the value (net of any applicable reserves) of all goodwill, trade names, trademarks, patents and other like intangible assets, all as set forth, or on a pro forma basis would be set forth, on the consolidated balance sheet of the Company and its Restricted Subsidiaries on a consolidated basis for the most recently completed Fiscal Quarter, prepared in accordance with GAAP.

Consolidated Total Debt: as of any date of determination, without duplication, all of the consolidated Debt of the Company and its Restricted Subsidiaries (a) described in clauses (a), (b), (c), (d) and (e) of the definition herein of "Debt" and (b) described in clause (f) of the definition herein of "Debt" to the extent such Debt is comprised of guaranty obligations in respect of Debt of others of the type described in clause (a), (b), (c), (d) or (e) of the definition herein of "Debt", excluding, in each case, any Debt with respect to letters of credit to the extent such letters of credit have not been drawn.

Consolidated Total Net Debt: as of any date of determination, the remainder of (a) Consolidated Total Debt minus (b) the aggregate amount of all Unrestricted Cash of the Company and its Restricted Subsidiaries on such date.

Contingent Obligation: any obligation of a Person arising from a guaranty, indemnity or other assurance of payment or performance of any Debt, lease, dividend or other obligation ("primary obligation") of another obligor ("primary obligor") in any manner, whether directly or indirectly, including any obligation of such Person under any (a) guaranty, endorsement, co-making or sale with recourse of an obligation of a primary obligor; (b) obligation to make take-or-pay or similar payments regardless of nonperformance by any other party to an agreement; or (c) arrangement (i) to purchase any primary obligation or security therefor, (ii) to supply funds for the purchase or payment of any primary obligation, (iii) to maintain or assure working capital, equity capital, net worth or solvency of the primary obligor, (iv) to purchase Property or services for the purpose of assuring the ability of the primary obligor to perform a primary obligation, or (v) otherwise to assure or hold harmless the holder of any primary obligation against loss in respect thereof. The amount of any Contingent Obligation shall be deemed to be the stated or determinable amount of the primary obligation (or, if less, the maximum amount for which such Person may be liable under the instrument evidencing the Contingent Obligation) or, if not stated or determinable, the maximum reasonably anticipated liability with respect thereto.

Control: possession, directly or indirectly, of the power to direct or cause direction of a Person's management or policies, whether through the ability to exercise voting power, by contract or otherwise.

Covenant Trigger Period: the period (a) commencing on any day that (i) an Event of Default occurs, (ii) if no Loans or Letters of Credit (other than Letters of Credit that have been Cash Collateralized) are outstanding, Liquidity is less than the Applicable Trigger, or (iii) if any Loan or Letter of Credit (other than Letters of Credit that have been Cash Collateralized) is outstanding, Availability is less than the Applicable Trigger; and (b) continuing until, during each of the preceding 30 consecutive days, (i) no Event of Default has existed, (ii) in the case of a Covenant Trigger Period arising as a result of clause (a)(ii) above, Liquidity has been more than the Applicable Trigger at all times, and (iii) in the case of a Covenant Trigger Period arising as a result of clause (a)(iii) above, Availability has been more than the Applicable Trigger at all times in each case during such 30 day period.

Covered Entity: (a) a "covered entity," as defined and interpreted in accordance with 12 C.F.R. §252.82(b); (b) a "covered bank," as defined in and interpreted in accordance with 12 C.F.R. §47.3(b); or (c) a "covered FSI," as defined in and interpreted in accordance with 12 C.F.R. §382.2(b).

Credit Card Agreements: with respect to the Obligors, all agreements now or hereafter entered into by any Obligor with any Credit Card Issuer or any Credit Card Processor, as the same now exist or may hereafter be amended, modified, supplemented, extended, renewed, restated or replaced, including, without limitation, the agreements set forth on **Schedule 9.1.27**.

Credit Card Issuer: any Person (other than any Obligor) who issues or whose members issue credit or debit cards, including, MasterCard or VISA bank credit or debit cards or other bank credit or debit cards issued through MasterCard International, Inc., VISA, U.S.A., Inc. or Visa International and American Express, Discover, Diners Club, Carte Blanche and other non-bank credit or debit cards.

Credit Card Processor: with respect to each Obligor, any servicing or processing agent or any factor or financial intermediary who facilitates, services, processes or manages the credit authorization, billing transfer and/or payment procedures with respect to any of such Obligor's sales transactions involving credit card or debit card purchases by customers using credit cards or debit cards issued by any Credit Card Issuer.

Credit Card Receivables Account: one or more deposit accounts established in connection with a Credit Card Agreement and which is maintained in accordance with **Section 10.1.12**.

Cure Amount: as defined in **Section 11.6.1**.

Cure Deadline: as defined in **Section 11.6.1**.

Cure Right: as defined in **Section 11.6.1**.

Daily Simple SOFR: with respect to any applicable determination date, the secured overnight financing rate published on the FRBNY website (or any successor source satisfactory to Agent).

Debt: as applied to any Person, without duplication, (a) all Borrowed Money; (b) all obligations of such Person (whether contingent or otherwise) in respect of letters of credit, surety or other bonds and similar instruments; (c) all accrued expenses, liabilities or other obligations of such Person to pay the deferred purchase price of Property or services; (d) all obligations of such Person under Capital Leases, conditional sales or title retention agreements; (e) all Debt (as defined in the other clauses of this definition) of others secured by (or for which the holder of such Debt has an existing right, contingent or otherwise, to be secured by) a Lien on any Property of such Person, whether or not such Debt is assumed by such Person (provided, however, if such Person has not assumed or otherwise become liable in respect of such Debt, such Debt shall be deemed to be in an amount equal to the Fair Market Value of the property subject to such Lien at the time of determination); (f) all Debt (as defined in the other clauses of this definition) of others guaranteed by such Person or in respect of which such Person otherwise has a Contingent Obligation to the extent of the lesser of the amount of such Debt and the maximum stated amount of such guarantee or assurance against loss; (g) any Debt (as defined in the other clauses of this definition) of a partnership for which such Person is liable either by agreement, by operation of law or by a governmental requirement but only to the extent of such liability; (h) obligations of such Person with respect to Disqualified Equity Interests and (i) all net obligations of such Person in respect of any Swaps; provided, however, that "Debt" does not include (i) obligations with respect to surety or performance bonds and similar instruments entered into in the Ordinary Course of Business in connection with the operation of the Sand Mines or with respect to appeal bonds, (ii) accounts payable and accrued expenses, liabilities or other obligations to pay the deferred purchase price of Property or services, from time to time incurred in the Ordinary Course of Business which are not greater than 90 days past the date of invoice or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with

GAAP, or (iii) endorsements of negotiable instruments for collection. The Debt of a Person shall include any recourse Debt of any partnership in which such Person is a general partner or joint venturer. The Debt of any Person shall include all obligations of such Person of the character described above to the extent such Person remains legally liable in respect thereof notwithstanding that any such obligation is not included as a liability of such Person under GAAP.

Debtor Relief Laws: the Bankruptcy Code and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief laws of the United States or other applicable jurisdictions from time to time in effect.

Default: an event or condition that, with the lapse of time or giving of notice, would constitute an Event of Default.

Default Rate: for any Obligation (including, to the extent permitted by law, interest not paid when due), 2% plus the interest rate or fee (including margin) otherwise applicable thereto.

Defaulting Lender: any Lender that (a) has failed to comply with its funding obligations hereunder, and such failure is not cured within two Business Days; (b) has notified Agent or any Borrower that such Lender does not intend to comply with its funding obligations hereunder or under any other credit facility, or has made a public statement to that effect; (c) has failed, within three Business Days following request by Agent or any Borrower, to confirm in a manner satisfactory to Agent and Borrowers that such Lender will comply with its funding obligations hereunder; or (d) has, or has a direct or indirect parent company that has, become the subject of an Insolvency Proceeding (including reorganization, liquidation, or appointment of a receiver, custodian, administrator or similar Person by the Federal Deposit Insurance Corporation or any other regulatory authority) or Bail-In Action; provided, that a Lender shall not be a Defaulting Lender solely by virtue of a Governmental Authority's ownership of an equity interest in such Lender or parent company unless the ownership provides immunity for such Lender from jurisdiction of courts within the United States or from enforcement of judgments or writs of attachment on its assets, or permits such Lender or Governmental Authority to repudiate or otherwise to reject such Lender's agreements.

Deposit Account Control Agreement: control agreement reasonably satisfactory to Agent executed by an institution maintaining a Deposit Account for an Obligor, to perfect Agent's Lien on such account.

Designated Non-Cash Consideration: the Fair Market Value of non-cash or Cash Equivalent consideration received by any Obligor or its Restricted Subsidiaries in connection with a sale, disposition or transfer pursuant to **Section 10.2.5(n)** that is designated as "Designated Non-Cash Consideration" pursuant to a certificate of a Senior Officer of Borrower Agent delivered to Agent, setting forth the basis of such valuation.

Dilution Percent: the percent, determined for Obligors' most recent Fiscal Quarter, equal to (a) bad debt write-downs or write-offs, discounts, returns, credits, credit memos and other dilutive items with respect to Accounts, divided by (b) gross sales.

Dilution Reserve: a reserve determined by Agent in its Permitted Discretion to the extent that the Dilution Percent exceeds 2.5%.

Disposition: the sale, transfer, license, lease, consignment or other disposition (in one transaction, a series of transactions or otherwise) of property of a Person, including a sale-leaseback transaction, synthetic lease, issuance of Equity Interests by a subsidiary, Division, or sale, assignment, transfer or other disposal, with or without recourse, of any notes, accounts receivable or related rights.

Disqualified Equity Interests: any Equity Interest which, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable), or upon the happening of any event, (a) matures (excluding any maturity as the result of an optional redemption by the issuer thereof) or is mandatorily redeemable (other than for Equity Interests which would not constitute Disqualified Equity Interests), pursuant to a sinking fund obligation or otherwise, or is redeemable at the option of the holder thereof, in whole or in part, on or prior to 91 days after the Termination Date, (b) is convertible into or exchangeable (unless at the sole option of the issuer thereof) for (i) debt or (ii) any Equity Interests referred to in clause (a) above, in each case at any time on or prior to 91 days after the Termination Date, or (c) contains any mandatory repurchase obligation which may come into effect prior to Full Payment of all Obligations; provided, that any Equity Interests that would not constitute Disqualified Equity Interests but for provisions thereof giving holders thereof (or the holders of any security into or for which such Equity Interests is convertible, exchangeable or exercisable) the right to require the issuer thereof to redeem such Equity Interests upon the occurrence of a change in control or an asset sale occurring prior to the 91 days after the Termination Date shall not constitute Disqualified Equity Interests if such Equity Interests provide that the issuer thereof will not redeem any such Equity Interests pursuant to such provisions prior to the Full Payment of the Obligations.

Distribution: any (a) declaration or payment of a distribution, interest or dividend on any Equity Interest (other thanpayment-in-kind); or (b) purchase, redemption, or other acquisition or retirement for value of any Equity Interest.

Division: the division of assets, liabilities and/or obligations of a Person among two or more Persons (whether pursuant to a "plan of division" or similar arrangement, including under Texas law with respect to a divisive merger), which may or may not include the original dividing Person and pursuant to which the original dividing Person may or may not survive.

Dollars: lawful money of the United States.

Dominion Account: a special account established by Obligors at Bank of America or another bank acceptable to Agent, over which Agent has exclusive or springing control for withdrawal purposes; provided, that such Deposit Account is a collection account only and not also an operating or disbursement account.

EBITDA: for any fiscal period and determined on a consolidated basis for Obligors and Restricted Subsidiaries in accordance with GAAP, the result of (a) Consolidated Net Income, plus (b) without duplication, the sum of the following to the extent deducted from Consolidated Net Income: (i) Consolidated Interest Expense, plus (ii) Taxes based on income, profits or capital gains

thereto, including any franchise Taxes, margin Taxes and foreign withholding Taxes paid or accrued during such period, including penalties and interest related to such Taxes or arising from any Tax examination, plus (iii) depreciation, amortization, depletion and accretion expense, plus (iv) losses arising from the sale of capital assets, plus (v) any documented out-of-pocket fees, costs and expenses incurred in connection with negotiating and documenting the Loan Documents and any required amendments to the Term Loan Documents (whether occurring on or prior to the Closing Date), plus (vi) stock-based compensation expense and other non-cash items, including any non-cash losses or negative adjustments under ASC 815 as a result of changes in the fair market value of derivatives or otherwise resulting from fair value accounting required under GAAP (unless representing a reserve for a cash item in a future period), plus (vii) reasonable and customary fees, expenses and costs relating to any IPO Event, Permitted Parent Entity Investment, Permitted Acquisition (including the determination of any related earnout and similar obligations in connection with a Permitted Acquisition), Disposition outside of the Ordinary Course of Business, Investments (other than Investments in Unrestricted Subsidiaries), equity issuances and debt issuances (including refinancings) permitted under the Loan Documents (in each case whether or not consummated), plus (viii) fees, expenses and costs incurred during such period in connection with any amendment, modification, consent or waiver (whether or not consummated) of or under the Loan Documents and/or the Term Loan Documents, plus (ix) any extraordinary, unusual or non-recurring items, and minus (c) without duplication, the sum of the following to the extent included in Consolidated Net Income: (i) gains arising from the sale of capital assets, plus (ii) any extraordinary, unusual or non-recurring gains, plus (iii) the amount of all non-cash items increasing net income for such period, including anynon-cash gains or positive adjustments under ASC 815 as a result of changes in the fair market value of derivatives or otherwise resulting from fair value accounting required under GAAP (excluding any such non-cash item to the extent it represents the reversal of an accrual or reserve for a potential cash item in any prior period). For the purposes of calculating EBITDA for any period, if at any time during such period, any Obligor or any Restricted Subsidiary of an Obligor shall have made any Material Acquisition or Material Disposition, then EBITDA for such period shall be calculated after giving pro forma effect thereto (including pro forma adjustments arising out of events which are directly attributable to such Material Acquisition or Material Disposition, are factually supportable, and are expected to have a continuing impact, in each case as determined by the Obligors and approved by Agent in its reasonable discretion) or in such other manner acceptable to Borrower Agent and Agent as if any such Material Acquisition, Material Disposition or adjustment occurred on the first day of such period. For the avoidance of doubt, EBITDA shall exclude the results of Unrestricted Subsidiaries (including by equity method accounting) other than an amount equal to, but not less than zero, the amount of cash dividends or distributions received by the Company and its Restricted Subsidiaries from Unrestricted Subsidiaries during the applicable period minus the amount of cash investments received by the Unrestricted Subsidiaries from the Company and its Restricted Subsidiaries during such period; provided, that cash proceeds attributable to any incurrence of Debt or issuance of (or contribution to) Equity Interests will not be included in any calculation of investments, dividends, or distributions referenced above.

EEA Financial Institution: (a) any credit institution or investment firm established in an EEA Member Country that is subject to the supervision of an EEA Resolution Authority; (b) any entity established in an EEA Member Country that is a parent of an institution described in clause (a) above; or (c) any financial institution established in an EEA Member Country that is a subsidiary of an institution described in the foregoing clauses and is subject to consolidated supervision with its parent.

EEA Member Country: any of the member states of the European Union, Iceland, Liechtenstein and Norway.

EEA Resolution Authority: any public administrative authority or any Person entrusted with public administrative authority of an EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

Electronic Copy: as defined in **Section 14.8**.

Electronic Record and Electronic Signature: as defined in 15 U.S.C. §7006.

Eligible Account: an Account owing to an Obligor that arises in the Ordinary Course of Business from the sale of Sand Inventory or rendition of services, is payable in Dollars, and has been invoiced. Notwithstanding the foregoing, no Account shall be an Eligible Account if (a) (i) it is unpaid for more than 60 days after the original due date or (ii) the Account Debtor has failed to pay (A) if the payment terms offered to such Account Debtor is 60 days or less, within 120 days of original invoice date, or (B) otherwise, within 90 days of the original invoice date, in each case, unless the Account is supported by an irrevocable letter of credit reasonably satisfactory to Agent (as to form, substance, and issuer or domestic confirming bank) that has been delivered to Agent and is directly drawable by Agent; (b) 50% or more of the Accounts owing by the Account Debtor are not Eligible Accounts under the foregoing clause unless the Account is supported by an irrevocable letter of credit reasonably satisfactory to Agent (as to form, substance, and issuer or domestic confirming bank) that has been delivered to Agent and is directly drawable by Agent; (c) when aggregated with other Accounts owing by the Account Debtor and its Affiliates, it exceeds (i) in the case of an Account Debtor that is not an Investment Grade Account Debtor, 20% of the aggregate Eligible Accounts (or such higher percentage as Agent may establish for the Account Debtor from time to time) or (ii) in the case of an Account Debtor that is an Investment Grade Account Debtor, 35% of the aggregate Eligible Accounts (or such higher percentage as Agent may establish for the Account Debtor from time to time); (d) it does not conform with a covenant or representation herein; (e) it is owing by a creditor or supplier, or is otherwise subject to an asserted or presently existing offset, counterclaim, dispute, deduction, discount, recoupment, reserve, defense, chargeback, credit or allowance (but ineligibility shall be limited to the amount thereof); (f) an Insolvency Proceeding has been commenced by or against the Account Debtor; or the Account Debtor has failed, has suspended or ceased doing business, is liquidating, dissolving or winding up its affairs, is not Solvent (provided, that Agent may, in its Permitted Discretion, include Accounts from such Account Debtors if, and to the extent that, (i) such Account is supported by an irrevocable letter of credit reasonably satisfactory to Agent (as to form, substance, and issuer or domestic confirming bank) that has been delivered to Agent and is directly drawable by Agent, (ii) such Account is covered by credit insurance in form, substance, and amount, and by an insurer, reasonably satisfactory to Agent or (iii) such Account is an Account that was created on a post-petition basis of an Account Debtor that is a debtor in a Chapter 11 Insolvency Proceeding under the U.S. federal bankruptcy law that has "debtor in possession" financing in effect (or other court orders in effect) that is reasonably satisfactory to Agent and Agent shall have reasonably determined that the timely payment and collection of such Account will not be

impaired), or is the target of a Sanction; or the applicable Obligor is not able to bring suit or enforce remedies against the Account Debtor through judicial process; (g) the Account Debtor is organized or has its principal offices or assets outside the United States or Canada, unless the Account is supported by a letter of credit (delivered to and directly drawable by Agent) or credit insurance satisfactory to Agent in all respects (in Agent's Permitted Discretion) and assigned to it; provided that this **clause (g)** shall not exclude any Accounts of (x) any Investment Grade Account Debtor organized or headquartered in the United Kingdom, Austria, Belgium, Canada, Denmark, Finland, Germany, Holland, Ireland, Luxembourg, Norway, Sweden, or Switzerland (or any other country requested to be included in this list from time to time by the Borrower Agent and approved in writing by Agent in its Permitted Discretion), in each case, which has significant assets and operations in the United States (as reasonably determined by Agent) or (y) any Person listed on **Schedule 1.1(a)**, as such list may be supplemented by the Borrower Agent from time to time in writing to Agent and agreed to in writing by Agent; (h) it is owing by a Governmental Authority, unless the Account Debtor is (i) the United States or any department, agency or instrumentality thereof and the Account has been assigned to Agent in compliance with the federal Assignment of Claims Act or (ii) any state (or political subdivision thereof) and the Obligors have complied, to the reasonable satisfaction of Agent, with any applicable state legislation similar to the federal Assignment of Claims Act for the creation and perfection of security interests in such Account, if applicable, and Agent shall have determined that no immunity or other impediment exists to the enforcement of such Account; (i) it is not subject to a duly perfected, first priority Lien in favor of Agent, or is subject to any other Lien (other than (i) the subordinate Lien in favor of the Term Loan Lender permitted by **Section 10.2.2(b)** and (ii) other Permitted Liens that do not have priority over the Lien in favor of Agent); (j) the goods giving rise to it have not been delivered to the Account Debtor, the services giving rise to it have not been accepted by the Account Debtor, or it otherwise does not represent a final sale; (k) it is evidenced by Chattel Paper or an Instrument of any kind, or has been reduced to judgment; (l) its payment has been extended or the Account Debtor has made a partial payment; (m) it arises from a sale to an Affiliate (other than Eligible Affiliate Accounts), from a sale on a cash-on-delivery, bill-and-hold, sale or return, sale on approval, consignment, or other repurchase or return basis, or from a sale for personal, family or household purposes; (n) it represents a progress billing or retainage, or relates to services for which a performance, surety or completion bond or similar assurance has been issued; (o) it is a credit card sale or an amount due from a Credit Card Issuer or Credit Card Processor; (p) it is owed by an Account Debtor where the proceeds of any Accounts of such Account Debtor are, or such Account Debtor has made, Pass-Through Customer Prepayments up to the lesser of (i) the amount of such Pass-Through Customer Prepayments and (ii) Eligible Accounts owed from such Account Debtor; (q) it includes a billing for interest, fees or late charges, but ineligibility shall be limited to the extent thereof; (r) it is a comingled invoice with a Person that is not an Obligor (it being understood that an invoice that is otherwise payable solely to an Obligor shall not be deemed ineligible under this clause (r) as a result of any separate obligation of Obligors to pay any Unrestricted Subsidiary for services rendered by such Unrestricted Subsidiary for, or on behalf of, an Obligor in the Ordinary Course of Business); or (s) Agent determines that such Account is otherwise ineligible for inclusion in the Borrowing Base in its Permitted Discretion. In calculating delinquent portions of Accounts under clauses (a) and (b), credit balances more than 90 days old will be excluded.

Eligible Affiliate Accounts: Accounts owed to an Obligor by Eligible Affiliates and/or Brigham Exploration; provided that (a) such Accounts are on arm's-length terms and arise out of the Ordinary Course of Business of such Obligor and any such Eligible Affiliate or Brigham Exploration, as applicable, and are administered in accordance with the customary collection and credit policies of the Obligors and (b) the aggregate amount of all such Accounts included in the calculation of Eligible Accounts shall not exceed 5.0% of Eligible Accounts.

Eligible Affiliates: as defined in the definition of "Brigham Family"; provided, that no Unrestricted Subsidiary may be an Eligible Affiliate.

Eligible Assignee: (a) a Lender, Affiliate of a Lender or Approved Fund that satisfies **Section 12.13**; (b) an assignee approved by Borrower Agent (which approval shall not be unreasonably withheld or delayed, and shall be deemed given if no objection is made within 10 Business Days after notice of the proposed assignment) and Agent; or (c) during the continuance of an Event of Default under **Section 11.1(a)**, **(i)**, **(j)** or **(k)**, any Person acceptable to Agent in its discretion.

Eligible Inventory: Sand Inventory owned by an Obligor. Notwithstanding the foregoing, no Inventory shall be Eligible Inventory unless it (a) is finished goods, work-in-process or raw materials, and not packaging or shipping materials, labels, samples, display items, bags, replacement parts or manufacturing supplies; (b) is not held on consignment, nor subject to any deposit or down payment; (c) is in saleable condition and is not unfit for sale; (d) is not slow-moving, perishable, obsolete or unmerchantable, and does not constitute returned or repossessed goods; (e) meets all standards imposed by any Governmental Authority in all material respects, has not been acquired from a Person that is the target of a Sanction, and does not constitute hazardous materials under any applicable Environmental Law; (f) conforms with the covenants and representations herein in all material respects; (g) is subject to Agent's duly perfected, first priority Lien, and no other Lien (other than the subordinate Lien in favor of the Term Loan Lender permitted by **Section 10.2.2(b)** and other Permitted Liens that do not have priority over Agent's Lien); (h) is within the continental United States, is not in transit except between locations of Obligors, and is not consigned to any Person; (i) is not subject to any warehouse receipt or negotiable Document; (j) is not subject to any License or other arrangement that restricts such Obligor's or Agent's right to dispose of such Inventory, unless Agent has received an appropriate Lien Waiver; (k) is not located on leased premises or in the possession of a customer, warehouseman, processor, repairman, mechanic, shipper, freight forwarder or other Person, unless the lessor or such Person has delivered a Lien Waiver or an appropriate Rent and Charges Reserve has been established; (l) is reflected in the details of a current perpetual inventory report; and (m) is otherwise determined by Agent in its Permitted Discretion to be eligible for inclusion in the Borrowing Base.

Eligible Unbilled Account: an Account owing to an Obligor that would otherwise qualify as an Eligible Account except that such Account has not yet been billed to the applicable Account Debtor; provided that an Account shall cease to be an Eligible Unbilled Account upon the earlier of (a) the date such Account is billed to the applicable Account Debtor and (b) 30 days after the goods giving rise to such Account have been delivered to the applicable Account Debtor or the applicable service has been performed.

Enforcement Action: any action to enforce any Obligations (other than Secured Bank Product Obligations) or Loan Documents or to exercise any rights or remedies relating to any Collateral, whether by judicial action, self-help, notification of Account Debtors, setoff or recoupment, credit bid, deed in lieu of foreclosure, action in an Insolvency Proceeding or otherwise.

Environmental Laws: Applicable Laws (including programs, permits and guidance promulgated by regulators) relating to public health (other than occupational safety and health regulated by OSHA) or the protection or pollution of the environment, including the Resource Conservation and Recovery Act (42 U.S.C. §§6991-6991i), Clean Water Act (33 U.S.C. §1251 et seq.) and CERCLA.

Environmental Permit: any permit, registration, license, approval, consent, exemption, variance, or other authorization required under or issued pursuant to applicable Environmental Laws.

Environmental Release: a release as defined in CERCLA or under any other Environmental Law.

Equity Interest: the interest of any (a) shareholder in a corporation; (b) partner in a partnership (whether general, limited, limited liability or joint venture); (c) member in a limited liability company; or (d) other Person having any other form of equity security or ownership interest, including without limitation, warrants, options, or other rights to purchase or acquire, and securities convertible into or exchangeable for, an equity security or ownership interest.

ERISA: the Employee Retirement Income Security Act of 1974.

ERISA Affiliate: any trade or business (whether or not incorporated) under common control with an Obligor within the meaning of Section 414(b) or (c) of the Code (and Sections 414(m) and (o) of the Code for purposes of provisions relating to Section 412 of the Code).

ERISA Event: (a) a Reportable Event with respect to a Pension Plan; (b) withdrawal of an Obligor or ERISA Affiliate from a Pension Plan subject to Section 4063 of ERISA during a plan year in which it was a substantial employer (as defined in Section 4001(a)(2) of ERISA) or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (c) complete or partial withdrawal of an Obligor or ERISA Affiliate from a Multiemployer Plan or notification that a Multiemployer Plan is insolvent; (d) filing of a notice of intent to terminate, treatment of a Pension Plan amendment as a termination under Section 4041 or 4041A of ERISA, or institution of proceedings by the PBGC to terminate a Pension Plan; (e) determination that a Pension Plan is considered an at-risk plan or a plan in critical or endangered status under the Code or ERISA; (f) an event or condition that constitutes grounds under Section 4042 of ERISA for termination of, or appointment of a trustee to administer, any Pension Plan; (g) imposition of any liability on an Obligor or ERISA Affiliate under Title IV of ERISA, other than for PBGC premiums due but not delinquent under Section 4007 of ERISA; or (h) failure by an Obligor or ERISA Affiliate to meet all applicable requirements under the Pension Funding Rules in respect of a Pension Plan, whether or not waived, or to make a required contribution to a Multiemployer Plan.

EU Bail-In Legislation Schedule: the EU Bail-In Legislation Schedule published by the Loan Market Association, as in effect from time to time.

Event of Default: as defined in **Section 11**.

Exam Trigger Period: the period (a) commencing on any day that (i) an Event of Default occurs or (ii) Availability is less than the Applicable Trigger for five consecutive Business Days; and (b) continuing until, during each of the preceding 30 consecutive days, no Event of Default has existed and Availability has been more than the Applicable Trigger at all times, in each case during such 30 day period.

Excepted Liens: (a) Liens for Taxes, assessments or other governmental charges or levies which are not delinquent or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with GAAP; (b) Liens in connection with workers' compensation, unemployment insurance or other social security, old age pension or public liability obligations which are not delinquent or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with GAAP; (c) landlords' liens, operators', vendors', carriers', warehousemen's, repairmen's, mechanics', suppliers', workers', materialmen's, construction or other like Liens, in each case, arising in the Ordinary Course of Business or incident to the excavation, development, operation and maintenance of the Sand Mines or the Sand Properties each of which is in respect of obligations that are not delinquent or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with GAAP; (d) contractual Liens which arise in the Ordinary Course of Business under operating agreements, joint venture agreements, mineral leases, contracts for the sale, transportation or exchange of sand or minerals, area of mutual interest agreements, overriding royalty agreements, marketing agreements, processing agreements, net profits agreements, development agreements, seismic or other geophysical permits or agreements, and other similar agreements which are usual and customary in the sand extracting, producing, processing, developing and/or marketing business and are for claims which are not delinquent or which are being contested in good faith by appropriate action and for which adequate reserves have been maintained in accordance with GAAP; (e) Liens arising solely by virtue of any statutory or common law provision relating to banker's liens, rights of set-off or similar rights and remedies and burdening only deposit accounts or other funds maintained with a creditor depository institution; provided that no such deposit account is a dedicated cash collateral account or is subject to restrictions against access by the depositor in excess of those set forth by regulations promulgated by the Board and no such deposit account is intended by the Obligors to provide collateral to the depository institution; (f) Liens in favor of the depository bank arising under documentation governing deposit accounts or in any Deposit Account Control Agreement or Liens of a collecting bank arising in the ordinary course of business under Section 4-208 of the UCC, which Liens secure the payment of returned items, settlement item amounts, bank fees, or similar items or fees; (g) Immaterial Title Deficiencies and easements, restrictions, servitudes, permits, conditions, covenants, exceptions, reservations, zoning and land use requirements in any Property of the Borrowers or any of the other Obligors for the purpose of roads, pipelines, transmission lines, transportation lines, distribution lines and other means of ingress and egress for the removal of gas, oil, coal, other minerals or sand or timber, and other like and/or usual and customary purposes, or for the joint or common use of real estate, rights of way, facilities and equipment, and leases or subleases of real property and any interest or title of a lessee

or sublessee under any such lease or sublease, in each case, that do not secure any Debt and which in the aggregate do not materially impair the use of such Property for the purposes of which such Property is held by the Borrowers or any of the other Obligors or materially impair the value of such Property subject thereto; (h) Liens on cash or securities pledged to secure (either directly, or indirectly by securing letters of credit that in turn secure) performance of tenders, surety and appeal bonds, government contracts, performance and return of money bonds, bids, trade contracts, leases, statutory obligations, regulatory obligations and other obligations of a like nature incurred in the Ordinary Course of Business; (i) title and ownership interests of lessors (including sub-lessors) of Property leased by such lessors to any Obligor or any Restricted Subsidiary of any Obligor, Liens and encumbrances encumbering such lessors' titles and interests in such Property and to which the applicable Obligor's or any Restricted Subsidiary's leasehold interests may be subject or subordinate, in each case whether or not evidenced by UCC financing statement filings or other documents of record, provided that such Liens do not secure Debt of any Obligor or its Restricted Subsidiaries and do not encumber Property of any Obligor or its Restricted Subsidiaries other than the Property that is the subject of such leases and items located thereon; provided, further, that any such Lien referred to in this clause does not materially impair the use of the Property covered by such Lien for the purposes for which such Property is held by the applicable Obligor or any Restricted Subsidiary of any Obligor or materially impair the value of such Property subject thereto; (j) judgment and attachment Liens not giving rise to an Event of Default; provided that any appropriate legal proceedings which may have been duly initiated for the review of such judgment shall not have been finally terminated or the period within which such proceeding may be initiated shall not have expired and no action to enforce such Lien has been commenced; (k) a Lien existing on any Property prior to the acquisition thereof by any Obligor or any Subsidiary or existing on any Property of any Person that becomes an Obligor or a Subsidiary of any Obligor after the date hereof prior to the time such Person becomes an Obligor or a Subsidiary of any Obligor; provided that (i) such Lien is not created in contemplation of or in connection with such acquisition or such Person becoming an Obligor or a Subsidiary of an Obligor, as applicable, (ii) such Lien shall not apply to any other Property of such Obligor or Subsidiary and (iii) such Lien shall secure only those obligations which it secures on the date of such acquisition or the date such Person becomes an Obligor or Subsidiary, as applicable, and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof and (l) nonexclusive licenses of intellectual property rights granted in the Ordinary Course of Business, which in the aggregate do not materially impair the use of any Property owned by any of the Obligors or their Restricted Subsidiaries for the purposes of which such Property is held by any of the Obligors or their Restricted Subsidiaries or materially impair the value of such Property subject thereto; provided, that (x) Liens described in clauses (a) through (e) shall remain "Excepted Liens" only for so long as no action to enforce such Lien has been commenced and no intention to subordinate the Lien granted in favor of Agent for the benefit of the Secured Parties is to be hereby implied or expressed by the permitted existence of such Excepted Liens and (y) the term "Excepted Liens" shall not include any Lien securing Debt for Borrowed Money other than the Obligations.

Excluded Account: any Deposit Account (a) exclusively used for payroll, payroll taxes or employee benefits, (b) constituting zero-balance disbursement accounts through which disbursements are made and settled on a daily basis with no uninvested balance remaining overnight, (c) exclusively used for escrow arrangements, fiduciary arrangements, or trust arrangements, in each case for the benefit of unaffiliated third parties and (d) other accounts containing not more than $500,000 on deposit therein at any time (but no more than $2,000,000

for all such accounts in the aggregate); provided, that so long as the Term Loan Debt is outstanding, no Deposit Account described above shall constitute an Excluded Account hereunder unless it also constitutes an "Excluded Account" under and as defined in the applicable Term Loan Documents; provided, further that in no event shall a Credit Card Receivables Account be an "Excluded Account".

Excluded Property: each of the following: (a) Equity Interests of (i) any Foreign Subsidiary in excess of 65% of the voting stock of such Foreign Subsidiary, (ii) any FSHCO in excess of 65% of the voting stock of such FSHCO, (iii) any Subsidiary of a Foreign Subsidiary and (iv) any Unrestricted Subsidiary, (b) any Obligor's right, title or interest in any lease, license or agreement (other than customer contracts, customer leases or work orders, Chattel Paper and Accounts) existing on the Closing Date if and to the extent that a security interest therein is prohibited by or in violation of a term, provision or condition of any such lease, license or agreement (unless in each case, such term, provision or condition has been waived or would be rendered ineffective with respect to the creation of such security interest pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or any successor provision or provisions) of any relevant jurisdiction or any other Applicable Law or principles of equity), provided, however, that the foregoing shall cease to be treated as "Excluded Property" (and shall constitute Collateral) immediately at such time as the contractual prohibition shall no longer be applicable and to the extent severable, such security interest shall attach immediately to any portion of such lease, license or agreement not subject to the prohibitions specified above, provided, further, that Excluded Property shall not include any proceeds of any such lease, license or agreement or any goodwill of Obligors' business associated therewith or attributable thereto, (c) Deposit Accounts described in clauses (a) and (c) of the definition of "Excluded Accounts", (d) Property owned by any Obligor on the date hereof or hereafter acquired that is subject to a Lien permitted to be incurred pursuant to **Section 10.2.2(c)**, for so long as the contract or other agreement in which such Lien is granted (or the documentation governing such Lien or the obligations secured thereby) validly prohibits the creation of any other Lien on such Property (and, in the case of Property hereafter acquired, so long as such prohibition was not entered into in contemplation of such acquisition) (unless in each case, such prohibition would be rendered ineffective with respect to the creation of such security interest pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or any successor provision or provisions) of any relevant jurisdiction or any other Applicable Law or principles of equity), (e) applications filed in the United States Patent and Trademark Office to register trademarks or service marks on the basis of any Obligor's "intent to use" such trademarks or service marks unless and until the filing of a "Statement of Use" or "Amendment to Allege Use" has been filed and accepted, whereupon such applications shall be automatically subject to the Lien granted herein and deemed included in the Collateral, (f) vehicles and other assets subject to certificates of title (except to the extent the security interest in such assets can be perfected by the filing of an "all assets" financing statement), (g) Property with respect to which the cost to the Obligors of pledging such Property and perfecting Agent's Lien thereon is excessive (as determined by Agent in its reasonable discretion and confirmed by it in writing) in relation to the benefits to the Secured Parties of the security to be afforded thereby, (h) Real Estate (other than fixtures and as-extracted collateral) that is not required to be subject to a Mortgage pursuant to **Section 7.4**, and (i) any Property to the extent that such grant of a security interest is prohibited by any Applicable Law or requires a consent not obtained of any Governmental Authority pursuant to such Applicable Law (unless in each case, such Applicable Law, term, provision or condition has been waived or would be rendered ineffective with respect

to the creation of such security interest pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or any successor provision or provisions) of any relevant jurisdiction or any other Applicable Law or principles of equity); provided, that, notwithstanding the foregoing in each case, "Excluded Property" shall not include any proceeds, products, substitutions or replacements of Excluded Property, including monies due or to become due to an Obligor (unless such proceeds, products, substitutions or replacements would otherwise constitute Excluded Property).

Excluded Swap Obligation: with respect to an Obligor, each Swap Obligation as to which, and only to the extent that, such Obligor's guaranty of or grant of a Lien as security for such Swap Obligation is or becomes illegal under the Commodity Exchange Act because the Obligor does not constitute an "eligible contract participant" as defined in the act (determined after giving effect to any keepwell, support or other agreement for the benefit of such Obligor and all guarantees of Swap Obligations by other Obligors) when such guaranty or grant of Lien becomes effective with respect to the Swap Obligation. If a hedging agreement governs more than one Swap Obligation, only the Swap Obligation(s) or portions thereof described in the foregoing sentence shall be Excluded Swap Obligation(s) for the applicable Obligor.

Excluded Taxes: (a) Taxes imposed on or measured by a Recipient's net income (however denominated), franchise Taxes and branch profits Taxes (i) as a result of such Recipient being organized under the laws of, or having its principal office or applicable Lending Office located in, the jurisdiction imposing such Tax (or any political subdivision thereof), or (ii) constituting Other Connection Taxes; (b) U.S. federal withholding Taxes imposed on amounts payable to or for the account of a Lender with respect to its interest in a Loan or Commitment pursuant to a law in effect on the date on which the Lender acquires such interest (except pursuant to an assignment request by Borrower Agent under **Section 13.4**) or changes its Lending Office, unless such Taxes were payable pursuant to **Section 5.8** to its assignor immediately prior to such assignment or to the Lender immediately prior to its change in Lending Office; (c) Taxes attributable to a Recipient's failure to comply with **Section 5.9**; and (d) withholding Taxes imposed pursuant to FATCA.

Extraordinary Expenses: all documented out-of-pocket costs, expenses or advances incurred by any Agent Indemnitee during an Event of Default or Obligor's Insolvency Proceeding, including those relating to any (a) audit, inspection, repossession, storage, repair, appraisal, insurance, processing, preparation or advertising for sale, sale, collection, or other preservation of or realization upon Collateral; (b) action, arbitration or other proceeding (whether instituted by or against Agent, any Lender, any Obligor, any creditor(s) of an Obligor or any other Person) in any way relating to any Collateral, Agent's Liens, Loan Documents, Letters of Credit or Obligations, including any lender liability or other Claims; (c) Enforcement Action or exercise of any rights or remedies in, or the monitoring of, an Insolvency Proceeding; (d) settlement or satisfaction of Taxes, charges or Liens with respect to any Collateral; and (e) negotiation and documentation of any Modification, workout, restructuring, forbearance, liquidation or collection with respect to any Loan Document, Collateral or Obligations. Such costs, expenses and advances include transfer fees, Other Taxes, storage and insurance costs, permit fees, utility expenses, legal and accounting fees and expenses, appraisal costs, brokers' and auctioneers' commissions, environmental study costs, wages and salaries paid to employees of any Obligor or independent contractors in liquidating Collateral, and travel expenses.

Fair Market Value: with respect to any asset or group of assets on any date of determination, the value of the consideration obtainable in a sale of such asset at such date of determination assuming a sale by a willing seller to a willing purchaser dealing at arm's length and arranged in an orderly manner over a reasonable period of time having regard to the nature and characteristics of such asset.

FATCA: Sections 1471 through 1474 of the Code (including any amended or successor version if substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b)(1) of the Code, and any intergovernmental agreement, treaty or convention among Governmental Authorities (and related fiscal or regulatory legislation, or related official rules or practices) entered into in connection with implementing the foregoing.

Federal Funds Rate: for any day, the per annum rate calculated by FRBNY based on such day's federal funds transactions by depository institutions (as determined in such manner as FRBNY shall set forth on its public website from time to time) and published on the next Business Day by FRBNY as the federal funds effective rate; provided, that in no event shall the Federal Funds Rate be less than zero.

Financed Capital Expenditures: with respect to the Company and its Restricted Subsidiaries and for any period, Capital Expenditures of the Company and its Restricted Subsidiaries during such period that are financed with, without duplication, (a) the net proceeds of any incurrence of Debt (other than Loans) or (b) the proceeds of any issuance of Equity Interests (other than Disqualified Equity Interests or any other issuance of Equity Interests which increases any available basket hereunder).

Fiscal Quarter: each period of three months, commencing on the first day of a Fiscal Year.

Fiscal Year: the fiscal year of Obligors and Subsidiaries for accounting and tax purposes, ending on December 31 of each year.

Fixed Charge Coverage Ratio: as of any date of determination, the ratio, determined on a consolidated basis for the Obligors and their Restricted Subsidiaries for the most recent four Fiscal Quarter period ended on or prior to such date for which financial statements have been delivered whether as Historical Financial Statements or pursuant to **Section 10.1.2(a)** or **10.1.2(b)**, of (a) EBITDA minus Unfinanced Capital Expenditures and cash Taxes of the Obligors and their Restricted Subsidiaries (including Permitted Tax Distributions) paid or required to be paid during such period, to (b) Fixed Charges. In the event that EBITDA is being calculated on a pro forma basis as a result of any Material Acquisition or Material Disposition during the relevant period, Unfinanced Capital Expenditures, cash Taxes and Fixed Charges shall also be determined on a pro forma basis for such Material Acquisition or Material Disposition, as applicable, by the Borrower Agent in good faith and approved by Agent in its reasonable discretion.

Fixed Charges: the sum of Consolidated Interest Expense, scheduled principal payments made on Borrowed Money (other than the Loans), and Distributions made in cash (excluding Permitted Tax Distributions and other than Distributions solely among Obligors).

FLSA: the Fair Labor Standards Act of 1938.

Flood Laws: the National Flood Insurance Act of 1968, Flood Disaster Protection Act of 1973 and related laws.

Foreign Lender: any Lender that is not a U.S. Person.

Foreign Plan: any employee benefit plan or arrangement (a) maintained or contributed to by any Obligor or Subsidiary that is not subject to the laws of the United States; or (b) mandated by a government other than the United States for employees of any Obligor or Subsidiary.

Foreign Subsidiary: a Subsidiary that is a "controlled foreign corporation" under Section 957 of the Code.

FRBNY: the Federal Reserve Bank of New York.

Fronting Exposure: a Defaulting Lender's interest in LC Obligations, Swingline Loans and Protective Advances, except to the extent Cash Collateralized by the Defaulting Lender or allocated to other Lenders hereunder.

FSHCO: any Subsidiary substantially all of whose assets consist of Equity Interests or Debt of one or more direct or indirect Foreign Subsidiaries.

Full Payment: with respect to any Obligations, (a) other than with respect to LC Obligations described in clause (b) of the definition thereof and Secured Bank Product Obligations, the full cash payment thereof, including any interest, fees and other charges accruing during an Insolvency Proceeding (whether or not allowed in the proceeding); (b) with respect to LC Obligations described in clause (b) of the definition thereof, the Cash Collateralization thereof (or delivery of standby letter(s) of credit acceptable to Agent in its discretion, in the amount of required Cash Collateral); (c) if such Obligations consist of indemnification or contingent obligations for which a claim has been made or asserted, the Cash Collateralization thereof or other arrangements reasonably acceptable to the Agent; and (d) with respect to Secured Bank Product Obligations, the termination thereof and full cash payment of all amounts thereof that are then due and payable (other than Secured Bank Products allowed to remain outstanding by Bank Product providers).

Full Payment of the Obligations or Full Payment of all Obligations: Full Payment of all Obligations has occurred and all Commitments have been terminated.

GAAP: generally accepted accounting principles in effect in the United States from time to time, subject to **Section 1.2**.

Governmental Approvals: all authorizations, consents, approvals, licenses and exemptions of, registrations and filings with, and required reports to, all Governmental Authorities.

Governmental Authority: any federal, state, local, foreign or other agency, authority, body, commission, court, instrumentality, political subdivision, central bank, or other entity or officer exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions for any governmental, judicial, investigative, regulatory or self-regulatory authority (including the Financial Conduct Authority, the Prudential Regulation Authority and any supra-national bodies such as the European Union or European Central Bank).

Guarantor Payment: as defined in **Section 5.10.3**.

Guarantors: each Person that guarantees payment or performance of Obligations. As of the Closing Date, the Guarantors include each Borrower (in respect of the obligations of the other Borrowers), Atlas Sand Employee Company, LLC, Atlas Sand Employee Holding Company, LLC, Atlas Sand Construction, LLC, Atlas Construction Employee Company, LLC, Fountainhead Logistics Employee Company, LLC and Fountainhead Logistics, LLC.

Guaranty: each guaranty agreement executed by a Guarantor in favor of Agent, including this Agreement.

Hazardous Material: any substance regulated or as to which liability might arise under any Environmental Law, or any other Applicable Law related to pollution or protection of the environment or human health through exposure to the environment, including: (a) any chemical, compound, material, product, byproduct, substance or waste defined as or included in the definition or meaning of "hazardous substance," "hazardous material," "hazardous waste," "solid waste," "toxic waste," "extremely hazardous substance," "toxic substance," "contaminant," "pollutant," or words of similar meaning or import found in any applicable Environmental Law; (b) hydrocarbons, petroleum products, petroleum substances, natural gas, oil, oil and gas waste, crude oil, and any components, fractions, or derivatives thereof; and (c) radioactive materials, explosives, asbestos or asbestos containing materials, polychlorinated biphenyls, radon, infectious or medical wastes.

Historical Financial Statements: as defined in **Section 9.1.4**.

Immaterial Title Deficiencies: minor defects or deficiencies in title which do not diminish by more than 2.0% the aggregate value of the Sand Properties.

Indemnified Taxes: (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment of an Obligation (excluding any Secured Bank Product Obligation); and (b) to the extent not otherwise described in clause (a), Other Taxes.

Indemnitees: Agent Indemnitees, Lender Indemnitees, Issuing Bank Indemnitees and Bank of America Indemnitees.

Insolvency Proceeding: any case or proceeding commenced by or against a Person under any state, federal or foreign law for, or any agreement of such Person to, (a) the entry of an order for relief under the Bankruptcy Code, or any other insolvency, debtor relief or debt adjustment law; (b) the appointment of a receiver, trustee, liquidator, administrator, conservator or other custodian for such Person or any part of its Property; or (c) an assignment or trust mortgage for the benefit of creditors.

Intellectual Property: all intellectual and similar Property of a Person, including inventions, designs, patents, copyrights, trademarks, service marks, trade names, trade secrets, confidential or proprietary information, customer lists, know-how, software and databases; all embodiments or fixations thereof and all related documentation, applications, registrations and franchises; all licenses or other rights to use any of the foregoing; and all books and records relating to the foregoing.

Intellectual Property Claim: any claim or assertion (whether in writing, by suit or otherwise) that an Obligor's or Restricted Subsidiary's ownership, use, marketing, sale or distribution of any Inventory, Equipment, Intellectual Property or other Property violates another Person's Intellectual Property.

Intercreditor Agreement: that certain Second Amended and Restated Intercreditor Agreement dated as of the Closing Date, among each Obligor from time to time party thereto, Agent, as the ABL Agent, and the Term Loan Lender, as the Term Representative, as the same may be amended, restated, supplemented or otherwise modified from time to time.

Interest Payment Date: (a) for each Term SOFR Loan, the last day of the applicable Interest Period and, if the Interest Period is more than three months, each three month anniversary of the beginning of the Interest Period; and (b) for all other Loans, the first day of each calendar quarter.

Interest Period: as defined in **Section 3.1.3**.

Inventory: as defined in the UCC, including all goods intended for sale, lease, display or demonstration; all work in process; and all raw materials, and other materials and supplies of any kind that are or could be used in connection with the manufacture, printing, packing, shipping, advertising, sale, lease or furnishing of such goods, or otherwise used or consumed in an Obligor's business (but excluding Equipment).

Inventory Formula Amount: the least of (i) 70% of the Value of Eligible Inventory; (ii) 85% of the NOLV Percentage of the Value of Eligible Inventory; or (iii) 20% of the Borrowing Base (without giving effect to clause (a) of the definition therefor).

Inventory Reserve: reserves established by Agent in its Permitted Discretion to reflect factors that may negatively impact the Value of Inventory, including change in salability, obsolescence, seasonality, theft, shrinkage, imbalance, change in composition or mix, markdowns and vendor chargebacks.

Investment: an Acquisition, an acquisition of record or beneficial ownership of any Equity Interests or Debt of a Person, or an advance, loan or capital contribution to or other investment in a Person, including any Contingent Obligation in respect of Debt of another Person.

Investment Grade Account Debtor: any Account Debtor that has a long term issuer rating of no less than Baa3 from Moody's and BBB- from S&P.

IP Assignment: a collateral assignment or security agreement pursuant to which an Obligor grants a Lien on its Intellectual Property to Agent, as security for any Obligations.

IPO Event: the initial public offering and sale of common stock of Atlas Energy Solutions Inc. (or any other Person that directly or indirectly owns a majority of the outstanding common Equity Interests of the Company) pursuant to an effective registration statement filed with the SEC under the Securities Act.

IRS: the United States Internal Revenue Service.

Issuing Bank: Bank of America (including any Lending Office of Bank of America), or any replacement issuer appointed pursuant to **Section 2.2.4**.

Issuing Bank Indemnitees: Issuing Bank and its officers, directors, employees, Affiliates, agents, advisors, attorneys, consultants, service providers and other representatives.

Junior Debt: Subordinated Debt, Borrowed Money secured by a Lien that is junior to Agent's Liens (excluding the Term Loan Debt) and unsecured Borrowed Money.

Kermit Facility: the Sand Mine located in or around Kermit, Texas.

LC Application: an application by Borrower Agent to Issuing Bank for issuance of a Letter of Credit, in form and substance reasonably satisfactory to Issuing Bank and Agent.

LC Conditions: upon giving effect to any issuance or modification of a Letter of Credit, (a) the conditions in **Section 6** are satisfied; (b) total LC Obligations do not exceed the Letter of Credit Subline and Revolver Usage does not exceed the Borrowing Base; (c) the Letter of Credit and payments thereunder are denominated in Dollars or other currency satisfactory to Agent and Issuing Bank; (d) the form of the Letter of Credit is satisfactory to Agent and Issuing Bank in their reasonable discretion; and (e) the Letter of Credit would not violate any policy or procedure of the Issuing Bank applicable to letters of credit generally.

LC Documents: all documents, instruments and agreements (including requests and applications) delivered by any Borrower or other Person to Issuing Bank or Agent in connection with a Letter of Credit.

LC Obligations: the sum of (a) all amounts owing by Obligors for draws under Letters of Credit; and (b) the Stated Amount of all outstanding Letters of Credit.

LC Request: a request by Borrower Agent for issuance of a Letter of Credit, in form reasonably satisfactory to Agent and Issuing Bank.

Legal Expenses Limitation: (a) with respect to any obligation in any Loan Document of an Obligor to pay or reimburse any legal fees or expenses of Agent, that such obligation shall be limited to the documented out-of-pocket fees and expenses of one primary counsel, one local counsel for each relevant jurisdiction as may be necessary in the reasonable judgment of Agent, and one specialty counsel acting in each reasonably necessary specialty area as determined in the reasonable judgment of Agent and (b) with respect to any obligation in any Loan Document of an Obligor to pay or reimburse any legal fees or expenses of the Lenders or any other Indemnitee (other than Agent acting in its capacity as such), that such obligation shall be limited to the documented out-of-pocket fees and expenses of one primary counsel and one local counsel for each relevant jurisdiction for all such Persons as a whole; provided, that if such legal counsel determines in good faith that representing all such Persons would or could result in a conflict of interest under laws or ethical principles applicable to such legal counsel or that a defense or counterclaim is available to one such Person that is not available to all such Persons, then to the extent reasonably necessary to avoid such a conflict of interest or to permit unqualified assertion of such a defense or counterclaim, each group of affected similarly situated Persons shall be entitled to separate representation by legal counsel selected by such group of similarly situated Persons.

Lender Indemnitees: Lenders and Secured Bank Product Providers, and their officers, directors, employees, Affiliates, agents, advisors, attorneys, consultants, service providers and other representatives.

Lenders: lenders party to this Agreement (including Agent in its capacity as provider of Swingline Loans or Protective Advances) and any Person who hereafter becomes a "Lender" pursuant to an Assignment, including any Lending Office of the foregoing.

Lending Office: the office (including any domestic or foreign Affiliate or branch) designated as such by Agent, a Lender or Issuing Bank by notice to Borrower Agent and, if applicable, Agent.

Letter of Credit: any standby or documentary letter of credit, foreign guaranty, documentary bankers acceptance, indemnity, reimbursement agreement or similar instrument issued by Issuing Bank for the account or benefit of an Obligor or Affiliate of an Obligor.

Letter of Credit Subline: $25,000,000.

License: any license or agreement under which an Obligor is authorized to use Intellectual Property in connection with any manufacture, marketing, distribution or disposition of Collateral, any use of Property or any other conduct of its business.

Licensor: any Person from whom an Obligor obtains the right to use any Intellectual Property.

Lien: an interest in Property securing an obligation or claim, including any lien, security interest, pledge, hypothecation, assignment, trust, reservation, assessment right, encroachment, easement, right-of-way, covenant, condition, restriction, lease, or other title exception or encumbrance.

Lien Waiver: an agreement, in form and substance reasonably satisfactory to Agent, by which (a) for any material Collateral located on leased premises, the lessor waives or subordinates any Lien it may have on the Collateral, and allows Agent to enter the premises and remove, store and dispose of Collateral; (b) for any Collateral held by a warehouseman, processor, shipper, customs broker or freight forwarder, such Person waives or subordinates any Lien it may have on the Collateral, agrees to hold any Documents in its possession relating to the Collateral as agent for Agent, and agrees to deliver Collateral to Agent upon request; (c) for any Collateral held by a repairman, mechanic or bailee, such Person acknowledges Agent's Lien, waives or subordinates any Lien it may have on the Collateral, and agrees to deliver Collateral to Agent upon request; and (d) for any Collateral subject to a Licensor's Intellectual Property rights, the Licensor grants to Agent the right, vis-à-vis such Licensor, to enforce Agent's Liens with respect to the Collateral, including the right to dispose of it with the benefit of the Intellectual Property, whether or not a default exists under any applicable License.

Liquidity: the sum of (a) Availability plus (b) Unrestricted Cash.

Loan: a loan made by Agent or a Lender under the credit facility established by this Agreement.

Loan Documents: this Agreement, Other Agreements and Security Documents.

Major Material Contract: (a) any contract or agreement (other than any Loan Document or Term Loan Document) entered into in respect of a Sand Facility pursuant to which any Obligor or any of Subsidiary of any Obligor pays, receives or incurs liabilities (or could reasonably be expected to pay, receive or incur liabilities during the term thereof) in excess of $25,000,000, and (b) any real property lease necessary for the operation of any Sand Facility to which any Obligor or any Subsidiary of any Obligor is the tenant, lessee, subtenant, licensee or other similar party thereunder for which breach, nonperformance, cancellation, or failure to renew would reasonably be expected to result in a Material Adverse Effect, together, in each case, with all amendments, modifications, replacements, extensions and rearrangements of the foregoing made in accordance with the terms of this Agreement.

Major Material Contract EOD: an event or circumstance occurred with respect to a Major Material Contract which, after giving effect to the expiration of any applicable grace period or the giving of notice, or both, provided in such Major Material Contract, entitles any party thereto to terminate such Major Material Contract prior to its scheduled termination.

Margin Stock: as defined in Regulation U of the Federal Reserve Board of Governors.

Material Acquisition: any acquisition of Property or series of related acquisitions of Property (including by way of merger or consolidation) that involves the payment of consideration by one or more of the Obligors in excess of $25,000,000.

Material Adverse Effect: the effect of any event or circumstance that, taken alone or in conjunction with other events or circumstances, (a) has or could be reasonably expected to have a material adverse effect on (i) the business, operations, Properties or financial condition of the Obligors taken as a whole, (ii) the enforceability of any Loan Document, or (iii) the rights and remedies of or benefits available to, taken as a whole, Agent or any Lender under any Loan Document; or (b) impairs the ability of (i) the Borrowers to perform their payment obligations under any Loan Document or (ii) the Obligors, taken as a whole, to perform any of their obligations under any Loan Document.

Material Debt: means Debt (other than the Obligations), or obligations in respect of one or more Swaps, of any one or more of the Obligors or Restricted Subsidiaries in an aggregate principal amount exceeding $25,000,000. For purposes of determining Material Debt, the "principal amount" of the obligations of any Obligor or Restricted Subsidiary of any Obligor in respect of any Swap at any time shall be the Swap Termination Value of such Swap.

Material Disposition: any Disposition of Property or series of related Dispositions of Property outside of the Ordinary Course of Business that yields gross proceeds to one or more of the Obligors or Restricted Subsidiaries in excess of $25,000,000.

Modification: any amendment, supplement, extension, approval, consent, waiver, change or other modification of a Loan Document, including any waiver of a Default or Event of Default.

Monahans Facility: the Sand Mine located in or around Monahans, Texas.

Moody's: Moody's Investors Service, Inc. or any successor acceptable to Agent.

Mortgage: a mortgage, deed of trust or other Lien on Real Estate granted to Agent by an Obligor to secure any Obligations.

Mortgaged Property: means any Property owned or leased by any Obligor that is subject to the Liens under the terms of any Mortgage.

Multiemployer Plan: any employee benefit plan of the type described in Section 4001(a)(3) of ERISA, to which an Obligor or ERISA Affiliate makes or is obligated to make contributions, or during the preceding five plan years, has made or been obligated to make contributions.

Multiple Employer Plan: a Plan with two or more contributing sponsors, including an Obligor or ERISA Affiliate, at least two of whom are not under common control, as described in ERISA Section 4064.

Net Proceeds: with respect to a Disposition, proceeds (including, when received, any deferred or escrowed payments) received by an Obligor or Restricted Subsidiary in cash from such disposition, net of (a) reasonable and customary costs and expenses actually incurred in connection therewith, including legal fees and sales commissions; (b) amounts applied to repayment of Debt secured by a Permitted Lien senior to Agent's Liens on Collateral sold; (c) Taxes paid or reasonably estimated to be payable as a result thereof and any Permitted Tax Distributions in connection therewith; and (d) reserves for indemnities, until such reserves are no longer needed.

NOLV Percentage: the net orderly liquidation value of Inventory, expressed as a percentage, expected to be realized at an orderly, negotiated sale held within a reasonable period of time, net of all liquidation expenses, as determined from the most recent appraisal of Borrowers' Inventory performed by an appraiser and on terms reasonably satisfactory to Agent.

Not Otherwise Applied: with reference to any amount otherwise for inclusion in the Available Equity Amount or as a Pass-Through Equity Contribution, as applicable, that such amount (a) was not previously applied to prepay the Obligations, (b) was not previously utilized (meaning such funds remain available for application as part of the Available Equity Amount or as a Pass-Through Equity Contribution, as applicable) for some other purpose (including to make any Investments, Distributions or purchases, redemptions, defeasements and satisfaction in respect of Debt, as applicable), and (c) that such amount was not committed to be applied for any other purpose, provided that such commitment remains outstanding or has not otherwise terminated or expired for some other reason.

Notice of Borrowing: notice by Borrower Agent of a Borrowing, in form reasonably satisfactory to Agent.

Notice of Conversion/Continuation: notice by Borrower Agent for conversion or continuation of a Loan as a Term SOFR Loan, in form reasonably satisfactory to Agent.

Obligations: all (a) principal of and premium, if any, on the Loans, (b) LC Obligations and other obligations of Obligors with respect to Letters of Credit, (c) interest, expenses, fees, indemnification obligations, Claims and other amounts payable by Obligors under the Loan Documents, (d) Secured Bank Product Obligations, and (e) other Debts, obligations and liabilities of any kind owing by Obligors pursuant to the Loan Documents, in each case whether now existing or hereafter arising, whether evidenced by a note or other writing, whether allowed in any Insolvency Proceeding, whether arising from an extension of credit, issuance of a letter of credit, acceptance, loan, guaranty, indemnification or otherwise, and whether direct or indirect, absolute or contingent, due or to become due, primary or secondary, or joint or several; provided, that Obligations of an Obligor shall not include its Excluded Swap Obligations.

Obligor: each Borrower and each Guarantor.

Ordinary Course of Business: the ordinary course of business of any Obligor or Subsidiary, undertaken in good faith and consistent in all material respects with Applicable Law.

Organic Documents: with respect to any Person, its charter, certificate or articles of incorporation, bylaws, articles of organization, limited liability agreement, operating agreement, members agreement, shareholders agreement, partnership agreement, certificate of partnership, certificate of formation, voting trust agreement, or similar agreement or instrument governing the formation or operation of such Person.

OSHA: the Occupational Safety and Hazard Act of 1970.

Other Agreement: each LC Document, fee letter, Lien Waiver, Intercreditor Agreement, Related Real Estate Document, Borrower Material, Communication, note, assignment, document, instrument or agreement of any kind (other than this Agreement or a Security Document) now or hereafter delivered by an Obligor or other Person to Agent or a Lender in connection with any transaction relating hereto.

Other Connection Taxes: Taxes imposed on a Recipient due to a present or former connection between it and the taxing jurisdiction (other than connections arising from the Recipient having executed, delivered, become party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to, enforced, or sold or assigned an interest in, any Loan or Loan Document).

Other Taxes: all present or future stamp, court, documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to **Section 13.4(c)**).

Overadvance: the amount of Revolver Usage in excess of the Borrowing Base.

Parent: the collective reference to all Parent Entities of the Company.

Parent Entity: any Person that is or becomes a direct or indirect parent company of the Company on and following an IPO Event. For the avoidance of doubt, (a) on and following an IPO Event (i) Atlas Energy Solutions Inc. and (ii) any other Person that is formed to effect an IPO Event that is the managing member of or that directly or indirectly owns a majority of the voting Equity Interests of the Company, in each case, shall be deemed to constitute a Parent Entity of the Company and (b) the term Parent Entity shall exclude (i) the Brigham Family and (ii) any Person that is a parent company to the public entity or that is a direct or indirect non-managing member of the Company.

Participant: as defined in **Section 13.2**.

Participant Register: as defined in **Section 13.2.3**.

Pass-Through Customer Prepayment: as defined in **Section 10.2.4(n)**.

Pass-Through Equity Contribution: as defined in **Section 10.2.4(m)**.

Patriot Act: the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. No. 107-56, 115 Stat. 272 (2001).

Payment Conditions: with respect to any designation made pursuant to **Section 1.6**, Distribution made pursuant to **Section 10.2.3(a)(v)**, Permitted Acquisition made pursuant to **Section 10.2.4(g)**, Investment made pursuant to **Section 10.2.4(j)** or Debt payment made pursuant to **Section 10.2.6**:

(a) no Event of Default shall have occurred and be continuing on the date of such transaction or would result after giving effect to such transaction;

(b) (I) if no Loans or Letters of Credit (other than Letters of Credit that have been Cash Collateralized and other Letters of Credit having an aggregate Stated Amount of not more than $7,500,000) are outstanding, Liquidity exceeds $30,000,000 after giving effect to and at all times during the 30 consecutive day period immediately prior to such transaction on a pro forma basis as if the payment were made at the beginning of such period; or

(II) if any Loans or Letters of Credit (other than Letters of Credit that have been Cash Collateralized and other Letters of Credit having an aggregate Stated Amount of not more than $7,500,000) are outstanding or Borrower Agent otherwise elects, either (i) Availability shall be higher than the greater of (A) $12,000,000 and (B) 20.0% of the Borrowing Base then in effect after giving effect to and at all times during the 30 consecutive day period immediately prior to such transaction on a pro forma basis as if the payment were made at the beginning of such period or (ii) both (A) Availability shall be higher than the greater of (x) $9,000,000 and (y) 15.0% of the Borrowing Base then in effect after giving effect to and at all times during the 30 consecutive day period immediately prior to such transaction on a pro forma basis as if the payment were made at the beginning of such period and (B) the Fixed Charge Coverage Ratio for the most recently ended Fiscal Quarter for which financial statements have been delivered, calculated on a pro forma basis by including such transactions in the denominator as Fixed Charges, as and to the extent applicable, shall be greater than 1.00 to 1.00 (whether or not the financial covenant is being tested at such time); and

(c) in the case of any such transaction or series of related transactions exceeding $1,000,000 (but in any event if the total of all such transactions in a month exceeds $5,000,000), at least two Business Days prior to (but in no event more than five Business Days prior to) such transaction, Agent shall have received a certificate of a Senior Officer of Borrower Agent (i) certifying satisfaction of the foregoing conditions concurrently with any such transaction and (ii) setting forth in reasonable detail the pro forma calculations of the Fixed Charge Coverage Ratio, Availability and Liquidity, as applicable (along with evidence supporting such pro forma calculations, including, in the case of any determination of Liquidity, bank statements or such other evidence as may be reasonably acceptable to Agent).

For the avoidance of doubt, a pro forma calculation in respect of any Distribution shall account for any mandatory prepayment of the Term Loan Debt required in connection therewith.

Payment Item: each check, draft or other item of payment payable to an Obligor, including those constituting proceeds of any Collateral.

PBGC: the Pension Benefit Guaranty Corporation.

Pension Funding Rules: Code and ERISA rules regarding minimum required contributions (including installment payments) to Pension Plans set forth in Sections 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

Pension Plan: any employee pension benefit plan (as defined in Section 3(2) of ERISA), other than a Multiemployer Plan, that is subject to Title IV of ERISA and is sponsored or maintained by any Obligor or ERISA Affiliate or to which the Obligor or ERISA Affiliate contributes or has an obligation to contribute, or in the case of a multiple employer or other plan described in Section 4064(a) of ERISA, has made contributions at any time during the preceding five plan years.

Permitted Acquisition: any Acquisition as long as (a) no Default or Event of Default exists or is caused thereby; (b) the Acquisition is consensual; (c) the assets, business or Person being acquired is useful or engaged in the business of Obligors and Restricted Subsidiaries and is located or organized within the United States; (d) the Payment Conditions are satisfied with respect thereto; and (e) Borrowers deliver to Agent, at least five Business Days prior to the Acquisition, copies of all material agreements relating thereto and a certificate, in form and substance reasonably satisfactory to Agent, stating that the Acquisition is a "Permitted Acquisition" and demonstrating compliance with the foregoing requirements.

Permitted Contingent Obligations: Contingent Obligations (a) arising from endorsements of Payment Items for collection or deposit in the Ordinary Course of Business; (b) arising from customary indemnification obligations in favor of purchasers in connection with dispositions of Equipment permitted hereunder; and (c) arising under the Loan Documents.

Permitted Discretion: a determination made in good faith, using reasonable business judgment (from the perspective of a secured, asset-based lender).

Permitted Disposition: a Disposition permitted by **Section 10.2.5**.

Permitted Intercompany Activities: shared administrative, overhead, technology or licensing arrangements entered into in the Ordinary Course of Business or consistent with customary industry practices between or among Parent, the Borrowers and their Subsidiaries, in each case that (i) are, in the good faith judgment of the Borrowers, necessary or advisable in connection with the ownership or operation of the business of the Borrowers and their Subsidiaries and (ii) do not interfere in any material respect with the ordinary conduct of business of any Borrower or any Restricted Subsidiary; provided, that there is a reasonable allocation of any material costs and expenses for such arrangements as between Borrowers and their Restricted Subsidiaries, on the one hand, and the Unrestricted Subsidiaries, on the other hand.

Permitted Lien: as defined in **Section 10.2.2**.

Permitted Parent Entity Investment: as defined in **Section 10.2.3(a)(x)**.

Permitted Refinancing Debt: with respect to any outstanding Debt (the "Original Debt"), any Debt incurred to refinance, refund or replace such Original Debt; provided that (a) the principal amount (or accreted value, if applicable) of such Debt is not increased at the time of such refinancing or refunding or replacement from the principal amount (or accreted value, if applicable) of the Original Debt outstanding immediately prior to such refinancing, refunding or replacement, except by an amount equal to any unpaid accrued interest, fees, expenses and premiums paid in respect of the Original Debt and other amounts paid, and fees and expenses incurred, in connection with such refinancing, refunding or replacement, (b) the final stated maturity and the average life to maturity of any refinancing or refunding or replacement of such Debt is not less than the final stated maturity and then average life to maturity, as applicable, of the Original Debt so refinanced, refunded or replaced, (c) the terms of such Debt shall be not be materially more restrictive to the Obligors (taken as a whole), than the Original Debt being refinanced, refunded or replaced, (d) such Debt shall not be recourse to any Obligor or any Subsidiary of an Obligor other than those Persons which were obligated with respect to the Original Debt that is being so refinanced, refunded or replaced (provided that the foregoing shall not prohibit the guarantee of such Debt by Subsidiaries formed or acquired after the incurrence of such Debt if such Subsidiaries also guarantee the Obligations), (e) if secured, the Liens securing such Debt shall have the same or lesser collateral priority as the Liens securing the Original Debt and such Debt shall not be secured by any categories of assets or property of any Obligor or any Subsidiary of an Obligor that does not secure the Original Debt that is being so refinanced, refunded or replaced unless such assets or property also secure the Obligations, and (f) if the Original Debt was subordinated in right of payment to the Obligations, then the refinancing Debt shall include subordination terms and conditions that are no less favorable to the Lenders in all material respects as those that were applicable to the Original Debt.

Permitted Tax Distributions: without duplication, (i) dividends or distributions by the Company to Parent in an amount required for Parent to pay franchise, excise and similar taxes, (ii) with respect to any taxable period (or portion thereof) for which the Company and any of its subsidiaries are members of a consolidated, combined, affiliated, unitary or similar income tax group for U.S. federal and/or applicable foreign, state or local income tax purposes (each, a "Tax Group") of which a direct or indirect parent of the Company is the common parent, or for which the Company is a partnership or disregarded entity for U.S. federal or applicable foreign, state or local income tax purposes that is wholly-owned (directly or indirectly) by an entity that is taxable as a corporation for such income tax purposes, dividends or distributions by the Company to any direct or indirect parent of the Company in an amount not to exceed the amount of any U.S. federal, foreign, state and/or local income taxes that the Company and/or its subsidiaries that are members of the relevant Tax Group, as applicable, would have paid for such taxable period had the Company and/or such subsidiaries, as applicable, been a stand-alone corporate taxpayer or a stand-alone corporate group; (iii) with respect to any taxable period (or portion thereof) prior to an IPO Event for which the Company is a passthrough entity (including a partnership or disregarded entity) for U.S. federal income tax purposes and is not wholly owned (directly or indirectly) by an entity that is taxable as a corporation for U.S. federal income tax purposes, dividends or distributions by the Company to any member or partner of the Company in accordance with Section 4.1(b) of the Third Amended and Restated Limited Liability Company Agreement of the Company, dated as of January 30, 2018 (taking into account any loss carryforwards of such member or partner available from losses allocable to such member or partner by the Company to the extent such loss is of a character that would allow such loss to be available to reduce taxes in the current taxable period (taking into account any limitations on the utilization of such loss to reduce such taxes and to the extent such loss had not already been utilized)); and (iv) with respect to any taxable period (or portion thereof) beginning at or after an IPO Event for which the Company is a passthrough entity (including a partnership or disregarded entity) for U.S. federal income tax purposes and is not wholly owned (directly or indirectly) by an entity that is taxable as a corporation for U.S. federal income tax purposes, dividends or distributions by the Company to any member or partner of the Company, on or prior to each estimated tax payment date as well as each other applicable due date, on a pro rata basis, such that each such member or partner (or its direct or indirect members or partners, if applicable) receives, in the aggregate for such period, payments or distributions sufficient to equal such member's or partner's U.S. federal, state and/or local income taxes (as applicable) attributable to its direct or indirect ownership of the Company and its subsidiaries with respect to such taxable period (assuming that such member or partner is subject to tax at the highest combined marginal U.S. federal, state, and/or local income tax rates (including any tax rate imposed on "net investment income" by Section 1411 of the Code)) applicable to an individual or, if higher, a corporation, resident in New York, New York, determined by taking into account (A) the deductibility of state and local income taxes for U.S. federal income tax purposes (disregarding any deduction that is subject to a dollar limitation), (B) the alternative minimum tax, (C) any U.S. federal, state and/or local (as applicable) loss carryforwards of such member or partner available from losses of such member or partner attributable to its direct or indirect ownership of the Company and its subsidiaries for prior taxable periods beginning at or after an IPO Event to the extent such loss is of a character that would allow such loss to be available to reduce taxes in the current taxable period (taking into account any limitations on the utilization of such loss to reduce such taxes and to the extent such loss had not already been utilized), (D) the character (e.g., long-term or short-term capital gain or ordinary or exempt) of the applicable income, and (E) any

adjustment to such member or partner's taxable income attributable to its direct or indirect ownership of the Company and its subsidiaries as a result of any tax examination, audit or adjustment with respect to any period (or portion thereof). Notwithstanding the foregoing, no Permitted Tax Distributions may be made in respect of taxable income of Unrestricted Subsidiaries except to the extent that a like amount is received by the Obligors in cash from such Unrestricted Subsidiaries during the most recent twelve (12) calendar month period.

Person: any individual, corporation, limited liability company, partnership, joint venture, association, trust, unincorporated organization, Governmental Authority or other entity of any kind.

Plan: any Benefit Plan maintained for employees of an Obligor or ERISA Affiliate, or to which an Obligor or ERISA Affiliate is required to contribute on behalf of its employees.

Platform: as defined in **Section 14.3.3**.

Pledged Collateral: as defined in **Section 7.3**.

Pledged Debt Securities: as defined in **Section 7.3**.

Pledged Equity Interests: as defined in **Section 7.3**.

Prime Rate: the rate of interest announced by Bank of America from time to time as its prime rate. Such rate is set by Bank of America on the basis of various factors, including its costs and desired return, general economic conditions and other factors, and is used as a reference point for pricing some loans, which may be priced at, above or below such rate. Any change in such rate publicly announced by Bank of America shall take effect at the opening of business on the day specified in the announcement.

Pro Rata: with respect to any Lender, a percentage (rounded to the ninth decimal place) determined (a) by dividing the amount of such Lender's Commitment by the aggregate outstanding Commitments; or (b) following termination of the Commitments, by dividing the amount of such Lender's Loans and LC Obligations by the aggregate outstanding Loans and LC Obligations or, if all Loans and LC Obligations have been paid in full and/or Cash Collateralized, by dividing such Lender's and its Affiliates' remaining Obligations by the aggregate remaining Obligations.

Properly Contested: with respect to any obligation of an Obligor or Subsidiary, (a) the obligation is being properly contested in good faith by appropriate proceedings promptly instituted and diligently pursued; (b) appropriate reserves have been established in accordance with GAAP; (c) while any such contest is pending, there is no material impairment of the enforceability, validity, or priority of any of the Agent's Liens in and to the collateral affected thereby; and (d) the failure to make any payment while any such protest is pending could not reasonably be expected to result in a Material Adverse Effect.

Property: any interest in any kind of property or asset, whether real, personal or mixed, or tangible or intangible.

Protective Advances: as defined in **Section 2.1.6**.

PTE: a prohibited transaction class exemption issued by the U.S. Department of Labor, as amended from time to time.

Qualified ECP: an Obligor with total assets exceeding $10,000,000, or that constitutes an "eligible contract participant" under the Commodity Exchange Act and can cause another Person to qualify as an "eligible contract participant" under Section 1a(18)(A)(v)(II) of such act.

Real Estate: all right, title and interest (whether as owner, lessor or lessee) in any real Property or any buildings, structures, parking areas or other improvements thereon, including sand or mineral mining leases.

Recipient: Agent, Issuing Bank, any Lender or any other recipient of a payment to be made by an Obligor under a Loan Document or on account of an Obligation (excluding any Secured Bank Product Obligation).

Redemption or Redeem: with respect to any Debt, the repurchase, redemption, prepayment, repayment, satisfaction and discharge or defeasance or any other acquisition or retirement for value (or the segregation of funds with respect to any of the foregoing) of any such Debt.

Register: as defined in **Section 13.3.4**.

Reimbursement Certificate: as defined in **Section 3.3**.

Reimbursement Date: as defined in **Section 2.2.2**.

Related Real Estate Documents: with respect to any Real Estate required to be subject to a Mortgage pursuant to**Section 7.4.1**, the following, in form and substance reasonably satisfactory to Agent and received by Agent for review: (a) at least 45 days prior to the effective date of the Mortgage, all information requested by any Lender for its due diligence pursuant to Flood Laws; and (b) at least 15 days prior to the effective date of the Mortgage, (i) such assignments of leases, estoppel letters, attornment agreements, consents, waivers and releases as Agent may reasonably require with respect to other Persons having an interest in the Real Estate; (ii) a current, as-built survey of the Real Estate, containing a metes-and-bounds property description to the extent in the possession of an Obligor; (iii) a life-of-loan flood hazard determination and, if any Real Estate is located in a special flood hazard zone, flood insurance documentation and coverage in accordance with Flood Laws or as otherwise satisfactory to each Lender; and (iv) such other information, documents, instruments or agreements as Agent may reasonably request.

Release Event: as defined in **Section 7.4.3**.

Relevant Governmental Body: the Federal Reserve Board and/or FRBNY, or a committee officially endorsed or convened by the Federal Reserve Board and/or FRBNY.

Rent and Charges Reserve: the aggregate of (a) all past due rent and other amounts owing by an Obligor to any landlord, warehouseman, processor, repairman, mechanic, shipper, freight forwarder, broker or other Person who possesses any Collateral or could assert a Lien on any Collateral; and (b) a reserve equal to three months' rent and other charges that could be payable to any such Person, unless it has executed a reasonably satisfactory Lien Waiver.

Report: as defined in **Section 12.2.3**.

Reportable Event: any event set forth in Section 4043(c) of ERISA, other than an event for which the 30 day notice period has been waived.

Required Lenders: two or more unaffiliated Lenders holding more than 50% of (a) the aggregate outstanding Commitments; or (b) after termination of the Commitments, the aggregate outstanding Loans and LC Obligations or, upon Full Payment of all Loans and LC Obligations, the aggregate remaining Obligations; provided, that (i) Commitments, Loans and other Obligations held by a Defaulting Lender and its Affiliates shall be disregarded in making such calculation, but any related Fronting Exposure shall be deemed held as a Loan or LC Obligation by the Lender (including in its capacity as Issuing Bank) that funded the applicable Loan or issued the applicable Letter of Credit and (ii) in the event there is only one Lender at any time, such Lender shall constitute Required Lenders.

Required Real Estate Collateral: Real Estate of an Obligor that is or was subject to a Lien in favor of the Term Loan Lender to secure the Term Loan Debt or a Lien securing Debt permitted under **Section 10.2.1(n)**; provided, that no item of Real Estate shall constitute Required Real Estate Collateral upon the occurrence of a Release Event with respect to such Real Estate (unless such Real Estate is later subject to a Lien described above following such Release Event).

Rescindable Amount: as defined in **Section 4.1.3(c)**.

Resolution Authority: an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

Restricted Subsidiary: any Subsidiary of an Obligor that is not an Unrestricted Subsidiary.

Restrictive Agreement: an agreement (other than a Loan Document) that conditions or restricts the right of any Borrower, Restricted Subsidiary or other Obligor to incur or repay Borrowed Money, to grant Liens on any assets, to declare or make Distributions, to modify, extend or renew any agreement evidencing Borrowed Money, or to repay any intercompany Debt.

Revolver Usage: the aggregate amount of outstanding LC Obligations (net of Cash Collateral posted with respect to the Stated Amount of Letters of Credit) and Loans.

S&P: Standard & Poor's Financial Services LLC, a subsidiary of S&P Global Inc., or any successor acceptable to Agent.

Sanction: a sanction administered or enforced by the U.S. government, UN Security Council, European Union, U.K. government or other applicable sanctions authority, including restrictions imposed with respect to the specially designated nationals list maintained by the U.S. Treasury Office of Foreign Assets Control (OFAC).

Sand Facility: each of the Kermit Facility and the Monahans Facility.

Sand Facility Improvements: any improvements to the Sand Facilities.

Sand Interests: with respect to any Sand Facility, all rights, titles, interests and estates of any Obligor or any Restricted Subsidiary of any Obligor now or hereafter acquired in and to Real Estate related to such Sand Facility (a) that contains or may contain silica, sand, silica sand, gravel, or minerals or similar substances, and (b) used to excavate, produce, mine, extract or recover such silica, sand, silica sand, gravel, or minerals or similar substances, including any mining lease, license, mineral lease, mineral fee interests, overriding royalty and royalty interests, net profit interests and production payment interests, including any reserved or residual interests of whatever nature, in each case with respect to such silica, sand, silica sand, gravel, or minerals or similar substances, or otherwise used in the mining, transportation, or processing thereof or in the operation of any Obligor's or any Restricted Subsidiary's businesses.

Sand Inventory: Inventory consisting of wet or dry sand, silica or silica sand that has been mined, extracted, or otherwise severed from the land; provided, however, that "Sand Inventory" shall not include any Sand Reserves.

Sand Mine: any excavation or opening into the earth now or hereafter made from which sand, silica, silica sand, gravel or any mineral or similar substance is or can be extracted on or from any Real Estate, now owned or hereafter acquired, to which any Obligor or any Restricted Subsidiary of any Obligor has any right, title, interest or estate.

Sand Properties: (a) Sand Interests; (b) all operating agreements, production sales or other contracts, equipment leases and other agreements that relate to any of the Sand Interests or any interests therein or to the production, sale, purchase, exchange, processing, handling, storage, transporting or marketing of the sand, silica, silica sand, gravel or minerals or similar substances from or attributable to such Sand Interests; (c) all sand, silica, silica sand, gravel and minerals and similar substances in and under and which may be produced and saved or attributable to the Sand Interests, including all work in process and sand, silica, silica sand, gravel and minerals and similar substances extracted from and/or processed from the Sand Interests and in storage, and all rents, issues, profits, proceeds, products, revenues and other incomes from or attributable to the Sand Interests; (d) all tenements, hereditaments, appurtenances and Properties in any manner appertaining, belonging, affixed or incidental to the Sand Interests and (e) all Property, real or personal, now owned or hereinafter acquired and situated upon, used, held for use or useful in connection with the operating, working or development of any of such Sand Interests (excluding personal Property which may be on such premises for temporary uses) and including any and all buildings, structures, plants, compressors, pumps, conveyors, dryers, silos and other storage facilities, transloading equipment, rail equipment, infrastructure, tanks and tank batteries, fixtures, valves, fittings, machinery and parts, engines, boilers, meters, apparatus, equipment, appliances, tools, implements, cables, wires, surface leases, rights-of-way, easements and servitudes together with all additions, substitutions, replacements, accessions and attachments to any and all of the foregoing. Unless otherwise expressly provided herein, all references in this Agreement to "Sand Properties" refer to Sand Properties owned at the time in question by the Obligors or any of their Subsidiaries.

Sand Reserves: collectively, sand reserves that, in accordance with SEC's Industry Guide 7, are classified as "Probable (Indicated) Reserves" or "Proven (Measured) Reserves". Unless otherwise expressly provided herein, all of the references in this Agreement to "Sand Reserves" refer to the Sand Reserves attributable to the Sand Properties of the Obligors.

Sand Reserves Value: as of any date of determination, the present value of the estimated future net revenues, discounted at a rate of 9% per annum, from forecasted sales of Inventory during the remaining expected economic lives of the reserves related thereto.

Scheduled Unavailability Date: as defined in **Section 3.6.2**.

Secured Bank Product Obligations: Debt, obligations and other liabilities with respect to Bank Products owing by an Obligor or Restricted Subsidiary of an Obligor to a Secured Bank Product Provider; provided, that Secured Bank Product Obligations of an Obligor shall not include its Excluded Swap Obligations.

Secured Bank Product Provider: (a) Bank of America or any of its Affiliates; and (b) any other Lender or Affiliate of a Lender that is providing a Bank Product, provided such provider delivers written notice to Agent, in form and substance reasonably satisfactory to Agent, (i) describing the Bank Product and setting forth the maximum amount to be secured by the Collateral and the methodology to be used in calculating such amount, and (ii) agreeing to be bound by **Section 12.14**.

Secured Parties: Agent, Issuing Bank, Lenders and Secured Bank Product Providers.

Securities Account Control Agreement: a control agreement reasonably satisfactory to Agent executed by an institution maintaining a Securities Account for an Obligor, to perfect Agent's Lien on such account.

Securities Act: the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

Security Documents: the Guaranties, IP Assignments, Deposit Account Control Agreements, Securities Account Control Agreements, Credit Card Acknowledgments, Mortgages and all other documents, instruments and agreements now or hereafter securing (or given with the intent to secure) any Obligations.

Senior Officer: the chairman of the board, president, chief executive officer or chief financial officer of the applicable Obligor.

Senior Secured Leverage Ratio: as of any date of determination, the ratio of (a) Consolidated Total Net Debt that is secured by a Lien on any asset or property of the Company or any Restricted Subsidiaries to (b) EBITDA for the four Fiscal Quarter period most recently ended, in each case calculated based on the financial statements most recently delivered whether as Historical Financial Statements or pursuant to **Section 10.1.2(a)** or **Section 10.1.2(b)**.

Settlement Report: a report summarizing Loans and participations in LC Obligations outstanding as of a settlement date, allocated to Lenders on a Pro Rata basis in accordance with their Commitments.

SOFR: the secured overnight financing rate as administered by FRBNY (or a successor administrator).

SOFR Adjustment: 0.10%.

Solvent: as to any Person, such Person (a) owns Property whose fair salable value is greater than the amount required to pay all of its debts (including contingent, subordinated, unmatured and unliquidated liabilities); (b) owns Property whose present fair salable value (as defined below) is greater than the probable total liabilities (including contingent, subordinated, unmatured and unliquidated liabilities) of such Person as they become absolute and matured; (c) is able to pay all of its debts as they mature; (d) has capital that is not unreasonably small for its business and is sufficient to carry on its business and transactions and all business and transactions in which it is about to engage; (e) is not "insolvent" within the meaning of Section 101(32) of the Bankruptcy Code; and (f) has not incurred (by way of assumption or otherwise) any obligations or liabilities (contingent or otherwise) under any Loan Documents, or made any conveyance in connection therewith, with actual intent to hinder, delay or defraud either present or future creditors of such Person or any of its Affiliates. "Fair salable value" means the amount that could be obtained for assets within a reasonable time, either through collection or through sale under ordinary selling conditions by a capable and diligent seller to an interested buyer who is willing (but under no compulsion) to purchase.

Specified Event of Default: an Event of Default under **Section 11.1(a)**, **Section 11.1(b)** (solely to the extent related to the breach of any representation or warranty set forth in a Borrowing Base Report), **Section 11.1(c)** (solely to the extent arising from a breach of **Section 8.1**, **Section 8.2.4**, **Section 8.2.5**, **Section 8.5** or **Section 10.3**), **Section 11.1(i)**, **Section 11.1(j)** or **Section 11.1(k)**.

Specified IPO Event Transactions: collectively, the transactions described to Agent in the restructuring steps slides dated February 3, 2023 and delivered to Agent on February 6, 2023, and any other related actions that are necessary to implement such transactions; provided that immediately following the completion of all such transactions the corporate structure of Parent and its Subsidiaries (including the Company) is substantially as set forth on page 15 of such restructuring steps slides.

Specified Obligor: an Obligor that is not then an "eligible contract participant" under the Commodity Exchange Act (determined prior to giving effect to **Section 5.10**).

Stated Amount: the outstanding undrawn amount of a Letter of Credit, including any automatic increase or tolerance (whether or not then in effect) provided by the Letter of Credit or related LC Documents.

Subordinated Debt: Debt incurred by an Obligor that is expressly subordinate and junior in right of payment to Full Payment of all Obligations, and is on terms (including maturity, interest, fees, repayment, covenants and subordination) satisfactory to Agent.

Subsidiary: any entity at least 50% of whose voting securities or Equity Interests is owned by an Obligor or combination of Obligors (including indirect ownership through other entities in which an Obligor directly or indirectly owns 50% of the voting securities or Equity Interests).

Successor Rate: as defined in **Section 3.6.2**.

Swap: as defined in §1a(47) of the Commodity Exchange Act.

Swap Obligations: obligations under an agreement relating to a Swap.

Swap Termination Value: in respect of any one or more Swaps, after taking into account the effect of any legally enforceable netting agreement relating to such Swaps, (a) for any date on or after the date such Swaps have been closed out and settlement amounts, early termination amounts or termination value(s) determined in accordance therewith, such settlement amounts, early termination amounts or termination value(s), and (b) for any date prior to the date referenced in clause (a), the amount(s) determined as the mark-to-market value(s) for such Swaps, as determined based upon one or more commercially reasonable mid-market or other readily available quotations provided by any dealer which is a party to such Swap or any other recognized dealer in such Swaps.

Swingline Loan: any Borrowing of Base Rate Loans funded with Agent's funds, until such Borrowing is settled among Lenders or repaid by Borrowers.

Taxes: all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

Term Loan Agreement: that certain Credit Agreement dated as of October 20, 2021, among the Company, as borrower, and Term Loan Lender, as amended, restated, replaced or otherwise modified from time to time (subject to **Section 10.2.16**).

Term Loan Debt: as defined in **Section 10.2.1(b)**.

Term Loan Documents: the "Loan Documents" or similar term under (and as defined in) the Term Loan Agreement.

Term Loan Lender: Stonebriar Commercial Finance LLC and its successors and assigns or any replacement lender with respect to the Term Loan Debt.

Term Priority Collateral: as defined in the Intercreditor Agreement.

Term SOFR: (a) for any Interest Period relating to a Loan (other than a Base Rate Loan), a per annum rate equal to the Term SOFR Screen Rate two U.S. Government Securities Business Days prior to such Interest Period, with a term equivalent to such Interest Period (or if such rate is not published prior to 11:00 a.m. on the determination date, the applicable Term SOFR Screen Rate on the U.S. Government Securities Business Day immediately prior thereto), plus the SOFR Adjustment for such Interest Period; and (b) for any interest calculation relating to a Base Rate Loan on any day, a fluctuating rate of interest equal to the Term SOFR Screen Rate with a term of one month commencing that day; provided, that in no event shall Term SOFR be less than zero.

Term SOFR Loan: a Loan that bears interest based on clause (a) of the definition of Term SOFR.

Term SOFR Screen Rate: the forward-looking SOFR term rate administered by CME (or any successor administrator satisfactory to Agent) and published on the applicable Reuters screen page (or such other commercially available source providing such quotations as may be designated by Agent from time to time).

Termination Date: the earliest of (a) February 22, 2028; (b) June 30, 2027, if any portion of the Term Loan Debtremains outstanding on such date and has not been refinanced or extended to a date at least 91 days following the date in clause (a); or (c) any date on which the aggregate Commitments terminate hereunder.

Transferee: any actual or potential Eligible Assignee, Participant or other Person acquiring an interest in any Obligations.

Trigger Period: the period (a) commencing on any day that (i) an Event of Default occurs, (ii) if no Loans or Letters of Credit (other than Letters of Credit that have been Cash Collateralized) are outstanding, Liquidity is less than the Applicable Trigger for five consecutive Business Days, or (iii) if any Loan or Letter of Credit (other than Letters of Credit that have been Cash Collateralized) is outstanding, Availability is less than the Applicable Trigger for five consecutive Business Days; and (b) continuing until, during each of the preceding 30 consecutive days, (i) no Event of Default has existed, (ii) in the case of a Trigger Period arising as a result of clause (a)(ii) above, Liquidity has been more than the Applicable Trigger at all times, and (iii) in the case of a Trigger Period arising as a result of clause (a)(iii) above, Availability has been more than the Applicable Trigger at all times.

UCC: the Uniform Commercial Code as in effect in the State of New York or, when used in reference to a Lien for which the laws of another jurisdiction govern perfection or enforcement, the Uniform Commercial Code of such other jurisdiction, as applicable.

UK Financial Institution: any BRRD Undertaking (as defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any Person subject to IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

UK Resolution Authority: the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

Unfinanced Capital Expenditures: means, with respect to the Company and its Restricted Subsidiaries and for any period, Capital Expenditures of the Company and its Restricted Subsidiaries during such period that are not Financed Capital Expenditures.

Unfunded Pension Liabilities: has the meaning assigned to such term in **Section 9.1.10(f)**.

Unrestricted Cash: unrestricted cash and Cash Equivalents of Obligors in each case that are (i) free and clear of all Liens other than Liens in favor of Agent, Liens permitted under **Section 10.2.2(b)** (other than any Term Cash Collateral Account (as defined in the Intercreditor Agreement)), and Liens permitted under clauses (e) and (f) of the definition of Excepted Liens and (ii) subject to a control agreement in favor of Agent (it being understood that cash and Cash

Equivalents of the Obligors that are subject to control agreements or Liens in favor of Agent shall, in each case, not be deemed "restricted" under this definition unless constituting Cash Collateral). Notwithstanding the foregoing, cash and Cash Equivalents constituting part of the Available Equity Amount at the relevant time of determination, Pass-Through Equity Contributions or Pass-Through Customer Prepayments shall not be treated as Unrestricted Cash.

Unrestricted Subsidiary: any Subsidiary of an Obligor designated as such on **Schedule 9.1.14(a)** or which the Borrower Agent has designated in writing to Agent to be an Unrestricted Subsidiary pursuant to **Section 1.6** and any Subsidiary of an Unrestricted Subsidiary.

Unused Line Fee Rate: a per annum rate equal to (a) 0.50%, if average daily Revolver Usage was less than 50% of the Commitments during the preceding calendar month, or (b) 0.375%, if average daily Revolver Usage was 50% or more of the Commitments during such month.

Upstream Payment: a Distribution by a Subsidiary of an Obligor to such Obligor.

U.S. Government Securities Business Day: any Business Day, except any day on which the Securities Industry and Financial Markets Association, New York Stock Exchange or FRBNY is not open for business because the day is a legal holiday under New York law or U.S. federal law.

U.S. Person: "United States Person" as defined in Section 7701(a)(30) of the Code.

U.S. Tax Compliance Certificate: as defined in **Section 5.9.2(b)(iii)**.

Value: (a) for Inventory, its value determined on the basis of the lower of cost or market, calculated in accordance with GAAP, and excluding any portion of cost attributable to intercompany profit among Obligors and their Affiliates, provided, that, with respect to any Inventory that is anticipated to be sold pursuant to a fixed price contract, the value of such Inventory shall equal such contract price; and (b) for an Account, its face amount, net of any prepayments, deposits, returns, rebates, discounts (calculated on the shortest terms), credits, allowances or sales, excise or other similar Taxes.

Write-Down and Conversion Powers: (a) the write-down and conversion powers of the applicable EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which powers are described in the EUBail-In Legislation Schedule; or (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that Person or any other Person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

1.2 Accounting Terms. Under the Loan Documents (except as otherwise specified therein), all accounting terms shall be interpreted, all accounting determinations shall be made, and all financial statements shall be prepared, in accordance with GAAP applied on a basis consistent with the most recent audited financial statements of the Applicable Reporting Entity delivered to Agent before the Closing Date and using the same inventory valuation method as used in such financial statements; provided, that the Applicable Reporting Entity may adopt a change required or permitted by GAAP after the Closing Date as long as the Applicable Reporting Entity's certified public accountants concur in such change, it is disclosed to Agent and the Loan Documents are amended in a manner satisfactory to Required Lenders to address the change. Upon request by Agent in connection with any such change, the Applicable Reporting Entity's financial statements and Borrower Materials shall set forth a reconciliation between calculations made before and after giving effect to any such change in GAAP. In addition, all accounting terms shall be interpreted, all accounting determinations shall be made and all financial statements shall be prepared without giving effect to any election under *FASB Accounting Standards Codification Topic 825, Financial Instruments*, or any successor thereto (including pursuant to the Accounting Standards Codification), to value any Debt at "fair value", as defined therein. Notwithstanding any changes in GAAP after December 31, 2017, any lease of the Obligors or their Restricted Subsidiaries that would be characterized as an operating lease under GAAP in effect on December 31, 2017 (whether such lease is entered into before or after December 31, 2017) shall not constitute a Capital Lease under this Agreement or any other Loan Document as a result of such changes in GAAP unless otherwise agreed to in writing by the Borrower Agent and the Agent (it being understood and agreed that, for the avoidance of doubt, any future effectiveness of ASC 842 after December 31, 2017 shall be disregarded for purposes of this Agreement).

1.3 Uniform Commercial Code. As used herein, the following terms are defined in accordance with the UCC in effect in the State of New York: "Account," "Account Debtor," "As-Extracted Collateral," "Chattel Paper," "Commercial Tort Claim," "Deposit Account," "Document," "Equipment," "Fixtures," "General Intangibles," "Goods," "Instrument," "Investment Property," "Letter-of-Credit Right," "Payment Intangibles," "Securities Account" and "Supporting Obligation."

1.4 Certain Matters of Construction. The rules of construction and interpretation included in this Section apply to all Loan Documents. The terms "herein," "hereof," "hereunder" and other words of similar import refer to the applicable document as a whole and not to any particular section, paragraph or subdivision. Any pronoun used shall be deemed to cover all genders. In the computation of periods of time from a specified date to a later date, "from" means "from and including," and "to" and "until" each mean "to but excluding." The terms "including" and "include" mean "including, without limitation", "or" includes "and/or", and the rule of *ejusdem generis* does not apply. Section titles appear as a matter of convenience only and will not affect the interpretation of a Loan Document. Reference to any (a) law includes all related regulations, interpretations, supplements, amendments and successor provisions; (b) document, instrument or agreement includes any amendment, extension, supplement, waiver, replacement and other modification thereto (to the extent permitted by the Loan Documents and except as otherwise specified herein); (c) section means, unless the context otherwise requires, a section of the applicable document; (d) exhibit or schedule means, unless the context otherwise requires, an exhibit or schedule to the applicable document, which is thereby incorporated by reference; (e) Person includes its permitted successors and assigns; (f) time of day means the time at Agent's notice address under **Section 14.3.1**; or (g) discretion or satisfaction of Agent, Issuing Bank or any Lender means the sole and absolute discretion of such Person exercised from time to time. Any references to Value, Borrowing Base components, Loans, Letters of Credit, Obligations and other

amounts herein shall be denominated in Dollars, unless expressly provided otherwise, and any determination (including calculation of Borrowing Base and financial covenants) made from time to time by Obligors under the Loan Documents shall be made in light of the circumstances existing at such time. Borrowing Base calculations shall be consistent with historical methods of valuation and calculation, and otherwise reasonably satisfactory to Agent (and not necessarily calculated in accordance with GAAP). Obligors have the burden of establishing any alleged negligence, misconduct or lack of good faith by any Indemnitee under a Loan Document. No provision of a Loan Document shall be construed against a party by reason of it having, or being deemed to have, drafted the provision. Reference to an Obligor's "knowledge" or similar concept means actual knowledge of a Senior Officer, or knowledge that a Senior Officer would have obtained if he or she had engaged in good faith and diligent performance of his or her duties, including reasonably specific inquiries of employees or agents and a good faith attempt to ascertain the matter.

1.5 Division. Any reference herein to a merger, transfer, consolidation, amalgamation, assignment, sale, disposition or transfer, or similar term, shall be deemed to apply to a Division, or an allocation of assets to a series of any such entity (or the unwinding of a Division or allocation) as if it were a merger, transfer, consolidation, amalgamation, assignment, sale, disposition or transfer or similar term, as applicable, to, of or with a separate Person. Any Division of Person shall constitute a separate Person hereunder.

1.6 **Designation and Conversion of Subsidiaries**.

1.6.1 Generally. Unless designated as an Unrestricted Subsidiary on **Schedule 9.1.14(a)** as of the Closing Date or thereafter, assuming compliance with **Section 1.6.2**, any Person that becomes a Subsidiary of an Obligor or any of its Restricted Subsidiaries shall be classified as a Restricted Subsidiary.

1.6.2 Designation. Borrower Agent may designate by written notification thereof to Agent, any Restricted Subsidiary, including a newly formed or newly acquired Subsidiary, as an Unrestricted Subsidiary (other than a Borrower or a direct or indirect parent of a Borrower); provided that (a) immediately prior, and immediately after giving effect, to such designation, no Default or Event of Default shall have occurred and be continuing; (b) each Subsidiary designated as an "Unrestricted Subsidiary" and its Subsidiaries has not at the time of designation, and does not thereafter create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable with respect to any Debt pursuant to which a lender or any other Person has recourse to any Obligor or any Restricted Subsidiary of any Obligor or any of the assets of any Obligor or any Restricted Subsidiary of any Obligor (other than to the extent consisting solely of a pledge of the Equity Interests of such Unrestricted Subsidiary to secure Debt of such Subsidiary); (c) no Obligor or Restricted Subsidiary of any Obligor shall have any liability for any Debt or other obligations of any Unrestricted Subsidiary; (d) such designation is deemed to be (i) an Investment in an Unrestricted Subsidiary in an amount equal to the Fair Market Value as of the date of such designation of the Obligors' direct and indirect ownership interest in the assets of such Subsidiary and such Investment would be permitted to be made at the time of such designation under **Section 10.2.4** and (ii) a Disposition of 100% of the assets of such Subsidiary and such Disposition would be permitted to be made at the time of such designation under **Section 10.2.5**; (e) no Subsidiary may be designated as an Unrestricted Subsidiary (i) if immediately after such designation, it will be a restricted subsidiary for purposes of any other Debt of an Obligor or other Restricted

Subsidiary, (ii) to the extent it owns (directly or indirectly) Equity Interests in any Obligor, any material Intellectual Property, any Sand Facility, or, to the extent constituting assets included in the Borrowing Base (or constituting locations from which assets included in the Borrowing Base in the immediately preceding 90 day period originated) any Sand Interest, Sand Property or Sand Mine or (iii) if it was previously an Unrestricted Subsidiary that had been re-designated as a Restricted Subsidiary; (f) Agent shall have received a Borrowing Base Report (giving pro forma effect to such Unrestricted Subsidiary designation) to the extent that at the time of such designation such Subsidiary holds assets or property constituting more than 5.0% of the assets included in the most recent calculation of the Borrowing Base; (g) the Payment Conditions are satisfied at the time of such designation and immediately after giving effect thereto on a pro forma basis, and (h) Agent shall have received an officer's certificate executed by a Senior Officer of Borrower Agent, certifying compliance with the requirements of the preceding clauses (a) through (g). Notwithstanding the foregoing, no Unrestricted Subsidiary may hold any Debt of, Liens on or Equity Interests in any Obligor or any Restricted Subsidiary (or any of their respective assets). Except as provided in this **Section 1.6.2**, no Restricted Subsidiary may be redesignated as an Unrestricted Subsidiary. For the avoidance of doubt, the ongoing requirements in **clauses (b)**, **(c)** and **(e)** of the first sentence of this **Section 1.6** shall apply to Subsidiaries that are designated as Unrestricted Subsidiaries on **Schedule 9.1.14(a)** on the Closing Date.

1.6.3 Redesignation. Borrower Agent may designate any Unrestricted Subsidiary to be a Restricted Subsidiary if after giving effect to such designation, (a) the representations and warranties of the Obligors and their Restricted Subsidiaries contained in each of the Loan Documents are true and correct in all material respects (without duplication of any materiality qualification applicable thereto) on and as of such date as if made on and as of the date of such redesignation (or, if stated to have been made expressly as of an earlier date, were true and correct as of such date), (b) no Default or Event of Default would exist, (c) such designation shall constitute an incurrence of any Debt and Liens of such Unrestricted Subsidiary and must be permitted under **Section 10.2.1** and **Section 10.2.2**, respectively, and (d) the Obligors comply with the requirements of **Section 10.1.9**. Any such designation shall be treated as a cash dividend in an amount equal to the lesser of the Fair Market Value of the applicable Obligor's direct and indirect ownership interest in such Subsidiary or the amount of the Obligors' cash investment previously made for purposes of the limitation on Investments under **Section 10.2.4**.

1.7 **Negative Covenant Compliance**. For purposes of determining whether the Obligors and their Restricted Subsidiaries comply with any exception to **Section 10.2** where compliance with any such exception is based on a financial ratio or metric being satisfied as of a particular point in time, it is understood that (a) compliance shall be measured at the time when the relevant event is undertaken, as such financial ratios and metrics are intended to be "incurrence" tests and not "maintenance" tests, and (b) correspondingly, any such ratio and metric shall only prohibit the Obligors and their Restricted Subsidiaries from creating, incurring, assuming, suffering to exist or making, as the case may be, any new, for example, Liens, Debt or Investments, but shall not result in any previously permitted, for example, Liens, Debt or Investments ceasing to be permitted hereunder.

Section 2. CREDIT FACILITIES.

2.1 Loan Commitments

2.1.1 Commitments. Each Lender agrees, severally on a Pro Rata basis up to its Commitment, on the terms set forth herein (including **Section 6**), to make Loans to Borrowers from time to time through the Termination Date. The Loans may be repaid and reborrowed as provided herein. In no event shall Lenders have any obligation to honor a request for a Loan if Revolver Usage at such time plus the requested Borrowing would exceed the Borrowing Base.

2.1.2 Notes. Loans and interest accruing thereon shall be evidenced by the records of Agent and the applicable Lender. At the request of a Lender, Borrowers shall deliver promissory note(s) to such Lender, evidencing its Loans.

2.1.3 Use of Proceeds. The proceeds of Loans shall be used by Borrowers solely (a) to satisfy existing Debt; (b) to pay fees and transaction expenses associated with the closing of this credit facility; (c) to pay Obligations in accordance with this Agreement; and (d) for lawful corporate purposes, including working capital. Borrowers shall not, directly or, knowingly, indirectly, use any Letter of Credit or Loan proceeds, nor use, lend, contribute or otherwise make available any Letter of Credit or Loan proceeds to any Subsidiary, joint venture partner or other Person, (i) to purchase or carry, or to reduce or refinance any debt incurred to purchase or carry, any Margin Stock or for any related purpose as governed by any regulation (including Regulation U) of the Federal Reserve Board of Governors; (ii) to fund any activities of or business with any Person, or in any country or territory, that, at the time of issuance of the Letter of Credit or funding of the Loan, is the target of any Sanction; or (iii) in any manner that would result in a violation of a Sanction, Anti-Corruption Law or other Applicable Law by any Person (including any Secured Party or other individual or entity participating in any transaction).

2.1.4 Voluntary Reduction or Termination. Upon at least three Business Days' prior written notice to Agent at any time, Borrowers may terminate or reduce the Commitments. Each reduction shall be specified in the notice, in a minimum amount of $5,000,000 (plus any increment of $1,000,000), and applied ratably to all Commitments. A notice of termination or reduction by Borrowers is irrevocable; provided, that a notice of termination in full may state that such notice is conditional upon the effectiveness of another credit facility or any other transaction or condition, in which case such notice may be revoked by Borrower Agent by notice to Agent on or prior to the specified effective date if such condition is not satisfied.

2.1.5 Overadvances. Any Overadvance shall be repaid by Borrowers within one Business Day of written demand by Agent (including by email), and constitute an Obligation secured by the Collateral, entitled to all benefits of the Loan Documents. Agent may require Lenders to fund Base Rate Loans requested by Borrowers that cause or constitute an Overadvance and to forbear from requiring Borrowers to cure an Overadvance, as long as the total Overadvance does not exceed $7,500,000 and does not continue for more than 30 consecutive days without the consent of Required Lenders. In no event shall Loans be required that would cause Revolver Usage to exceed the aggregate Commitments. No funding or sufferance of an Overadvance shall constitute a waiver by Agent or Lenders of any Event of Default. No Obligor shall be a beneficiary of this Section nor authorized to enforce any of its terms.

2.1.6 Protective Advances. Agent shall be authorized, in its discretion, at any time that any condition in **Section 6** is not satisfied, to make Base Rate Loans ("Protective Advances") (a) up to an aggregate amount of $7,500,000 outstanding at any time, if Agent deems such Loans necessary or desirable to preserve or protect Collateral, or to enhance payment of Obligations, as long as such Loans do not cause Revolver Usage to exceed the aggregate Commitments; or (b) to pay any other amounts chargeable to Obligors under any Loan Documents, including interest, costs, fees and expenses. Each Lender hereby purchases an undivided Pro Rata participation in Protective Advances outstanding from time to time. Required Lenders may at any time revoke Agent's authority to make further Protective Advances under clause (a) by written notice to Agent. Absent such revocation, Agent's determination that funding of a Protective Advance is appropriate shall be conclusive. No funding of a Protective Advance shall constitute a waiver by Agent or Lenders of any Event of Default. No Obligor shall be a beneficiary of this Section nor authorized to enforce any of its terms.

2.1.7 Increase in Commitments. Borrowers may request an increase in Commitments from time to time upon not less than 10 Business Days' notice to Agent, as long as (a) the requested increase is in a minimum amount of $5,000,000 and is offered on the same terms as existing Commitments, except for a closing fee specified by Borrowers, (b) total increases under this Section do not exceed $75,000,000 and no more than five increases are made, and (c) the requested increase does not cause the Commitments to exceed 90% of any applicable cap under any intercreditor or subordination agreement (including the Intercreditor Agreement). Agent shall promptly notify Lenders of the requested increase and, within five Business Days thereafter, each Lender shall notify Agent if and to what extent such Lender commits to increase its Commitment. No Lender is obligated to provide any increase, and any Lender not responding within such period shall be deemed to have declined an increase. If Lenders fail to commit to the full requested increase, Eligible Assignees may issue additional Commitments and become Lenders hereunder. Agent may allocate, in consultation with Borrowers, the increased Commitments among committing Lenders and, if necessary, Eligible Assignees. Total Commitments shall be increased by the requested amount (or such lesser amount committed by Lenders and Eligible Assignees) on a date agreed upon by Agent and Borrower Agent, provided (i) the conditions set forth in **Section 6.2** are satisfied at such time and (ii) flood insurance diligence and documentation have been completed as required by all Flood Laws or otherwise in a manner satisfactory to all Lenders. Agent, Obligors, and the new and existing Lenders shall execute and deliver such documents and agreements as Agent reasonably deems appropriate to evidence the increase in and allocations of Commitments and Obligors shall pay any reasonable and documented out-of-pocket fees and expenses incurred in connection therewith. On the effective date of an increase, the Revolver Usage and other exposures under the Commitments shall be reallocated among Lenders, and settled by Agent as necessary, in accordance with Lenders' adjusted shares of Commitments.

2.2 Letter of Credit Facility.

2.2.1 Issuance of Letters of Credit. Issuing Bank shall issue Letters of Credit from time to time until five Business Days prior to the Termination Date, on the terms set forth herein, including the following:

(a) Each Borrower acknowledges that Issuing Bank's issuance of any Letter of Credit is conditioned upon Issuing Bank's receipt of a LC Application with respect to the requested Letter of Credit, as well as such other instruments and agreements as Issuing Bank may customarily require for issuance of a letter of credit of similar type and amount. Issuing Bank shall have no obligation to issue any Letter of Credit unless (i) Issuing Bank receives a LC Request and LC Application at least three Business Days prior to the requested date of issuance; (ii) each LC Condition is satisfied; and (iii) if a Defaulting Lender exists, such Lender or Borrowers have entered into arrangements reasonably satisfactory to Agent and Issuing Bank to eliminate any Fronting Exposure associated with such Lender. If, in sufficient time to act, Issuing Bank receives written notice from Agent or Required Lenders that a LC Condition has not been satisfied, Issuing Bank shall not issue the requested Letter of Credit. Prior to receipt of any such notice, Issuing Bank shall not be deemed to have knowledge of any failure of LC Conditions. Letters of Credit may not extend beyond the scheduled Termination Date unless Cash Collateralized to the reasonable satisfaction of Agent (it being agreed that delivery of cash collateral in an amount equal to 103% of the Stated Amount of such Letter of Credit shall be satisfactory), and Issuing Bank shall be entitled to issue notices of non-renewal to the beneficiaries thereof with respect to any Letter of Credit with automatic renewal provisions.

(b) Letters of Credit may be requested by a Borrower to support obligations incurred by Obligors. Increase, renewal or extension of a Letter of Credit shall be treated as issuance of a new Letter of Credit, but Issuing Bank may require a new LC Application in its discretion.

(c) Borrowers assume all risks of beneficiaries' acts, omissions or misuses of Letters of Credit. None of Agent, Issuing Bank or Lenders shall be responsible for the existence, character, quality, quantity, condition, packing, value or delivery of any goods purported to be represented by any Documents; differences or variation in the character, quality, quantity, condition, packing, value or delivery of any goods from that expressed in any Documents; the form, validity, sufficiency, accuracy, genuineness or legal effect of any Documents or any endorsements thereon; the time, place, manner or order in which shipment of goods is made; partial, incomplete or failed shipment of any goods referred to in a Letter of Credit or Documents; deviation from instructions, delay, default or fraud by any shipper or other Person in connection with any goods, shipment or delivery; breach of contract between a shipper or vendor and an Obligor; errors, omissions, interruptions or delays in transmission or delivery of any messages, by mail, cable, telegraph, telex, telecopy, e-mail, telephone or otherwise; errors in translation or interpretation of technical terms; misapplication by a beneficiary of a Letter of Credit or proceeds thereof; or consequences arising from causes beyond the control of Issuing Bank, Agent or any Lender, including any act or omission of a Governmental Authority. Obligors shall take commercially reasonable actions (including enforcement of available rights against a beneficiary) requested by Issuing Bank or Agent to avoid and mitigate damages relating to Letters of Credit or claimed against Issuing Bank, Agent or any Lender. Issuing Bank shall be fully subrogated to all rights and remedies of a beneficiary whose claims are discharged through a Letter of Credit.

(d) In connection with its administration of and enforcement of rights or remedies under any Letters of Credit or LC Documents, Issuing Bank shall be entitled to act, and shall be fully protected in acting, upon any certification, documentation or other Communication in whatever form believed by Issuing Bank, in good faith, to be genuine and correct and to have been signed, sent or made by a proper Person. Issuing Bank may use legal counsel, accountants and other experts to advise it concerning its obligations, rights and remedies, and shall be entitled to act (and shall be fully protected in any action taken in good faith reliance) upon any advice given by such experts. Issuing Bank may employ agents and attorneys-in-fact in connection with any matter relating to Letters of Credit or LC Documents, and shall not be liable for the negligence or misconduct of agents and attorneys-in-fact selected with reasonable care.

2.2.2 Reimbursement; Participations.

(a) If Issuing Bank honors any request for payment under a Letter of Credit, Borrowers shall pay to Issuing Bank, (i) within one Business Day of the date of such drawing or disbursement if the Issuing Bank provides notice to the Borrower Agent of such drawing or disbursement prior to 11:00 a.m. (Central time) on such prior Business Day after the date of such drawing or disbursement or (ii) if such notice is received after such time, on the next Business Day following the date of receipt of such notice (such required date for reimbursement under clause (i) or (ii), as applicable, the "Reimbursement Date"), the amount paid by Issuing Bank under such Letter of Credit, together with interest at the interest rate for Base Rate Loans from the Reimbursement Date until payment by Borrowers. The obligation of Borrowers to reimburse Issuing Bank for any payment made under a Letter of Credit shall be absolute, unconditional, irrevocable, and joint and several, and shall be paid without regard to any lack of validity or enforceability of any Letter of Credit or the existence of any claim, setoff, defense or other right that Borrowers may have at any time against the beneficiary. Whether or not Borrower Agent submits a Notice of Borrowing, Borrowers shall be deemed to have requested a Borrowing of Base Rate Loans in an amount necessary to pay all amounts due Issuing Bank on any Reimbursement Date and each Lender shall fund its Pro Rata share of such Borrowing whether or not the Commitments have terminated, an Overadvance exists or is created thereby, or the conditions in **Section 6** are satisfied.

(b) Each Lender hereby irrevocably and unconditionally purchases from Issuing Bank, without recourse or warranty, an undivided Pro Rata participation in all LC Obligations outstanding from time to time. Issuing Bank is issuing Letters of Credit in reliance upon this participation. If Borrowers do not make a payment to Issuing Bank when due hereunder, Agent shall promptly notify Lenders and each Lender shall within one Business Day after such notice pay to Agent, for the benefit of Issuing Bank, the Lender's Pro Rata share of such payment. Upon request by a Lender, Issuing Bank shall provide copies of Letters of Credit and LC Documents in its possession.

(c) The obligation of each Lender to make payments to Agent for the account of Issuing Bank in connection with Issuing Bank's payment under a Letter of Credit shall be absolute, unconditional and irrevocable, not subject to any counterclaim, setoff, qualification or exception whatsoever, and shall be made as provided in this Agreement under all circumstances, irrespective of any lack of validity or unenforceability of any Loan Documents; a draft, certificate or other document presented under a Letter of Credit being determined to be forged, fraudulent, noncompliant, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; waiver by Issuing Bank of a requirement that exists for its protection (and not a Obligor's protection) or that does not materially prejudice an Obligor; honor of an electronic demand for payment even if a draft is required; payment of an item presented after a Letter of Credit's expiration date if authorized by the UCC or applicable customs or practices; or any setoff or defense that an Obligor may have with respect to any Obligations. Issuing Bank does

not assume responsibility for any failure or delay in performance or any breach by any Obligor or other Person of any obligations under any LC Documents. Issuing Bank does not make any express or implied warranty, representation or guaranty to Lenders with respect to any Letter of Credit, Collateral, LC Document or Obligor. Issuing Bank shall not be responsible to any Lender for any recitals, statements, information, representations or warranties contained in, or for the execution, validity, genuineness, effectiveness or enforceability of any LC Documents; the validity, genuineness, enforceability, collectability, value or sufficiency of any Collateral or perfection of any Lien therein; or the assets, liabilities, financial condition, results of operations, business, creditworthiness or legal status of any Obligor.

(d) No Indemnitee shall be liable to any Obligor, Lender or other Person for any action taken or omitted to be taken in connection with any Letter of Credit or LC Document except as a result of such Indemnitee's gross negligence or willful misconduct. Issuing Bank may refrain from taking any action with respect to a Letter of Credit until it receives written instructions (and in its discretion, appropriate assurances) from the Lenders.

2.2.3 Cash Collateral. At Agent's or Issuing Bank's request, Obligors shall Cash Collateralize (a) the Fronting Exposure of any Defaulting Lender; and (b) all outstanding Letters of Credit if an Event of Default exists (provided, that such cash collateral shall be returned to the Obligors upon the cure or waiver of such Event of Default), the Termination Date is scheduled to occur within five Business Days or the Termination Date occurs. If Obligors fail to provide any Cash Collateral as required hereunder, Lenders may (and shall upon direction of Agent) advance, as Loans, the amount of Cash Collateral required (whether or not the Commitments have terminated, an Overadvance exists or the conditions in **Section 6** are satisfied).

2.2.4 Resignation of Issuing Bank. Issuing Bank may resign at any time upon 30 days' prior written notice to Agent and Borrowers, and any resignation of Agent hereunder shall automatically constitute its concurrent notice of resignation as Issuing Bank. In the event of any such resignation as Issuing Bank, the Borrowers shall be entitled to appoint from among the Lenders a successor Issuing Bank hereunder; provided, that no failure by the Borrowers to appoint any such successor shall affect the resignation of the resigning Issuing Bank. From the effective date of its resignation, Issuing Bank shall have no obligation to issue, amend, renew, extend or otherwise modify any Letter of Credit, but shall otherwise have all rights and obligations of an Issuing Bank hereunder relating to any Letter of Credit issued by it prior to such date. A replacement Issuing Bank may be appointed by written agreement among Agent, Borrower Agent and the new Issuing Bank.

Section 3. INTEREST, FEES AND CHARGES

3.1 Interest

3.1.1 Rates and Payment of Interest.

(a) The Obligations shall bear interest (i) if a Base Rate Loan, at the Base Rate in effect from time to time, plus the Applicable Margin; (ii) if a Term SOFR Loan, at Term SOFR for the applicable Interest Period, plus the Applicable Margin; and (iii) if any other Obligation (including, to the extent permitted by law, interest not paid when due), at the Base Rate in effect from time to time, plus the Applicable Margin for Base Rate Loans.

(b) During an Insolvency Proceeding with respect to any Obligor, or during any other Specified Event of Default if Agent or Required Lenders in their discretion so elect, all overdue Obligations shall bear interest at the Default Rate (whether before or after any judgment), payable **on demand**.

(c) Interest shall accrue from the date a Loan is advanced or Obligation is incurred or payable, as applicable, until paid in full by Borrowers, and shall in no event be less than zero at any time. Interest accrued on the Loans is due and payable in arrears (i) on each Interest Payment Date; (ii) concurrently with prepayment of any Loan, with respect to the principal amount being prepaid; and (iii) on the Termination Date. Interest accrued on any other Obligations shall be due and payable as provided in the applicable agreements or, if no payment date is specified, within five Business Days of Agent's demand therefor.

3.1.2 Application of Term SOFR to Outstanding Loans

(a) Borrowers may elect to convert any portion of Base Rate Loans to, or to continue any Term SOFR Loan at the end of its Interest Period as, a Term SOFR Loan. During any Default or Event of Default, Agent may (and shall at the direction of Required Lenders) declare that no Loan may be made, converted or continued as a Term SOFR Loan.

(b) Borrower Agent shall give Agent a Notice of Conversion/Continuation by 11:00 a.m. at least three Business Days before the requested conversion or continuation date. Promptly after receiving such notice, Agent shall notify each Lender thereof. Each Notice of Conversion/Continuation is irrevocable, and shall specify the amount of Loans to be converted or continued, the conversion or continuation date (which shall be a Business Day), and the duration of the Interest Period (which shall be deemed to be one month if not specified). If, at expiration of an Interest Period for a Term SOFR Loan, Borrowers have failed to deliver a Notice of Conversion/Continuation, the Loan shall convert to a Base Rate Loan. Agent does not warrant or accept responsibility for, nor shall it have any liability with respect to, administration, submission or any other matter related to any reference rate referred to herein or with respect to any rate (including, for the avoidance of doubt, the selection of such rate and any related spread or other adjustment) that is an alternate, replacement or successor to such rate (including any Successor Rate), or any component thereof, or the effect of any of the foregoing, or of any Conforming Changes. The Agent and its affiliates or other related entities may engage in transactions or other activities that affect any reference rate referred to herein, or any alternative, successor or replacement rate (including, without limitation, any Successor Rate) (or any component of any of the foregoing) or any related spread or other adjustments thereto, in each case, in a manner adverse to the Borrowers. Agent may select information source(s) in its discretion to ascertain any reference rate referred to herein or any alternative, successor or replacement rate (including any Successor Rate), or any component thereof, in each case pursuant to the terms hereof, and shall have no liability to any Lender, Obligor or other Person for damages of any kind, including direct or indirect, special, punitive, incidental or consequential damages, costs, losses or expenses (whether in tort, contract or otherwise, and whether at law or in equity) for any error or other act or omission related to or affecting the selection, determination or calculation of any rate (or component thereof) provided by such information source(s).

3.1.3 Interest Periods. Borrowers shall select an interest period ("Interest Period") of one, three or six months (in each case, subject to availability) to apply to each Term SOFR Loan; provided, that (a) the Interest Period shall begin on the date the Loan is made or continued as, or converted into, a Term SOFR Loan, and shall expire one, three or six months thereafter, as applicable; (b) if any Interest Period begins on the last day of a calendar month or on a day for which there is no numerically corresponding day in the calendar month at its end, or if such corresponding day falls after the last Business Day of the end month, then the Interest Period shall expire on the end month's last Business Day; and if any Interest Period would otherwise expire on a day that is not a Business Day, the period shall expire on the next Business Day; and (c) no Interest Period shall extend beyond the Termination Date.

3.2 Fees.

3.2.1 Unused Line Fee. Borrowers shall pay to Agent, for the Pro Rata benefit of Lenders, a fee equal to the Unused Line Fee Rate times the amount by which the Commitments exceed the average daily Revolver Usage during any month. Such fee shall be payable in arrears, on the first day of each quarter and on the Termination Date.

3.2.2 LC Facility Fees. Borrowers shall pay (a) to Agent, for the Pro Rata benefit of Lenders, a fee equal to the Applicable Margin in effect for Term SOFR Loans times the average daily Stated Amount of Letters of Credit, payable in arrears on the first day of each quarter; (b) to Issuing Bank, for its own account, a fronting fee equal to 0.125% per annum on the Stated Amount of each Letter of Credit, payable in arrears on the first day of each quarter; and (c) to Issuing Bank, for its own account, all customary charges associated with issuance, amending, negotiating, payment, processing, transfer and administration of Letters of Credit, payable as and when incurred. During an Event of Default, the fee payable under **clause (a)** shall be increased by 2% per annum.

3.2.3 Fee Letters. Borrowers shall pay all fees set forth in any fee letter executed in connection with this Agreement.

3.3 Computation of Interest, Fees, Yield Protection. All computations of interest for Base Rate Loans (including Base Rate Loans determined by reference to Term SOFR) shall be computed for actual days elapsed, based on a year of 365 or 366 days, as applicable. All other interest, as well as fees and other charges calculated on a per annum basis, shall be computed for actual days elapsed, based on a year of 360 days. Each determination by Agent of any interest, fee, interest rate or amounts payable hereunder shall be final, conclusive and binding for all purposes, absent manifest error. All fees shall be fully earned when due and shall not be subject to rebate, refund or proration. All fees payable under **Section 3.2** are compensation for services and are not, and shall not be deemed to be, interest or any other charge for the use, forbearance or detention of money. A certificate as to amounts payable by Borrowers under **Section 3.4**, **3.7**, **3.9** or **5.8** that is submitted to Borrower Agent by Agent or the affected Lender in reasonable detail (a "Reimbursement Certificate") shall be final, conclusive and binding for all purposes, absent manifest error, and Borrowers shall pay such amounts to the appropriate party within 10 days following receipt of the certificate.

3.4 Reimbursement Obligations. Obligors shall pay all Claims within 10 days of receipt of a reasonably detailed written request therefor from the requesting Person. Obligors shall also reimburse Agent for all reasonable and documented legal, accounting, appraisal, consulting, and other fees and expenses incurred by it in connection with (a) the negotiation and preparation of Loan Documents, including any modification thereof; (b) the administration of and actions relating to any Collateral, Loan Documents and the transactions contemplated thereby, including any actions taken to perfect or maintain priority of Agent's Liens on any Collateral, to maintain any insurance required hereunder that the Obligors fail to maintain or to verify Collateral; and (c) subject to **Section 10.1.1(b)**, any examination or appraisal with respect to any Obligor or Collateral by Agent's personnel or a third party. All legal, accounting and consulting fees shall be charged to Obligors by Agent's professionals at their then applicable hourly rates, regardless of any alternative fee arrangements that Agent, any Lender or any of their Affiliates may have with such professionals that otherwise might apply to any other transaction. Obligors acknowledge that counsel may provide Agent with a benefit (such as a discount, credit or accommodation for other matters) based on counsel's overall relationship with Agent, including fees paid hereunder. If, for any reason (including inaccurate information in Borrower Materials), it is determined that a higher Applicable Margin should have applied to a period than was actually applied, then the proper margin shall be applied retroactively and Borrowers shall within 10 days following Agent's demand therefor pay to Agent, for the ratable benefit of Lenders, an amount equal to the difference between the amount of interest and fees that would have accrued using the proper margin and the amount actually paid. All amounts payable by Obligors under this Section shall be due within 10 days in accordance with **Section 3.3**. This **Section 3.4** shall be subject to the Legal Expenses Limitation.

3.5 Illegality. If any Lender determines that any Applicable Law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for any Lender or its applicable Lending Office to perform any of its obligations hereunder, to make, maintain, issue, fund or commit to, participate in, or charge applicable interest or fees with respect to any Loan or Letter of Credit, or to determine or charge interest or fees based on SOFR or Term SOFR, then, on notice thereof by such Lender to Agent, (a) any obligation of such Lender to perform such obligations, to make, maintain, issue, fund, commit to or participate in the Loan or Letter of Credit (or to charge interest or fees otherwise applicable thereto), or to continue or convert Loans as Term SOFR Loans, shall be suspended and Borrowers shall make such appropriate accommodations regarding affected Letters of Credit as Agent or such Lender may reasonably request, as applicable, (b) if such notice asserts the illegality of such Lender to make or maintain Base Rate Loans whose interest rate is determined by reference to Term SOFR, the interest rate applicable to such Lender's Base Rate Loans shall, as necessary to avoid such illegality, be determined by Agent without reference to the Term SOFR component of Base Rate, in each case until such Lender notifies Agent that the circumstances giving rise to Lender's determination no longer exist. Upon delivery of such notice, Borrowers shall prepay or convert Term SOFR Loans of such Lender to Base Rate Loans, either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain the Loan and charge applicable interest to such day, or immediately, if such Lender cannot so maintain the Loan. Upon any prepayment or conversion of a Loan pursuant to this Section, Borrowers shall also pay accrued interest on the amount so prepaid or converted.

3.6 Inability to Determine Rates

3.6.1 Inability to Determine Rate. If in connection with any request for a Term SOFR Loan or a conversion to or continuation thereof, as applicable, (a) Agent determines (which determination shall be conclusive absent manifest error) that (i) no Successor Rate has been determined in accordance with **Section 3.6.2**, and the circumstances under **Section 3.6.2(a)** or the Scheduled Unavailability Date has occurred (as applicable), or (ii) adequate and reasonable means do not otherwise exist for determining Term SOFR for any requested Interest Period with respect to a proposed Term SOFR Loan or in connection with an existing or proposed Base Rate Loan, or (b) Agent or Required Lenders determine that for any reason Term SOFR for any requested Interest Period with respect to a proposed Term SOFR Loan does not adequately and fairly reflect the cost to such Lenders of funding such Loan, Agent will promptly so notify Borrowers and Lenders. Thereafter, (x) the obligation of Lenders to make, maintain, or convert Base Rate Loans to, Term SOFR Loans shall be suspended (to the extent of the affected Term SOFR Loans or Interest Periods), and (y) in the event of a determination described in the preceding sentence with respect to the Term SOFR component of Base Rate, the utilization of such component in determining Base Rate shall be suspended, in each case until Agent (or, in the case of a determination by Required Lenders described above, until Agent upon instruction of Required Lenders) revokes such notice. Upon receipt of such notice, (I) Borrowers may revoke any pending request for a Borrowing, conversion or continuation of Term SOFR Loans (to the extent of the affected Term SOFR Loans or Interest Periods) or, failing that, will be deemed to have converted such request into a request for Base Rate Loans, and (II) any outstanding Term SOFR Loans shall convert to Base Rate Loans at the end of their respective Interest Periods.

3.6.2 Successor Rates. Notwithstanding anything to the contrary in any Loan Document, if Agent determines (which determination shall be conclusive absent manifest error), or Borrower Agent or Required Lenders notify Agent (with, in the case of the Required Lenders, a copy to Borrower Agent) that Borrowers or Required Lenders (as applicable) have determined, that:

(a) adequate and reasonable means do not exist for ascertaining one, three and six month interest periods of Term SOFR, including because the Term SOFR Screen Rate is not available or published on a current basis, and such circumstances are unlikely to be temporary; or

(b) CME or any successor administrator of the Term SOFR Screen Rate or a Governmental Authority having jurisdiction over Agent, CME or such administrator with respect to its publication of Term SOFR, in each case acting in such capacity, has made a public statement identifying a specific date after which one, three and six month interest periods of Term SOFR or the Term SOFR Screen Rate shall or will no longer be made available or permitted to be used for determining the interest rate of U.S. dollar denominated syndicated loans, or shall or will otherwise cease, provided, that at the time of such statement, there is no successor administrator satisfactory to Agent that will continue to provide such interest periods of Term SOFR after such specific date (the latest date on which one, three and six month interest periods of Term SOFR or the Term SOFR Screen Rate are no longer available permanently or indefinitely, "Scheduled Unavailability Date");

then, on a date and time determined by Agent (any such date, "Term SOFR Replacement Date"), which date shall be at the end of an Interest Period or on the relevant interest payment date, as applicable, for interest calculated and, solely with respect to clause (b) above, no later than the Scheduled Unavailability Date, Term SOFR will be replaced hereunder and under any other applicable Loan Document with Daily Simple SOFR plus the SOFR Adjustment, for any payment period for interest calculated that can be determined by Agent, in each case, without any amendment to, or further action or consent of any other party to, any Loan Document ("Successor Rate"). If the Successor Rate is Daily Simple SOFR plus the SOFR Adjustment, all interest will be payable on a monthly basis.

Notwithstanding anything to the contrary herein, (x) if Agent determines that Daily Simple SOFR is not available on or prior to the Term SOFR Replacement Date or (y) if the events or circumstances of the type described in clauses (a) or (b) above have occurred with respect to the Successor Rate then in effect, then in each case, Agent and Borrower Agent may amend this Agreement solely for the purpose of replacing Term SOFR or any then current Successor Rate in accordance with this Section at the end of any Interest Period, relevant interest payment date or payment period for interest calculated, as applicable, with an alternative benchmark rate giving due consideration to any evolving or then existing convention for such alternative benchmarks in similar U.S. dollar denominated credit facilities syndicated and agented in the United States and, in each case, including any mathematical or other adjustments to such benchmark giving due consideration to any evolving or then existing convention for such benchmarks in similar U.S. dollar denominated credit facilities syndicated and agented in the United States, which adjustment or method for calculating such adjustment shall be published on an information service selected by Agent from time to time in its discretion and may be periodically updated. For the avoidance of doubt, any such proposed rate and adjustments shall constitute a Successor Rate. Any such amendment shall become effective at 5:00 p.m. on the fifth Business Day after Agent posts such proposed amendment to all Lenders and Borrowers unless, prior to such time, Required Lenders deliver to Agent written notice that Required Lenders object to the amendment.

Agent will promptly (in one or more notices) notify Borrowers and Lenders of implementation of any Successor Rate. A Successor Rate shall be applied in a manner consistent with market practice; provided, that to the extent market practice is not administratively feasible for Agent, the Successor Rate shall be applied in a manner as otherwise reasonably determined by Agent. Notwithstanding anything else herein, if at any time any Successor Rate as so determined would otherwise be less than zero, the Successor Rate will be deemed to be zero for all purposes of the Loan Documents.

3.7 Increased Costs; Capital Adequacy

3.7.1 Increased Costs Generally. If any Change in Law shall:

(a) impose, modify or deem applicable any reserve, liquidity, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender or Issuing Bank;

(b) subject any Recipient to Taxes (other than (i) Indemnified Taxes, (ii) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes, and (iii) Connection Income Taxes) with respect to any Loan, Letter of Credit, Commitment or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(c) impose on any Lender, Issuing Bank or any applicable interbank market any other condition, cost or expense (in each case, other than Taxes) affecting any Loan, Letter of Credit, participation in LC Obligations, Commitment or Loan Document;

and the result thereof shall be to increase the cost to a Lender of making or maintaining any Loan or its Commitment, or converting to or continuing any interest option for a Loan, or to increase the cost to a Lender or Issuing Bank of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by a Lender or Issuing Bank hereunder (whether of principal, interest or any other amount) then, within 10 days following the written request of such Lender or Issuing Bank in accordance with **Section 3.3**, Borrowers will pay to it such additional amount(s) as will compensate it for the additional costs incurred or reduction suffered as set forth in such request.

3.7.2 Capital Requirements. If a Lender or Issuing Bank determines that a Change in Law affecting it or its holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's, Issuing Bank's or holding company's capital as a consequence of this Agreement, or such Lender's or Issuing Bank's Commitment, Loans, Letters of Credit or participations in LC Obligations or Loans, to a level below that which such Lender, Issuing Bank or holding company could have achieved but for such Change in Law (taking into consideration its policies with respect to capital adequacy), then from time to time Borrowers will pay to such Lender or Issuing Bank, as the case may be, such additional amounts as will compensate it or its holding company for the reduction suffered within 10 days following delivery of a written request therefor in accordance with **Section 3.3**.

3.7.3 Compensation. Failure or delay on the part of any Lender or Issuing Bank to demand compensation pursuant to this Section shall not constitute a waiver of its right to demand such compensation, but Borrowers shall not be required to compensate a Lender or Issuing Bank for any increased costs, reductions or other amounts pursuant to this Section suffered more than six months (plus any period of retroactivity of the Change in Law giving rise to the demand) prior to the date that the Lender or Issuing Bank notifies Borrower Agent of the applicable Change in Law and of such Lender's or Issuing Bank's intention to claim compensation therefor.

3.8 Mitigation. If any Lender gives a notice under **Section 3.5** or requests compensation under **Section 3.7**, or if Borrowers are required to pay any Indemnified Taxes or additional amounts with respect to a Lender under **Section 5.8**, then at the request of Borrower Agent, such Lender shall use reasonable efforts to designate or assign its obligations hereunder to a different Lending Office, if, in the judgment of such Lender, such designation or assignment would eliminate the need for such notice or reduce amounts payable or to be withheld in the future, would not subject the Lender to any unreimbursed cost or expense, and would not otherwise be disadvantageous to it or unlawful. Borrowers shall pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

3.9 Funding Losses. If for any reason (a) any Borrowing, conversion or continuation of a Loan (other than a Base Rate Loan) does not occur on the date specified therefor in a Notice of Borrowing or Notice of Conversion/Continuation (whether or not withdrawn), (b) any repayment or conversion of a Loan (other than a Base Rate Loan) occurs on a day other than the end of its Interest Period or tenor, (c) Borrowers fail to repay a Loan (other than a Base Rate Loan) when required, or (d) a Lender (other than a Defaulting Lender) is required to assign a Loan (other than a Base Rate Loan) prior to the end of its Interest Period pursuant to **Section 13.4**, then Borrowers shall pay to Agent its customary administrative charge and to each Lender all losses, expenses and fees arising from redeployment of funds or termination of match funding, but excluding any loss of anticipated profits. All amounts payable by Obligors under this Section shall be due within 10 days following delivery of a written request therefor in accordance with **Section 3.3**.

3.10 Maximum Interest. Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by Applicable Law ("maximum rate"). If Agent or any Lender shall receive interest in an amount that exceeds the maximum rate, the excess interest shall be applied to the principal of the Obligations or, if it exceeds such unpaid principal, refunded to Borrowers. In determining whether the interest contracted for, charged or received by Agent or a Lender exceeds the maximum rate, such Person may, to the extent permitted by Applicable Law, (a) characterize any payment that is not principal as an expense, fee or premium rather than interest; (b) exclude voluntary prepayments and the effects thereof; and (c) amortize, prorate, allocate and spread (in equal or unequal parts) the total amount of interest throughout the contemplated term of the Obligations hereunder.

Section 4. LOAN ADMINISTRATION.

4.1 Manner of Borrowing and Funding Loans

4.1.1 Notice of Borrowing.

(a) To request Loans, Borrower Agent shall deliver a Notice of Borrowing to Agent by 12:00 p.m. (noon) (i) on the requested funding date, in the case of Base Rate Loans, and (ii) at least two Business Days prior to the requested funding date, in the case of Term SOFR Loans. Notices received by Agent after such time shall be deemed received on the next Business Day. Each Notice of Borrowing is irrevocable and must specify (A) the Borrowing amount, (B) the requested funding date (which must be a Business Day), (C) whether the Borrowing is to be made as a Base Rate Loan or Term SOFR Loan, and (D) in the case of a Term SOFR Loan, the applicable Interest Period (which shall be deemed to be one month if not specified).

(b) Unless payment is otherwise made by Borrowers, the becoming due of any Obligation (whether principal, interest, fees or other charges, including any Swingline Loan, Overadvance, Protective Advance, Extraordinary Expenses, LC Obligations, Cash Collateral and Secured Bank Product Obligations) shall be deemed to be a request for a Base Rate Loan on the due date in the amount due and the Loan proceeds shall be disbursed as direct payment of such Obligation.

(c) If a Borrower maintains a disbursement account with Agent or any of its Affiliates, then presentation for payment in the account of a Payment Item when there are insufficient funds to cover it shall be deemed to be a request for a Base Rate Loan on the presentation date, in the amount of the Payment Item. Proceeds of the Loan may be disbursed directly to the account.

4.1.2 Funding by Lenders. Except for Swingline Loans, Agent shall endeavor to notify Lenders of each Notice of Borrowing (or deemed request for a Borrowing) by 1:00 p.m. on the proposed funding date for a Base Rate Loan or by 3:00 p.m. two Business Days before a proposed funding of a Term SOFR Loan. Each Lender shall fund its Pro Rata share of a Borrowing in immediately available funds not later than 3:00 p.m. on the requested funding date, unless Agent's notice is received after the times provided above, in which case Lender shall fund by 10:00 a.m. on the next Business Day. Subject to its receipt of such amounts from Lenders, Agent shall disburse the Borrowing proceeds in a manner directed by Borrower Agent and acceptable to Agent. Unless Agent receives (in sufficient time to act) written notice from a Lender that it will not fund its share of a Borrowing, Agent may assume that such Lender has deposited or promptly will deposit its share with Agent, and Agent may disburse a corresponding amount to Borrowers. If a Lender's share of a Borrowing or of a settlement under **Section 4.1.3(b)** is not received by Agent, then Borrowers agree to repay to Agent within one Business Day of demand therefor the amount of such share, together with interest thereon from the date disbursed until repaid, at the rate applicable to the Borrowing. Agent, a Lender or Issuing Bank may fulfill its obligations under Loan Documents through one or more Lending Offices, and this shall not affect any obligation of Obligors under the Loan Documents or with respect to any Obligations.

4.1.3 Swingline Loans; Settlement; Rescindable Amounts.

(a) To fulfill any request for a Base Rate Loan hereunder, Agent may in its discretion advance Swingline Loans to Borrowers, up to an aggregate outstanding amount of $7,500,000. Swingline Loans shall constitute Loans for all purposes, except that payments thereon shall be made to Agent for its own account until settled with or funded by Lenders hereunder. Each Lender hereby purchases, without recourse or warranty, an undivided Pro Rata participation in all Swingline Loans outstanding from time to time.

(b) Settlement of Loans, including Swingline Loans and Protective Advances, among Lenders and Agent shall take place on a date determined from time to time by Agent (but at least weekly, unless the settlement amount is de minimis), on a Pro Rata basis in accordance with the Settlement Report delivered by Agent to Lenders. Between settlement dates, Agent may in its discretion apply any payment received from an Obligor to Swingline Loans and Protective Advances, regardless of any designation by any Obligor or anything herein to the contrary. If any Loan cannot be settled among Lenders, whether due to an Obligor's Insolvency Proceeding or otherwise, each Lender shall pay the amount of its participation in the Loan to Agent, in immediately available funds, within one Business Day after Agent's request therefor. Interest on a Loan shall be payable in favor of a Lender from the later of the date the Loan is advanced to Borrowers or the Lender funds the Loan (or participation therein). No Obligor or Secured Party shall be entitled to credit for interest paid by a Secured Party to Agent pursuant to **Section 4.1.3(c)** or **12.10.2**, nor shall a Defaulting Lender be entitled to interest on amounts held by Agent pursuant to **Section 4.2.** Lenders' obligations to make settlements and to fund participations are absolute, irrevocable and unconditional, without offset, counterclaim or other defense, and whether or not the Commitments have terminated, an Overadvance exists or the conditions in **Section 6** are satisfied.

(c) Unless Agent receives notice from Borrowers prior to the date on which a payment is due to Agent for the account of Lenders or Issuing Bank hereunder that Borrowers will not make such payment, Agent may assume that Borrowers have made such payment on such date in accordance herewith and may, in reliance on such assumption, distribute to Lenders or Issuing Bank, as applicable, the amount due. With respect to any payment that Agent makes for the account of Lenders or Issuing Bank hereunder as to which Agent determines (which determination shall be conclusive absent manifest error) that any of the following applies (such payment, a "Rescindable Amount"): (1) Borrowers have not in fact made such payment, (2) Agent has made a payment in excess of the amount so paid by Borrowers (whether or not then owed), or (3) Agent has for any reason otherwise erroneously made such payment, then each Lender or Issuing Bank, as applicable, severally agrees to repay to Agent forthwith on demand the Rescindable Amount so distributed to or otherwise made for the account of such Lender or Issuing Bank, in immediately available funds with interest thereon for each day from and including the date such amount is distributed to it to but excluding the date of payment to Agent, at the greater of the Federal Funds Rate and a rate determined by Agent in accordance with banking industry rules on interbank compensation. A notice by Agent to Issuing Bank, any Lender or any Borrower with respect to any amount owing under this clause (c) shall be conclusive, absent manifest error.

4.1.4 Notices. If Borrowers request, convert or continue Loans, select interest rates or transfer funds based on telephonic or electronic instructions to Agent, Borrowers shall confirm the request by prompt delivery to Agent of a Notice of Borrowing or Notice of Conversion/Continuation, as applicable. Agent and Lenders are not liable for any loss suffered by a Borrower as a result of Agent or a Lender acting on its understanding of telephonic or electronic instructions from a person believed in good faith to be authorized to give instructions on a Borrower's behalf.

4.1.5 Conforming Changes. Agent may make Conforming Changes from time to time in consultation with Borrower Agent with respect to SOFR, Term SOFR or any Successor Rate. Notwithstanding anything to the contrary in any Loan Document, any amendment implementing such changes shall be effective without further action or consent of any party to any Loan Document. Agent shall post or provide each such amendment to Lenders and Borrower Agent reasonably promptly after it becomes effective.

4.2 Defaulting Lender. Notwithstanding anything herein to the contrary:

4.2.1 Reallocation of Pro Rata Share; Amendments. For purposes of determining Lenders' obligations or rights to fund, participate in or receive collections with respect to Loans and Letters of Credit (including existing Swingline Loans, Protective Advances and LC Obligations), Agent may in its discretion reallocate Pro Rata shares by excluding a Defaulting Lender's Commitments and Loans from the calculation of shares. A Defaulting Lender shall have no right to vote on any amendment, waiver or other modification of a Loan Document, except as provided in **Section 14.1.1(c)**.

4.2.2 Payments; Fees. Agent may, in its discretion, receive and retain any amounts payable to a Defaulting Lender under the Loan Documents, and a Defaulting Lender shall be deemed to have assigned to Agent such amounts until all Obligations owing to Agent, non-Defaulting Lenders and other Secured Parties have been paid in full. Agent may use such amounts to cover the Defaulting Lender's defaulted obligations, to Cash Collateralize such Lender's Fronting Exposure, to readvance the amounts to Borrowers or to repay Obligations. A Lender shall not be entitled to receive any fees accruing hereunder while it is a Defaulting Lender and its unfunded Commitment shall be disregarded for purposes of calculating the unused line fee under **Section 3.2.1**. If any LC Obligations owing to a Defaulted Lender are reallocated to other Lenders, fees attributable to such LC Obligations under **Section 3.2.2** shall be paid to such Lenders. Agent shall be paid all fees attributable to LC Obligations that are not reallocated.

4.2.3 Status; Cure. Agent may determine in its discretion that a Lender constitutes a Defaulting Lender and the effective date of such status shall be conclusive and binding on all parties, absent manifest error. Borrowers, Agent and Issuing Bank may agree in writing that a Lender has ceased to be a Defaulting Lender, whereupon Pro Rata shares shall be reallocated without exclusion of the reinstated Lender's Commitments and Loans, and the Revolver Usage and other exposures under the Commitments shall be reallocated among Lenders and settled by Agent (with appropriate payments by the reinstated Lender, including its payment of breakage costs for reallocated Term SOFR Loans) in accordance with the readjusted Pro Rata shares. Unless expressly agreed by Borrowers, Agent and Issuing Bank, or as expressly provided herein with respect to Bail-In Actions and related matters, no reallocation of Commitments and Loans to non-Defaulting Lenders or reinstatement of a Defaulting Lender shall constitute a waiver or release of claims against such Lender. The failure of any Lender to fund a Loan, to make a payment in respect of LC Obligations or otherwise to perform obligations hereunder shall not relieve any other Lender of its obligations under any Loan Document. No Lender shall be responsible for default by another Lender.

4.3 Number and Amount of Term SOFR Loans; Determination of Rate. Each Borrowing of Term SOFR Loans when made shall be in a minimum amount of $1,000,000, plus an increment of $100,000 in excess thereof. No more than eight Borrowings of Term SOFR Loans may be outstanding at any time, and all Term SOFR Loans having the same length and beginning date of their Interest Periods shall be aggregated and considered one Borrowing. Upon determining Term SOFR for any Interest Period requested by Borrowers, Agent shall promptly notify Borrowers thereof by telephone or electronically and, if requested by Borrowers, shall confirm any telephonic notice in writing.

4.4 Borrower Agent. Each Borrower hereby designates the Company ("Borrower Agent") as its representative and agent for all purposes under the Loan Documents, including requests for and receipt of Loans and Letters of Credit, designation of interest rates, delivery or receipt of Communications, delivery of Borrower Materials, payment of Obligations, requests for waivers, amendments or other accommodations, actions under the Loan Documents (including in respect of compliance with covenants), and all other dealings with Agent, Issuing Bank or any Lender. Borrower Agent hereby accepts such appointment. Agent and Lenders shall be entitled to rely upon any Communication (including any notice of borrowing) delivered by or to Borrower Agent on behalf of any Borrower. Each of Agent, Issuing Bank and Lenders shall have the right, in its discretion, to deal exclusively with Borrower Agent for all purposes under the Loan Documents. Each Obligor agrees that any Communication, delivery, action, omission or undertaking by Borrower Agent shall be binding upon and enforceable against such Obligor.

4.5 One Obligation. The Loans, LC Obligations and other Obligations constitute one general obligation of Borrowers, jointly and severally, and are secured by Agent's Lien on all Collateral; provided, that Agent and each Lender shall be deemed to be a creditor of, and the holder of a separate claim against, each Borrower to the extent of any Obligations jointly or severally owed by such Borrower.

4.6 Effect of Termination. On the effective date of the termination of all Commitments, the Obligations shall be immediately due and payable, and each Secured Bank Product Provider may terminate its Bank Products. Until Full Payment of the Obligations, all undertakings of Obligors contained in the Loan Documents shall continue, and Agent shall retain its Liens in the Collateral and all of its rights and remedies under the Loan Documents. Agent shall not be required to terminate its Liens unless it receives Cash Collateral or a written agreement, in each case reasonably satisfactory to it, protecting Agent and Lenders from dishonor or return of any Payment Item previously applied to the Obligations. **Sections 2.2**, **3.4**, **3.6**, **3.7**, **3.9**, **4.1.3(c)**, **5.4**, **5.8**, **5.9**, **12**, **14.2**, this Section, and each indemnity or waiver given by an Obligor or Lender in any Loan Document, shall survive any assignment by Agent, Issuing Bank or any Lender of rights or obligations hereunder, termination of any Commitment, and any repayment, satisfaction, discharge or Full Payment of any Obligations.

Section 5. PAYMENTS

5.1 General Payment Provisions. All payments of Obligations shall be made in Dollars, without offset, counterclaim or defense of any kind, free and clear of (and without deduction for) any Taxes (except Taxes as required by Applicable Law), and in immediately available funds, not later than 1:00 p.m. on the due date. Any payment after such time shall be deemed made on the next Business Day. Any payment of a Term SOFR Loan prior to the end of its Interest Period shall be accompanied by all amounts due under **Sections 3.1.1(c)** and **3.9**. Agent shall have the continuing, exclusive right to apply and reapply payments and proceeds of Collateral against the Obligations, at Agent's discretion, but whenever possible (provided no Default or Event of Default exists) any prepayment shall be applied to Base Rate Loans before Term SOFR Loans.

5.2 Repayment of Loans. Loans may be prepaid from time to time, without penalty or premium (subject to **Section 3.9**), pursuant to a notice of prepayment (in form reasonably satisfactory to Agent), delivered to Agent concurrently with prepayment of a Swingline Loan and at least three Business Days prior to prepayment of other Loans; provided, that no such notice shall be required for payments applied pursuant to **Section 5.6**. Loans shall be due and payable in full on the Termination Date, unless payment is sooner required hereunder, and any Overadvance or Protective Advance shall be due and payable as provided in **Sections 2.1.5** and **2.1.6**. If a Disposition includes Accounts or Inventory when a Trigger Period exists (or would result therefrom), Obligors shall apply Net Proceeds to repay Loans equal to the greater of (a) the net book value (or fair market value, if higher) of such Accounts and Inventory, or (b) the reduction in Borrowing Base resulting from the disposition.

5.3 Payment of Other Obligations. Obligations other than Loans, including LC Obligations and Claims, shall be paid by Obligors as provided in the Loan Documents or, if no payment date is specified, within five Business Days of demand therefor.

5.4 Marshaling; Payments Set Aside. None of Agent or Lenders shall be under any obligation to marshal any assets in favor of any Obligor or against any Obligations. If any payment by or on behalf of Obligors is made to Agent, Issuing Bank or any Lender, or if Agent, Issuing Bank or any Lender exercises a right of setoff, and any of such payment or setoff is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by Agent, Issuing Bank or a Lender in its discretion) to be repaid to a trustee, receiver or any other Person, then the Obligation originally intended to be satisfied, and all Liens, rights and remedies relating thereto, shall be revived and continued in full force and effect as if such payment or setoff had not occurred.

5.5 Application and Allocation of Payments

5.5.1 Application. Payments made by Borrowers hereunder shall be applied (a) first, as specifically required hereby; (b) second, to Obligations then due and owing; (c) third, to other Obligations specified by Borrowers; and (d) fourth, as determined by Agent in its discretion. If funds received by or available to Agent under clause (b) are insufficient to pay fully all Obligations then due and owing, such funds shall be applied (i) ratably to pay interest and fees until paid in full, and then (ii) ratably to pay unreimbursed draws under Letters of Credit and Loan principal then due and owing.

5.5.2 Post-Default Allocation. Notwithstanding anything in any Loan Document to the contrary but subject to the Intercreditor Agreement, during an Event of Default under **Section 11.1(i), (j)** or **(k)**, or during any other Event of Default at the discretion of Agent or Required Lenders, monies to be applied to the Obligations, whether arising from payments by Obligors, realization on Collateral, setoff or otherwise, shall be allocated as follows:

(a) first, to all fees, indemnification, costs and expenses, including Extraordinary Expenses, owing to Agent;

(b) second, to all other amounts owing to Agent, including Swingline Loans, Protective Advances, and Loans and participations that a Defaulting Lender has failed to settle or fund;

(c) third, to all amounts owing to Issuing Bank;

(d) fourth, to all Obligations (other than Secured Bank Product Obligations) constituting fees, indemnification, costs or expenses owing to Lenders;

(e) fifth, to all Obligations (other than Secured Bank Product Obligations) constituting interest;

(f) sixth, to Cash Collateralize all LC Obligations;

(g) seventh, to all Loans, and to Secured Bank Product Obligations constituting Swap Obligations (including Cash Collateralization thereof) up to the amount of Reserves existing therefor;

(h) eighth, to all other Secured Bank Product Obligations; and

(i) last, to all remaining Obligations.

Amounts shall be applied to payment of each category of Obligations only after Full Payment of amounts payable from time to time under all preceding categories. If amounts are insufficient to satisfy a category, they shall be paid ratably among outstanding Obligations in the category. Monies and proceeds obtained from an Obligor shall not be applied to its Excluded Swap Obligations, but appropriate adjustments shall be made with respect to amounts obtained from other Obligors to preserve the allocations in each category. Agent shall have no obligation to calculate the amount of any Secured Bank Product Obligation and may request a reasonably detailed calculation thereof from a Secured Bank Product Provider. If the provider fails to deliver the calculation within five days following request, Agent may assume the amount is zero. The allocations in this Section are solely to determine the priorities among Secured Parties and may be changed by agreement of affected Secured Parties without the consent of any Obligor. This Section is not for the benefit of or enforceable by any Obligor, and no Obligor has any right to direct the application of payments or Collateral proceeds subject to this Section.

5.5.3 Erroneous Application. Agent shall not be liable for any application of amounts made by it in good faith and, if any such application is subsequently determined to have been made in error, the sole recourse of any Lender or other Person to which such amount should have been paid shall be to recover the amount from the Person that actually received it (and, if such amount was received by a Secured Party, the Secured Party agrees to return it).

5.6 Dominion Account. The ledger balance in the Dominion Account(s) as of the end of a Business Day shall be transferred to Bank of America and applied to the Obligations at the beginning of the next Business Day, during any Trigger Period. Any resulting credit balance shall not accrue interest in favor of Borrowers and Agent shall use commercially reasonable efforts to transfer such credit balance to Borrowers' operating account on such next Business Day so long as no Event of Default exists (an "Existing Event of Default"); provided that upon the cure or waiver of all Existing Events of Default, any such credit balance shall be made available to Borrowers.

5.7 Account Stated. Agent shall maintain, in accordance with its customary practices, loan account(s) evidencing the Debt of Borrowers hereunder, including the Register in accordance with **Section 13.3.4**. Any failure of Agent to record anything in a loan account, or any error in doing so, shall not limit or otherwise affect the obligation of Borrowers to pay any amount owing hereunder. Entries in a loan account shall be presumptive evidence of the information contained therein. If information in a loan account is provided to or inspected by or on behalf of a Borrower, the information shall be conclusive and binding on Borrowers for all purposes absent manifest error, except to the extent Borrower Agent notifies Agent in writing within 30 days of specific information subject to dispute.

5.8 Taxes.

5.8.1 Payments Free of Taxes; Obligation to Withhold; Tax Payment.

(a) All payments of Obligations by Obligors shall be made without deduction or withholding for any Taxes, except as required by Applicable Law. If Applicable Law (as determined by Agent or an Obligor in its good faith discretion) requires the deduction or withholding of any Tax from any such payment by Agent or an Obligor, then Agent or such Obligor shall be entitled to make such deduction or withholding. For purposes of **Sections 5.8** and **5.9**, "Applicable Law" shall include FATCA, "Lender" shall include Issuing Bank and "Obligations" shall exclude Secured Bank Product Obligations.

(b) Subject to **Section 5.8.1(a)**, if Agent or any Obligor is required by the Code to withhold or deduct Taxes, including backup withholding and withholding taxes, from any payment, then (i) Agent shall pay the full amount that it determines is to be withheld or deducted to the relevant Governmental Authority pursuant to the Code, and (ii) to the extent the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Obligor shall be increased as necessary so that the Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made.

(c) If Agent or any Obligor is required by any Applicable Law other than the Code to withhold or deduct Taxes from any payment, then (i) Agent or such Obligor, to the extent required by Applicable Law, shall timely pay the full amount to be withheld or deducted to the relevant Governmental Authority, and (ii) to the extent the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Obligor shall be increased as necessary so that the Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made.

5.8.2 Payment of Other Taxes. Without limiting the foregoing, Obligors shall timely pay to the relevant Governmental Authority in accordance with Applicable Law, or at Agent's option, timely reimburse Agent for payment of, any Other Taxes.

5.8.3 Tax Indemnification.

(a) Each Obligor shall indemnify and hold harmless, on a joint and several basis, each Recipient against any Indemnified Taxes (including those imposed or asserted on or attributable to amounts payable under this Section) payable or paid by a Recipient or required to be withheld or deducted from a payment to a Recipient, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. Each Obligor shall make payment within 10 days after demand for any amount or liability payable under this Section. A certificate as to the amount of such payment or liability delivered to Borrower Agent by a Lender or Issuing Bank (with a copy to Agent), or by Agent on its own behalf or on behalf of any Recipient, shall be conclusive absent manifest error.

(b) Each Lender and Issuing Bank shall indemnify and hold harmless, on a several basis, (i) Agent against any Indemnified Taxes attributable to such Lender or Issuing Bank (but only to the extent Obligors have not already paid or reimbursed Agent therefor and without limiting Obligors' obligation to do so), (ii) Agent and Obligors, as applicable, against any Taxes attributable to such Lender's failure to maintain a Participant Register as required hereunder, and (iii) Agent and Obligors, as applicable, against any Excluded Taxes attributable to such Lender or Issuing Bank, in each case, that are payable or paid by Agent or an Obligor in connection with any Obligations, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. Each Lender and Issuing Bank shall make payment within 10 days after demand for any amount or liability payable under this Section. A certificate as to the amount of such payment or liability delivered to any Lender or Issuing Bank by Agent shall be conclusive absent manifest error.

5.8.4 Evidence of Payments. As soon as practicable after payment by an Obligor of any Taxes to a Governmental Authority pursuant to this Section, Borrower Agent shall deliver to Agent the original or a certified copy of a receipt issued by the appropriate Governmental Authority evidencing the payment, a copy of any return required by Applicable Law to report the payment or other evidence of payment reasonably satisfactory to Agent.

5.8.5 Treatment of Certain Refunds. Unless required by Applicable Law, at no time shall Agent have any obligation to file for or otherwise pursue on behalf of a Lender or Issuing Bank, nor have any obligation to pay to any Lender or Issuing Bank, any refund of Taxes withheld or deducted from funds paid for the account of a Lender or Issuing Bank. If a Recipient determines in its discretion, exercised in good faith, that it has received a refund of Taxes that were indemnified by Obligors or with respect to which an Obligor paid additional amounts pursuant to this Section, it shall pay the amount of such refund to Borrower Agent (but only to the extent of indemnity payments or additional amounts actually paid by Obligors with respect to the Taxes giving rise to the refund), net of all reasonable out-of-pocket expenses (including Taxes) incurred by such Recipient and without interest (other than interest paid by the relevant Governmental Authority with respect to such refund). Obligors shall, upon request by the Recipient, repay to the Recipient such amount paid over to Obligors (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) if the Recipient is required to repay such refund to the Governmental Authority. Notwithstanding anything to the contrary in this **Section 5.8.5**, no Recipient shall be required to pay any amount to Obligors if such payment would place it in a less favorable net after-Tax position than it would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. In no event shall Agent or any Recipient be required to make its tax returns (or any other information relating to its taxes that it deems confidential) available to any Obligor or other Person.

5.9 Lender Tax Information.

5.9.1 Status of Lenders. Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments of Obligations shall deliver to Borrower Agent and Agent, at the times reasonably requested by the Borrower Agent or the Agent, such properly completed and executed documentation reasonably requested by Borrower Agent or Agent as will permit such payments to be made without or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower Agent or Agent, shall deliver such other documentation prescribed by Applicable Law or reasonably requested by Borrower Agent or

Agent to enable them to determine whether such Lender is subject to backup withholding or information reporting requirements. Notwithstanding the foregoing, such documentation (other than documentation described in **Sections 5.9.2(a)**, **(b)** and **(d)**) shall not be required if a Lender reasonably believes such completion, execution or submission would subject it to any material unreimbursed cost or expense or would materially prejudice its legal or commercial position.

5.9.2 Documentation. Without limiting the foregoing,

(a) any Lender that is a U.S. Person shall deliver to Borrower Agent and Agent on or prior to the date on which such Lender becomes a Lender hereunder (and from time to time thereafter upon reasonable request of Borrower Agent or Agent), executed copies of IRS Form W-9, certifying that such Lender is exempt from U.S. federal backup withholding Tax;

(b) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Agent and Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender hereunder (and from time to time thereafter upon reasonable request of Borrower Agent or Agent), whichever of the following is applicable:

(i) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party, (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BENE establishing an exemption from or reduction of U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty, and (y) with respect to other payments under the Loan Documents, IRS Form W-8BENE establishing an exemption from or reduction of U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(ii) executed copies of IRS Form W-8ECI;

(iii) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate in form satisfactory to Agent to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of a Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code ("U.S. Tax Compliance Certificate"), and (y) executed copies of IRS Form W-8BENE; or

(iv) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BENE, a U.S. Tax Compliance Certificate in form satisfactory to Agent, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided, that if the Foreign Lender is a partnership and one or more of its direct or indirect partners is claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate on behalf of each such partner;

(c) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Agent and Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender hereunder (and from time to time thereafter upon the reasonable request of Borrower Agent or Agent), executed copies of any other form prescribed by Applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by Applicable Law to permit Borrowers or Agent to determine the withholding or deduction required to be made; and

(d) if payment of an Obligation to a Lender would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code), such Lender shall deliver to Borrower Agent and Agent, at the time(s) prescribed by law and otherwise upon reasonable request, such documentation prescribed by Applicable Law (including Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by Borrower Agent or Agent as may be necessary for Obligors or Agent to comply with their obligations under FATCA and to determine that such Lender has complied with its obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (d), "FATCA" shall include any amendments made to FATCA after the date hereof; and

(e) on or before the date on which Bank of America, N.A. (and any successor or replacement Agent) becomes the Agent hereunder, it shall deliver to Borrower Agent an executed copy of IRS Form W-9 certifying that such Agent is exempt from U.S. federal backup withholding tax.

5.9.3 Redelivery of Documentation. If any form or certification previously delivered by a Lender or Agent pursuant to this Section expires or becomes obsolete or inaccurate in any respect, such Lender shall promptly update the form or certification or notify Borrower Agent and Agent in writing of its legal inability to do so.

5.10 Nature and Extent of Each Obligor's Liability.

5.10.1 Joint and Several Liability. Each Obligor agrees that it is jointly and severally liable for, and absolutely and unconditionally guarantees to Agent and the other Secured Parties the prompt payment and performance of, all Obligations, except its Excluded Swap Obligations. Each Obligor agrees that its guaranty of the Obligations hereunder constitutes a continuing guaranty of payment and performance and not of collection, that such guaranty shall not be discharged until Full Payment of the Obligations, and that such guaranty is absolute and unconditional, irrespective of (a) the genuineness, validity, regularity, enforceability, subordination or any future modification of, or change in, any Obligations or Loan Document, or any other document, instrument or agreement to which any Obligor is or may become a party or be bound; (b) the absence of any action to enforce this Agreement (including this Section) or any other Loan Document, or any waiver, consent or indulgence of any kind by Agent or any other Secured Party with respect thereto; (c) the existence, value or condition of, or failure to perfect a Lien or to preserve rights against, any security or guaranty for any Obligations or any action or inaction by Agent or any other Secured Party in respect thereof (including the release of any

security or guaranty); (d) the insolvency of any Obligor; (e) any election by Agent or any other Secured Party in an Insolvency Proceeding for the application of Section 1111(b)(2) of the Bankruptcy Code; (f) any borrowing or grant of a Lien by any other Obligor, as debtor-in-possession under Section 364 of the Bankruptcy Code or otherwise; (g) the disallowance of any claims of Agent or any other Secured Party against any Obligor for the repayment of any Obligations under Section 502 of the Bankruptcy Code or otherwise; or (h) any other action or circumstances that might otherwise constitute a legal or equitable discharge or defense of a surety or guarantor, except Full Payment of the Obligations.

5.10.2 Waivers.

(a) Each Obligor expressly waives all rights that it may have now or in the future under any statute, at common law, in equity or otherwise, to compel Agent or any other Secured Party to marshal assets or to proceed against any other Obligor, other Person or security for the payment or performance of any Obligations before, or as a condition to, proceeding against such Obligor. Each Obligor waives all defenses available to a surety, guarantor or accommodation co-obligor other than Full Payment of Obligations and waives, to the maximum extent permitted by law, any right to revoke any guaranty of Obligations as long as it is an Obligor. It is agreed among each Obligor, Agent and the other Secured Parties that the provisions of this Section are of the essence of the transaction contemplated by the Loan Documents and that, but for such provisions, Agent and the other Secured Parties would decline to make Loans and issue Letters of Credit. Each Obligor acknowledges that its guaranty pursuant to this Section is necessary to the conduct and promotion of its business, and can be expected to benefit such business.

(b) Agent and the other Secured Parties may, in their discretion, pursue such rights and remedies as they deem appropriate, including realization upon Collateral or any Real Estate by judicial foreclosure or nonjudicial sale or enforcement, without affecting any rights and remedies under this Section. If, in taking any action in connection with the exercise of any rights or remedies, Agent or any other Secured Party shall forfeit any other rights or remedies, including the right to enter a deficiency judgment against any Obligor or other Person, whether because of any Applicable Laws pertaining to "election of remedies" or otherwise, each Obligor consents to such action and waives any claim based upon it, even if the action may result in loss of any rights of subrogation that any Obligor might otherwise have had. Any election of remedies that results in denial or impairment of the right of Agent or any other Secured Party to seek a deficiency judgment against any Obligor shall not impair any other Obligor's obligation to pay the full amount of the Obligations. Each Obligor waives all rights and defenses arising out of an election of remedies, such as nonjudicial foreclosure with respect to any security for Obligations, even though that election of remedies destroys such Obligor's rights of subrogation against any other Person. Agent may bid Obligations, in whole or part, at any foreclosure, trustee or other sale, including any private sale, and the amount of such bid need not be paid by Agent but may be credited against the Obligations. The amount of the successful bid at any such sale, whether Agent or any other Person is the successful bidder, shall be conclusively deemed to be the fair market value of the Collateral, and the difference between such bid amount and the remaining balance of the Obligations shall be conclusively deemed to be the amount of the Obligations guaranteed under this Section, notwithstanding that any present or future law or court decision may have the effect of reducing the amount of any deficiency claim to which Agent or any other Secured Party might otherwise be entitled but for such bidding at any such sale.

5.10.3 Extent of Liability; Contribution.

(a) Notwithstanding anything herein to the contrary, each Obligor's liability under this Section shall not exceed the greater of (i) all amounts for which such Obligor is primarily liable, as described in clause (c) below, or (ii) such Obligor's Allocable Amount.

(b) If any Obligor makes a payment under this Section of any Obligations (other than amounts for which such Obligor is primarily liable) (a "Guarantor Payment") that, taking into account all other Guarantor Payments previously or concurrently made by any other Obligor, exceeds the amount that such Obligor would otherwise have paid if each Obligor had paid the aggregate Obligations satisfied by such Guarantor Payments in the same proportion that such Obligor's Allocable Amount bore to the total Allocable Amounts of all Obligors, then such Obligor shall be entitled to receive contribution and indemnification payments from, and to be reimbursed by, each other Obligor for the amount of such excess, ratably based on their respective Allocable Amounts in effect immediately prior to such Guarantor Payment. The "Allocable Amount" for any Obligor shall be the maximum amount that could then be recovered from such Obligor under this Section without rendering such payment voidable under Section 548 of the Bankruptcy Code or under any applicable state fraudulent transfer or conveyance act, or similar statute or common law.

(c) This Section shall not limit the liability of any Obligor to pay or guarantee Loans made directly or indirectly to it (including Loans advanced hereunder to any other Person and then re-loaned or otherwise transferred to, or for the benefit of, such Obligor), LC Obligations relating to Letters of Credit issued to support its business, Secured Bank Product Obligations incurred to support its business, and all accrued interest, fees, expenses and other related Obligations with respect thereto, for which such Obligor shall be primarily liable for all purposes hereunder. Agent and Lenders shall have the right, at any time in their discretion, to condition Loans and Letters of Credit upon a separate calculation of borrowing availability for each Borrower and to restrict the disbursement and use of Loans and Letters of Credit to a Borrower based on that calculation.

(d) Each Obligor that is a Qualified ECP when its guaranty of or grant of Lien as security for a Swap Obligation becomes effective hereby jointly and severally, absolutely, unconditionally and irrevocably undertakes to provide funds or other support to each Specified Obligor with respect to such Swap Obligation as may be needed by such Specified Obligor from time to time to honor all of its obligations under the Loan Documents in respect of such Swap Obligation (but, in each case, only up to the maximum amount of such liability that can be hereby incurred without rendering such Qualified ECP's obligations and undertakings under this Section voidable under any applicable fraudulent transfer or conveyance act). The obligations and undertakings of each Qualified ECP under this Section shall remain in full force and effect until Full Payment of all Obligations. Each Obligor intends this Section to constitute, and this Section shall be deemed to constitute, a guarantee of the obligations of, and a "keepwell, support or other agreement" for the benefit of, each Obligor for all purposes of the Commodity Exchange Act.

5.10.4 Joint Enterprise. Each Obligor has requested that Agent and Lenders make this credit facility available to Borrowers on a combined basis, in order to finance Obligors' business most efficiently and economically. Obligors' business is a mutual and collective enterprise, and the successful operation of each Obligor is dependent upon the successful

performance of the integrated group. Obligors believe that consolidation of their credit facility will enhance the borrowing power of each Borrower and ease administration of the facility, all to their mutual advantage. Obligors acknowledge that Agent's and Lenders' willingness to extend credit and to administer the Collateral on a combined basis hereunder is done solely as an accommodation to Obligors and at Obligors' request.

5.10.5 Subordination. Each Obligor hereby subordinates any claims, including any rights at law or in equity to payment, subrogation, reimbursement, exoneration, contribution, indemnification or set off, that it may have at any time against any other Obligor, howsoever arising, to the Full Payment of its Obligations.

Section 6. CONDITIONS PRECEDENT.

6.1 Conditions Precedent to Initial Loans. In addition to the conditions set forth in**Section 6.2**, Lenders shall not be required to fund any requested Loan, issue any Letter of Credit, or otherwise extend credit to Borrowers hereunder, until the date ("Closing Date") that each of the following conditions has been satisfied:

(a) Each Loan Document shall have been duly executed and delivered to Agent by each of the signatories thereto, and each Obligor shall be in compliance with all terms thereof.

(b) Agent shall have received acknowledgments of all filings or recordations necessary to perfect its Liens in the Collateral, as well as UCC and Lien searches and other evidence reasonably satisfactory to Agent that such Liens are the only Liens upon the Collateral, except Permitted Liens.

(c) Agent shall have received duly executed agreements establishing each Dominion Account and related lockbox and Deposit Account Control Agreements for all Deposit Accounts (other than Excluded Accounts), in form and substance reasonably satisfactory to Agent.

(d) Agent shall have received certificates, in form and substance satisfactory to it, from a knowledgeable Senior Officer of each Obligor certifying that, after giving effect to the initial Loans and transactions hereunder, (i) such Obligor is Solvent; (ii) no Default or Event of Default exists; (iii) the representations and warranties set forth in **Section 9** are true and correct; (iv) assuming Agent and the Lenders are satisfied with any items that are subject to their satisfaction, such Obligor has complied with all agreements and conditions to be satisfied by it under the Loan Documents; and (v) attached to such certificate are true, accurate and complete copies of the Term Loan Agreement and all amendments thereto.

(e) Agent shall have received a certificate of a duly authorized officer of each Obligor, certifying (i) that attached copies of such Obligor's Organic Documents are true and complete, and in full force and effect, without amendment except as shown; (ii) that an attached copy of resolutions authorizing execution and delivery of the Loan Documents is true and complete, and that such resolutions are in full force and effect, were duly adopted, have not been amended, modified or revoked, and constitute all resolutions adopted with respect to this credit facility; and (iii) to the title, name and signature of each Person authorized to sign the Loan Documents. Agent may conclusively rely on this certificate until it is otherwise notified by the applicable Obligor in writing.

(f) Agent shall have received a written opinion of Vinson & Elkins L.L.P., in form and substance reasonably satisfactory to Agent.

(g) Agent shall have received copies of the charter documents of each Obligor, certified by the Secretary of State or other appropriate official of such Obligor's jurisdiction of organization as of a recent date. Agent shall have received good standing certificates as of a recent date for each Obligor, issued by the Secretary of State or other appropriate official of such Obligor's jurisdiction of organization and each jurisdiction where such Obligor's conduct of business or ownership of Property necessitates qualification.

(h) Agent shall have received copies of policies or certificates of insurance for the insurance policies carried by Obligors.

(i) Each Obligor shall have provided, in form and substance satisfactory to Agent and each Lender, all documentation and other information as Agent or any Lender deems appropriate in connection with applicable "know your customer" and anti-money-laundering rules and regulations, including the Patriot Act and Beneficial Ownership Regulation. If any Obligor qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, it shall have provided a Beneficial Ownership Certification to Agent and Lenders in relation to such Obligor.

(j) Agent shall have completed its business, financial and legal due diligence of Obligors, including a field examination and appraisal, with results satisfactory to Agent. No material adverse change in the financial condition of any Obligor or in the quality, quantity or value of any Collateral shall have occurred since December 31, 2021.

(k) Obligors shall have paid all fees and expenses to be paid to Agent on the Closing Date, including field exam and appraisal costs and the reasonable and documented out-of-pocket fees and expenses of Haynes & Boone, LLP and other external advisors to the extent invoiced prior to the Closing Date.

(l) Agent shall have received a Borrowing Base Report as of December 31, 2022. Upon giving effect to the initial funding of Loans and issuance of Letters of Credit, and the payment by Obligors of all fees and expenses incurred in connection herewith as well as any payables stretched beyond their customary payment practices, Availability shall be at least $15,000,000.

(m) Agent shall have received a duly executed payoff letter in form and substance satisfactory to it and dated on or prior to the Closing Date with respect to the Company's ABL Credit Agreement dated December 14, 2018 with Barclays Bank PLC, as administrative agent, together with evidence satisfactory to it (including UCC-3 financing statement terminations and other termination documents) that on the Closing Date such Debt will be repaid in full and the Liens securing such Debt have been released, subject only to the filing of applicable terminations and releases.

(n) Term Loan Lender shall have entered into (i) the Intercreditor Agreement with Agent and (ii) an amendment to the Term Loan Agreement in order to permit this Agreement, which shall each be in form and substance reasonably satisfactory to Agent.

(o) Agent shall have received the Related Real Estate Documents requested by Agent for all Real Estate described on **Schedule 6.1(o)**.

6.2 Conditions Precedent to All Credit Extensions. Agent, Issuing Bank and Lenders shall not be required to make any credit extension hereunder (including funding a Loan, arranging a Letter of Credit, or granting any other accommodation to or for the benefit of any Obligor), if the following conditions are not satisfied on such date and upon giving effect thereto:

(a) No Default or Event of Default exists or would result therefrom;

(b) The representations and warranties of each Obligor in the Loan Documents are true and correct in all material respects without duplication of any materiality qualification applicable thereto (except for representations and warranties that expressly apply only on an earlier date, which shall be true and correct in all material respects, without duplication, as of such date);

(c) Sufficient Availability exists therefor; and

(d) With respect to a Letter of Credit issuance, all LC Conditions are satisfied.

Each request (or deemed request) by a Borrower for any credit extension shall constitute a representation by Obligors that the foregoing conditions are satisfied on the date of such request and on the date of the credit extension.

Section 7. COLLATERAL.

7.1 Grant of Security Interest. To secure the prompt payment and performance of the Obligations, each Obligor hereby grants to Agent, for the benefit of Secured Parties, a continuing security interest and Lien on all personal Property of such Obligor, including the following, whether now owned or hereafter acquired, and wherever located:

(a) all Accounts and all Payment Intangibles;

(b) all Chattel Paper, including electronic chattel paper;

(c) all Commercial Tort Claims, including those shown on **Schedule 7.5**;

(d) all Deposit Accounts and Securities Accounts;

(e) all Documents;

(f) all General Intangibles (including Intellectual Property) and all business interruption insurance;

(g) all Goods, including Inventory, Equipment, Fixtures and As-Extracted Collateral;

(h) all Instruments;

(i) all Investment Property;

(j) all Letter-of-Credit Rights;

(k) all Supporting Obligations;

(l) all monies, whether or not in the possession or under the control of Agent, including any Cash Collateral;

(m) all accessions to, substitutions for, and all replacements, products, and cash andnon-cash proceeds of the foregoing, including proceeds of and unearned premiums with respect to insurance policies, and claims against any Person for loss, damage or destruction of any Collateral; and

(n) all books and records (including customer lists, files, correspondence, tapes, computer programs, print-outs and computer records) pertaining to the foregoing.

To the extent that any of the above-described Property is not subject to the UCC, each Obligor hereby pledges and collaterally assigns all of such Obligor's right, title, and interest in and to such Property, whether now owned or hereafter acquired, to Agent for the benefit of the Secured Parties to secure the payment and performance of the Obligations to the full extent that such a pledge and collateral assignment is possible under relevant law.

Notwithstanding the foregoing, Collateral shall not include any Excluded Property; provided that Excluded Property shall not include any proceeds, products, substitutions or replacements of Excluded Property, including monies due or to become due to an Obligor (unless such proceeds, products, substitutions or replacements would otherwise constitute Excluded Property).

7.2 Lien on Deposit Accounts; Cash Collateral.

7.2.1 Deposit Accounts. Agent's Lien hereunder encumbers all amounts credited to any Deposit Account of an Obligor (other than to the extent constituting Excluded Property), including sums in any blocked, lockbox, sweep or collection account.

7.2.2 Cash Collateral. As security for the Obligations, each Obligor hereby grants to Agent a security interest in and Lien upon all Cash Collateral delivered hereunder from time to time, whether held in a segregated cash collateral account or otherwise. Agent may apply Cash Collateral to the payment of the Obligations as they become due, in such order as Agent may elect. All Cash Collateral and related Deposit Accounts shall be under the sole dominion and control of Agent, and no Obligor or other Person shall have any right to any Cash Collateral until Full Payment of the Obligations.

7.3 Pledged Collateral.

7.3.1 Pledged Equity Interests and Debt Securities. As security for the payment and performance of the Obligations, each Obligor hereby assigns and pledges to Agent, for the benefit of the Secured Parties, and hereby grants to Agent, for the benefit of Secured Parties, a security interest in, all of such Obligor's right, title and interest in, to and under (a) the Equity Interests now owned or at any time hereafter acquired by such Obligor, including the Equity Interests set forth opposite the name of such Obligor on **Schedule 7.3**, and all certificates and other

instruments representing such Equity Interests (excluding any Excluded Property, collectively, the "Pledged Equity Interests"); (b) the debt securities now owned or at any time hereafter acquired by such Obligor, including the debt securities set forth opposite the name of such Obligor on **Schedule 7.3**, and all promissory notes and other instruments evidencing such debt securities (collectively, the "Pledged Debt Securities"); (c) all payments of principal or interest, dividends, cash, instruments and other property from time to time received, receivable or otherwise distributed in respect of, in exchange for or upon the conversion of, and all other proceeds received in respect of, the property referred to in clauses (a) and (b) above; (d) all rights and privileges of such Obligor with respect to the securities, instruments and other property referred to in clauses (a), (b) and (c) above; and (e) all proceeds of any and all of the foregoing (the items referred to in clauses (a) through (e) above being collectively referred to as the "Pledged Collateral").

7.3.2 Delivery of the Pledged Collateral.

(a) Each Obligor agrees to deliver or cause to be delivered to Agent any and all Pledged Collateral at any time owned by such Obligor promptly following the acquisition thereof by such Obligor (and in any event within 30 days) to the extent that such Pledged Collateral is either (i) certificated Pledged Equity Interests or (ii) in the case of Pledged Debt Securities, required to be delivered pursuant to paragraph (b) of this **Section 7.3.2**; provided, that Agent acknowledges that any Obligor's delivery of any such Pledged Collateral to the applicable Person entitled thereto under the Intercreditor Agreement at such time will satisfy such Obligor's delivery obligations under this **Section 7.3.2(a)** so long as the Intercreditor Agreement is in full force and effect.

(b) All Debt (other than Debt that has a principal amount of less than $250,000 individually and $1,000,000 in the aggregate) owing to any Obligor that is evidenced by a promissory note or other Instrument shall be promptly (and in any event within 30 days of the acquisition thereof) delivered to Agent pursuant to the terms hereof; provided, that Agent acknowledges that any Obligor's delivery of any such Pledged Collateral to the applicable Person entitled thereto under the Intercreditor Agreement at such time will satisfy such Obligor's delivery obligations under this **Section 7.3.2(b)** so long as the Intercreditor Agreement is in full force and effect.

(c) Upon delivery (i) any Pledged Equity Interests shall be accompanied by undated stock powers duly executed by the applicable Obligor in blank or other instruments of transfer reasonably satisfactory to Agent and by such other instruments and documents as Agent may reasonably request and (ii) all other property comprising part of the Pledged Collateral shall, if relevant or applicable to such property, be accompanied by undated proper instruments of assignment duly executed by the applicable Obligor in blank and by such other instruments and documents as Agent may reasonably request. In connection with any delivery of Pledged Collateral after the date hereof, Borrower Agent shall deliver a Schedule describing the Pledged Collateral so delivered, which Schedule shall be attached to **Schedule 7.3** and made a part hereof; provided, that failure to deliver any such Schedule hereto or any error in a Schedule so attached shall not affect the validity of the pledge of any Pledged Collateral.

7.3.3 Pledge Related Representations, Warranties and Covenants. Each Obligor hereby represents, warrants and covenants to Agent and the Secured Parties that:

(a) As of the Closing Date, **Schedule 7.3** sets forth a true and complete list, with respect to such Obligor, of (i) all the Equity Interests owned by such Obligor and the percentage of the issued and outstanding units of each class of the Equity Interests of the issuer thereof represented by the Pledged Equity Interests owned by such Obligor and (ii) all debt owned by such Obligor, and all promissory notes and other instruments evidencing such debt. **Schedule 7.3** sets forth all Equity Interests, debt and promissory notes required to be pledged hereunder as of the Closing Date.

(b) The Pledged Equity Interests and Pledged Debt Securities, solely with respect to Pledged Equity Interests and Pledged Debt Securities issued by a Person that is an Obligor or a Subsidiary of the Company, have been duly and validly authorized and issued by the issuers thereof and (i) in the case of Pledged Equity Interests issued by a Person that is an Obligor or a Subsidiary of the Company, are fully paid and nonassessable (to the extent such concepts are relevant to such Pledged Equity Interests) and (ii) in the case of Pledged Debt Securities issued by an Obligor or a Subsidiary of the Company, are legal, valid and binding obligations of the issuers thereof (subject to applicable bankruptcy, reorganization, insolvency, moratorium or similar laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or at law)).

(c) Except for the security interests granted hereunder, such Obligor (i) is and, subject to any transfers or dispositions made in compliance with this Agreement, will continue to be the direct owner, beneficially and of record, of the Pledged Collateral indicated on **Schedule 7.3** as owned by such Obligor, (ii) holds the same free and clear of all Liens (other than Permitted Liens), (iii) will make no assignment, pledge, hypothecation or transfer of, or create or permit to exist any security interest in or other Lien on, the Pledged Collateral (other than Permitted Liens and Permitted Dispositions), and (iv) will defend its title or interest thereto or therein against any and all Liens (other than Permitted Liens and Permitted Dispositions), however arising, of all Persons whomsoever.

(d) Such Obligor has the power and authority to pledge the Pledged Collateral pledged by it hereunder.

(e) No Governmental Approval or any other action by any Governmental Authority and no consent or approval of any securities exchange or any other Person (including stockholders, partners, members or creditors of such Obligor) is or will be required for the validity of the pledge effected hereby (other than such as have been obtained and are in full force and effect).

7.3.4 Registration in Nominee Name; Denominations. Agent shall have the right to hold the Pledged Collateral in its own name as pledgee, in the name of its nominee or in the name of the applicable Obligor, endorsed or assigned in blank or in favor of Agent. During the continuance of an Event of Default, Agent shall at all times have the right to exchange the certificates representing Pledged Equity Interests for certificates of smaller or larger denominations for any purpose consistent with this Agreement.

7.3.5 Voting Rights; Dividends and Interest.

(a) Unless and until an Event of Default shall have occurred and be continuing and Agent shall have notified any Obligors that their rights under this Section are being suspended:

(i) Each Obligor shall be entitled to exercise any and all voting and other consensual rights and powers inuring to an owner of Pledged Collateral or any part thereof for any purpose consistent with the terms of this Agreement and the other Loan Documents; provided, that such rights and powers shall not be exercised in any manner that could materially and adversely affect the rights inuring to a holder of any Pledged Collateral or the rights and remedies of Agent or any other Secured Party under this Agreement or any other Loan Document or the ability of the Secured Parties to exercise the same.

(ii) Agent shall promptly execute and deliver to Obligors, or cause to be executed and delivered to Obligors, all such proxies, powers of attorney and other instruments as Obligors may reasonably request for the purpose of enabling Obligors to exercise the voting and other consensual rights and powers they are entitled to exercise pursuant to paragraph (i) above.

(iii) Each Obligor shall be entitled to receive and retain any and all dividends, interest, principal and other distributions paid on or distributed in respect of the Pledged Collateral to the extent and only to the extent that such dividends, interest, principal and other distributions are permitted by, and otherwise paid or distributed in accordance with, the terms and conditions of this Agreement, the other Loan Documents and Applicable Law; provided, that any noncash dividends, interest, principal or other distributions that would constitute Pledged Equity Interests or Pledged Debt Securities, whether resulting from a subdivision, combination or reclassification of the outstanding Equity Interests of the issuer of any Pledged Collateral or received in exchange for Pledged Collateral or any part thereof, or in redemption thereof, or as a result of any merger, consolidation, acquisition or other exchange of assets to which such issuer may be a party or otherwise, shall be and become part of the Pledged Collateral and, if received by any Obligor, shall be held in trust for the benefit of Agent and shall be forthwith delivered to Agent promptly following demand in the same form as so received (with any necessary endorsement); provided, that Agent acknowledges that any Obligor's delivery of any such Pledged Collateral to the applicable Person entitled thereto under the Intercreditor Agreement at such time will satisfy such Obligor's delivery obligations under this **Section 7.3.5** so long as the Intercreditor Agreement is in full force and effect.

(b) Upon the occurrence and during the continuance of an Event of Default, after Agent shall have notified any Obligors of the suspension of their rights under paragraph (a)(iii) of this Section, all rights of any Obligor to dividends, interest, principal or other distributions that such Obligor is authorized to receive pursuant to paragraph (a)(iii) of this Section shall cease, and all such rights shall thereupon become vested in Agent, which shall have the sole and exclusive right and authority to receive and retain such dividends, interest, principal or other distributions. All dividends, interest, principal or other distributions received by any Obligor contrary to the provisions of this Section shall be held in trust for the benefit of Agent and shall be

forthwith delivered to Agent upon demand in the same form as so received (with any necessary endorsement); provided, that Agent acknowledges that any Obligor's delivery of any such Pledged Collateral to the applicable Person entitled thereto under the Intercreditor Agreement at such time will satisfy such Obligor's delivery obligations under this **Section 7.3.5** so long as the Intercreditor Agreement is in full force and effect. Any and all money and other property paid over to or received by Agent pursuant to the provisions of this paragraph shall be retained by Agent in an account to be established by Agent upon receipt of such money or other property, shall be held as security for the Obligations and shall be applied in accordance with the provisions of **Section 5.5**.

(c) Upon the occurrence and during the continuance of an Event of Default, after Agent shall have notified any Obligors of the suspension of their rights under paragraph (a)(i) of this Section, all rights of any Obligor to exercise the voting and other consensual rights and powers it is entitled to exercise pursuant to paragraph (a)(i) of this Section, and the obligations of Agent under paragraph (a)(ii) of this Section, shall cease, and all such rights shall thereupon become vested in Agent, which shall have the sole and exclusive right and authority to exercise such voting and other consensual rights and powers; provided, that unless otherwise directed by the Required Lenders, Agent shall have the right from time to, in its sole discretion, notwithstanding the continuance of an Event of Default, to permit any Obligor to exercise such rights and powers.

7.3.6 Consents.

(a) In the case of each Obligor which is an issuer of Pledged Collateral, such Obligor agrees to be bound by the terms of this Agreement relating to the Pledged Collateral issued by it and will comply with such terms insofar as such terms are applicable to it. Without limitation to the foregoing, with respect to each Obligor that is an issuer of Pledged Collateral constituting uncertificated securities, such Obligor agrees that upon notice from Agent following the occurrence and during the continuance of an Event of Default, such Obligor shall comply with Agent's instructions with respect to such Pledged Collateral without further consent of the Obligor holding such Pledged Collateral.

(b) Each Obligor on behalf of itself, and in the case of each Obligor which is a partner, shareholder or member, as the case may be, in a partnership, corporation, limited liability company or other entity that is an issuer of Pledged Collateral such Obligor in such capacity, hereby (i) consents, to the extent required by the applicable Organic Documents of such Obligor or such issuer of Pledged Collateral, to the pledge by it and by each other Obligor pursuant to the terms hereof of the Pledged Collateral in such partnership, corporation, limited liability company or other entity and, upon the occurrence and during the continuance of an Event of Default, to the transfer of such Pledged Collateral to Agent or its nominee or transferee and admission of such Person as a substitute partner, shareholder or member, as the case may be, and (ii) to the maximum extent permitted to do so, irrevocably waives any and all provisions of the applicable Organic Documents of such issuer of Pledged Collateral that conflict with the terms of this Agreement or prohibit, restrict, condition or otherwise affect the grant hereunder of any Lien on any of the Pledged Collateral or any enforcement action which may be taken in respect of any such Lien.

7.4 Real Estate Collateral.

7.4.1 Lien on Real Estate. The Obligations shall be secured by Mortgages upon all Required Real Estate Collateral owned or leased by Obligors. If any Obligor acquires Required Real Estate Collateral hereafter (or any previously owned or leased Real Estate becomes Required Real Estate Collateral after the date hereof), Obligors shall promptly notify Agent and, within 60 days (or such later date as the Agent may agree), execute, deliver and record a Mortgage, in form and substance reasonably satisfactory to Agent, together with all Related Real Estate Documents. The Mortgages shall be duly recorded, at Obligors' expense, in each office where such recording is required to constitute a fully perfected Lien on the Real Estate covered thereby.

7.4.2 Collateral Assignment of Leases. To further secure the prompt payment and performance of its Obligations, each Obligor hereby transfers and assigns to Agent and grants a Lien in favor of Agent on all of such Obligor's right, title and interest in, to and under all now or hereafter existing leases of Real Estate to which such Obligor is a party, whether as lessor or lessee, and all extensions, renewals, modifications and proceeds thereof.

7.4.3 Release of Required Real Estate Collateral. Notwithstanding anything in any Loan Document to the contrary, with respect to any Real Estate (other than fixtures and as-extracted collateral) subject to a Lien in favor of Agent, in the event that no Term Loan Debt is outstanding or the Term Loan Debt is not secured by a Lien on such Real Estate (and no other Borrowed Money permitted under **Section 10.2.1(n)** is secured by such Real Estate) (the occurrence of such event with respect to any Real Estate, a "Release Event"), the Obligors may request that Agent release its Lien on such Real Estate and Agent shall release such Lien promptly following such Obligors' request pursuant to such release documentation as the Obligors may reasonably request and that is reasonably acceptable to Agent, provided, that (a) no Event of Default exists at such time, (b) Agent may make or retain UCC "as-extracted" collateral and/or fixture filings, and (c) any such release shall be without prejudice to**Section 7.4.1** in the event that such Real Estate subsequently constitutes Required Real Estate Collateral.

7.5 Other Collateral.

7.5.1 Commercial Tort Claims. As of the Closing Date, no Obligor has a Commercial Tort Claim (other than any Commercial Tort Claim of less than $500,000) except as set forth on **Schedule 7.5**. Obligors shall promptly (and in any event within 30 days) notify Agent in writing if any Obligor has an additional Commercial Tort Claim (other than, as long as no Default or Event of Default exists, a Commercial Tort Claim for less than $500,000), shall promptly amend **Schedule 7.5** to include such claim, and shall take such actions as Agent deems appropriate to subject such claim to a duly perfected, first priority Lien in favor of Agent (subject to the Intercreditor Agreement).

7.5.2 Certain After-Acquired Collateral. As of the Closing Date, no Obligor has any Chattel Paper (other than any Chattel Paper with a face amount individually of less than $500,000 or less than $1,000,000 in the aggregate) except as set forth on **Schedule 7.5**. Obligors shall promptly (and in any event within 30 days) notify Agent in writing if any Obligor acquires any Chattel Paper with a face amount individually in excess of $500,000 or in the aggregate in excess of $1,000,000) constituting Collateral, and shall, upon Agent's request, deliver to Agent the originals of any such Chattel Paper. As of the Closing Date, no Obligor has any Document evidencing or constituting Collateral in an amount individually in excess of $500,000 or in the

aggregate in excess of $1,000,000 except as set forth on **Schedule 7.5**. Obligors shall promptly (and in any event within 30 days) notify Agent in writing if any Obligor acquires any Document evidencing or constituting Collateral in an amount individually in excess of $500,000 or in the aggregate in excess of $1,000,000, and shall, upon Agent's request, deliver to Agent the originals of any such Documents. Obligors shall promptly (and in any event within 30 days) notify Agent in writing if any Obligor acquires any Letter of Credit Right evidencing or constituting Collateral in an amount individually in excess of $500,000 or in the aggregate in excess of $1,000,000, and shall, upon Agent's request, take such further actions as Agent may reasonably require to perfect its Lien thereon. Obligors shall notify Agent of the acquisition of any material Intellectual Property at the time of delivery of each Compliance Certificate and shall, upon Agent's request, take such further actions as Agent may reasonably require to perfect its Lien thereon.

7.6 Limitations. The Lien on Collateral granted hereunder is given as security only and shall not subject Agent or any Lender to, or in any way modify, any obligation or liability of Obligors relating to any Collateral. In no event shall any Obligor's grant of a Lien under any Loan Document secure its Excluded Swap Obligations.

7.7 Further Assurances. All Liens granted to Agent under the Loan Documents are for the benefit of Secured Parties. Promptly (and in any event within 30 days) upon request, Obligors shall deliver such instruments and agreements, and shall take such actions, as Agent deems appropriate under Applicable Law to evidence or perfect its Lien on any Collateral, or otherwise to give effect to the intent of this Agreement. Each Obligor authorizes Agent to file any financing statement that describes the Collateral as "all assets" or "all personal property" of such Obligor, or words to similar effect.

Section 8. COLLATERAL ADMINISTRATION.

8.1 Borrowing Base Reports. By the 25th day of each month, Borrower Agent shall deliver to Agent (and Agent shall promptly deliver same to Lenders) a Borrowing Base Report as of the close of business of the previous month; provided, that if a Trigger Period is in effect Borrower Agent shall, no later than the third Business Day of each calendar week, deliver a Borrowing Base Report prepared as of the close of business of such previous week. All information (including the calculation of Availability) in a Borrowing Base Report shall be certified by Borrower Agent. Agent may from time to time adjust such report (a) to reflect Agent's reasonable estimate of declines in value of Collateral, due to collections received in the Dominion Account or otherwise; and (b) to the extent any information or calculation does not comply with this Agreement.

8.2 Accounts.

8.2.1 Records and Schedules of Accounts. Each Obligor shall keep accurate and complete, in all material respects, records of its Accounts, including all payments and collections thereon, and shall submit to Agent each of the reports set forth on **Schedule 8.2.1** at the times specified therein. If Accounts in an aggregate face amount of $2,500,000 or more cease to be Eligible Accounts or Eligible Unbilled Accounts, Borrowers shall notify Agent of such occurrence promptly (and in any event within three Business Days) after any Obligor has knowledge thereof.

8.2.2 Taxes. If an Account of any Obligor includes a charge for any Taxes, Agent is authorized, in its discretion if Obligors have not paid such Taxes when due and a Default or an Event of Default has occurred and is continuing, to pay the amount thereof to the proper taxing authority for the account of such Obligor and to charge Obligors therefor; provided, that neither Agent nor Lenders shall be liable for any Taxes that may be due from Obligors or relate to any Collateral.

8.2.3 Account Verification. Whether or not a Default or Event of Default exists, Agent shall have the right at any time, in the name of Agent, any designee of Agent or any Obligor, to verify the validity, amount or any other matter relating to any Accounts of Obligors by mail, telephone or otherwise; provided that as long as no Event of Default exists (a) Agent shall provide Borrower Agent at least two (2) Business Days' notice prior to such verification and (b) shall provide an opportunity for a representative of the Borrower Agent to participate in any such phone call, if Borrower Agent so elects. Obligors shall provide reasonable cooperation with Agent in an effort to facilitate and promptly conclude any such verification process.

8.2.4 Maintenance of Dominion Account. Obligors shall maintain Dominion Accounts pursuant to lockbox or other arrangements reasonably acceptable to Agent (and which Dominion Accounts shall be separate from the collection accounts for any Unrestricted Subsidiary). Obligors shall obtain a Deposit Account Control Agreement from each lockbox servicer and Dominion Account bank, establishing Agent's control over and Lien in the lockbox or Dominion Account (which may be exercised by Agent only during a Trigger Period) requiring immediate deposit of all remittances received in the lockbox to a Dominion Account, and waiving offset rights of such servicer or bank, except for customary administrative charges. Agent may, during any Trigger Period, require immediate transfer of all funds in such Dominion Account(s) to Bank of America pursuant to **Section 5.6** and such transferred funds shall be applied to the Obligations or made available to Borrowers, as applicable, in accordance with **Section 5.6**. Agent and Lenders assume no responsibility to Obligors for any lockbox arrangement or Dominion Account, including any claim of accord and satisfaction or release with respect to any Payment Items accepted by any bank.

8.2.5 Proceeds of ABL Priority Collateral. Obligors shall request in writing and otherwise take all commercially reasonable steps to ensure that all payments on Accounts or otherwise relating to ABL Priority Collateral are made directly to a Dominion Account (or a lockbox relating to a Dominion Account). If any Obligor or Subsidiary receives cash or Payment Items with respect to any ABL Priority Collateral, it shall hold same in trust for Agent and promptly (not later than the next Business Day) deposit the same into a Dominion Account. Obligors shall not deposit or comingle payments on Accounts owing to any Unrestricted Subsidiary into the Dominion Account.

8.3 Inventory.

8.3.1 Records and Reports of Inventory. Each Obligor shall keep accurate and complete records of its Inventory, and shall submit to Agent each of the reports set forth on **Schedule 8.2.1** at the times specified therein.

8.3.2 [Reserved].

8.3.3 Acquisition, Sale and Maintenance. No Obligor shall acquire or accept any Inventory on consignment or approval, and shall take all steps to assure that all Inventory is produced in accordance with Applicable Law, including the FLSA. No Obligor shall sell any Inventory on consignment or approval or any other basis under which the customer may return or require an Obligor to repurchase such Inventory. Obligors shall use, store and maintain all Inventory with reasonable care and caution, in accordance with applicable standards of any insurance and in conformity with all Applicable Law, and shall make current rent payments (within applicable grace periods provided for in leases) at all locations where any Collateral is located, in each case except where the failure to do so could not reasonably be expected to have a Material Adverse Effect.

8.4 [Reserved].

8.5 Administration of Deposit Accounts and Securities Accounts. As of the Closing Date, **Schedule 8.5** lists all Deposit Accounts and Securities Accounts maintained by Obligors, including Dominion Accounts. Obligors shall be the sole account holders of each Deposit Account and Securities Account (other than Excluded Accounts described in clauses (a) and (c) of the definition thereof) and shall not allow any Person (other than Agent, the depository bank or securities intermediary and the Term Loan Lender) to have control over their Deposit Accounts, Securities Accounts or any Property deposited therein (other than Excluded Accounts described in clauses (a) and (c) of the definition thereof). Obligors shall promptly notify Agent of any opening of a Deposit Account or a Securities Account. With respect to all Deposit Accounts (other than Excluded Accounts) and Securities Accounts existing on the Closing Date, and promptly following the opening of any new Deposit Account (other than Excluded Accounts) and Securities Account after the Closing Date (but in any event prior to the transfer of any funds or other property thereto), the Obligors shall provide Agent with a Deposit Account Control Agreement or Securities Account Control Agreement, as applicable. Obligors shall not comingle funds of any Unrestricted Subsidiary in Obligors' Deposit Accounts or Securities Accounts; provided that the inadvertent comingling of funds in an aggregate amount not exceeding $1,000,000 at any one time shall not constitute a breach of the foregoing requirement so long as promptly rectified following knowledge thereof.

8.6 General Provisions.

8.6.1 Location of Collateral. All material tangible items of Collateral, other than Inventory in transit and Equipment out for repair or in use away from a Sand Facility in the Ordinary Course of Business, shall at all times be kept by Obligors at the business locations set forth in **Schedule 8.6.1** (as updated from time to time by the Obligors by written notice to the Agent), except that Obligors may (a) make sales or other dispositions of Collateral in accordance with **Section 10.2.5**; and (b) move Collateral to customer sites, drop depots and trucking yards in the Ordinary Course of Business.

8.6.2 Insurance of Collateral; Condemnation Proceeds.

(a) Each Obligor shall maintain insurance with respect to the Collateral with financially sound and reputable insurance companies in such amounts and against such risks (including casualty) as are customarily maintained by companies engaged in the same or similar businesses operating in the same or similar locations and with insurers reasonably satisfactory to Agent (it being agreed that insurers with a Best rating of at least A- shall be deemed satisfactory to Agent), which insurance policies and proceeds thereof, whether now owned or hereafter existing, are hereby collaterally assigned to Agent as security for the Obligations; provided, that if Real Estate secures any Obligations, flood hazard diligence, documentation and insurance for such Real Estate shall comply with all Flood Laws or shall otherwise be reasonably satisfactory to all Lenders. From time to time upon Agent's reasonable request, Obligors shall deliver to Agent copies of its insurance policies and updated flood plain searches. Each policy shall include endorsements reasonably satisfactory to Agent (i) showing Agent as additional insured and lender's loss payee; and (ii) requiring 30 days prior written notice to Agent of cancellation of the policy for any reason whatsoever (10 days in the case of non-payment). If any Obligor fails to provide and pay for any insurance, Agent may, in its discretion, procure the insurance and charge Obligors therefor. While no Event of Default exists, Obligors may settle, adjust or compromise any insurance claim. If an Event of Default exists, only Agent may settle, adjust and compromise such claims with respect to Collateral (subject to the Intercreditor Agreement with respect to any Term Priority Collateral).

(b) Any proceeds of business interruption insurance and of property insurance in respect of ABL Priority Collateral (other than, for the avoidance of doubt, workers' compensation, D&O insurance and liability policy payments to third parties) and awards from condemnation of ABL Priority Collateral shall be paid directly to Agent for application to the Obligations during a Trigger Period.

8.6.3 Protection of Collateral. All expenses of protecting, storing, warehousing, insuring, handling, maintaining and shipping any Collateral, all Taxes payable with respect to any Collateral (including any sale thereof), and all other payments required to be made by Agent to any Person to realize upon any Collateral, shall be borne and paid by Obligors. Agent shall not be liable or responsible in any way for the safekeeping of any Collateral, for any loss or damage thereto (except for reasonable care in its custody while Collateral is in Agent's actual possession), for any diminution in the value thereof, or for any act or default of any warehouseman, carrier, forwarding agency or other Person whatsoever, but the same shall be at Obligors' sole risk.

8.6.4 Defense of Title. Each Obligor shall use commercially reasonable efforts to defend its title to any material Collateral and Agent's Liens therein against all Persons, claims and demands, except Permitted Liens.

8.7 Power of Attorney. Each Obligor hereby irrevocably constitutes and appoints Agent (and all Persons designated by Agent) as such Obligor's true and lawful attorney (and agent-in-fact) for the purposes provided in this Section. Agent, or Agent's designee, may (in its discretion), without notice and in either its or an Obligor's name, but at the cost and expense of Obligors:

(a) Endorse an Obligor's name on any Payment Item or other proceeds of Collateral (including proceeds of insurance) that come into Agent's possession or control; and

(b) During the continuance of an Event of Default, (i) notify any Account Debtors of the assignment of their Accounts, demand and enforce payment of Accounts by legal proceedings or otherwise, and generally exercise any rights and remedies with respect to Accounts; (ii) settle, adjust, modify, compromise, discharge or release any Accounts or other Collateral, or any legal proceedings brought to collect Accounts or Collateral; (iii) sell or assign any Accounts and other Collateral upon such terms, for such amounts and at such times as Agent deems advisable; (iv) collect, liquidate and receive balances in Deposit Accounts or investment accounts, and take control, in any manner, of proceeds of Collateral; (v) prepare, file and sign an Obligor's name to a proof of claim or other document in a bankruptcy of an Account Debtor, or to any notice, assignment or satisfaction of Lien or similar document; (vi) endorse any Chattel Paper, Document, Instrument, bill of lading, or other document or agreement relating to any Accounts, Inventory or other Collateral; (vii) use an Obligor's stationery and sign its name to verifications of Accounts and notices to Account Debtors; (viii) use information contained in any data processing, electronic or information systems relating to Collateral; (ix) make and adjust claims under insurance policies; (x) take any action as may be necessary or appropriate to obtain payment under any letter of credit, banker's acceptance or other instrument for which an Obligor is a beneficiary; (xi) exercise any voting or other rights relating to Investment Property following written notice to Borrower Agent of its intention to do so; and (xii) take all other actions as Agent deems appropriate to fulfill any Obligor's obligations under the Loan Documents.

Section 9. REPRESENTATIONS AND WARRANTIES.

9.1 General Representations and Warranties. To induce Agent and Lenders to enter into this Agreement and to make available the Commitments, Loans and Letters of Credit, each Obligor represents and warrants that:

9.1.1 Organization; Powers. Each of the Obligors and their Restricted Subsidiaries is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, has all requisite power and authority, and has all governmental licenses, authorizations, consents and approvals necessary, to own its assets and to carry on its business as now conducted, and is qualified to do business in, and is in good standing in, every jurisdiction where such qualification is required, except where failure to have such power, authority, licenses, authorizations, consents, approvals and qualifications would not reasonably be expected to result in a Material Adverse Effect.

9.1.2 Authority; Enforceability. The execution, delivery and performance of the Loan Documents are within each Obligor's corporate, limited liability company or partnership powers and have been duly authorized by all necessary corporate, limited liability company or partnership and, if required, equityholder action (including, without limitation, any action required to be taken by any class of directors, whether interested or disinterested, of the Obligors or any other Person in order to ensure the due authorization of the Loan Documents). Each Loan Document to which any Obligor is a party has been duly executed and delivered by such Obligor and constitutes a legal, valid and binding obligation of such Obligor, enforceable in accordance with its terms, subject to applicable Debtor Relief Laws and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

9.1.3 Approvals; No Conflicts. The execution, delivery and performance of the Loan Documents to which each Obligor is a party (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any other third Person (including equityholders, members, partners or any class of directors or managers, whether interested or disinterested, of the Obligors or any other Person), nor is any such consent, approval, registration, filing or other action necessary for the validity or enforceability of any Loan Document or the consummation of the obligations under the Loan Documents, except such as have been obtained or made and are in full force and effect, other than (i) the recordations and filings necessary to perfect Agent's Liens in the Collateral, as required by this Agreement and (ii) those third party approvals or consents which, if not made or obtained, would not cause a Default hereunder and would not reasonably be expected to result in a Material Adverse Effect, (b) will not violate any Applicable Law or any order of any Governmental Authority material to any Obligor's or its Restricted Subsidiary's business, (c) will not violate or result in a default under any Organic Documents of any Obligor or any indenture or other material agreement regarding Debt binding upon any Obligor or its Restricted Subsidiaries or its Properties (including the Term Loan Documents), or give rise to a right thereunder to require any payment to be made by any Obligor, and (d) will not result in the creation or imposition of any Lien on any Sand Property of any Obligor or its Restricted Subsidiaries (other than the Liens created by the Loan Documents).

9.1.4 Financial Condition; No Material Adverse Effect.

(a) The Borrowers have delivered to the Agent (for further distribution to the Lenders) the annual financial statements for the Fiscal Year ending December 31, 2021 and the quarterly financial statements for the Fiscal Quarter ending September 30, 2022 (the "Historical Financial Statements"). The Historical Financial Statements, including schedules and notes thereto, if any, have been prepared in reasonable detail in accordance with GAAP consistently applied throughout the periods covered thereby and present fairly, in all material respects, the Company's and its Subsidiaries' financial position as at the dates thereof and their results of operations for the periods then ended, subject, in the case of such unaudited financial statements, to changes resulting from normal year-end adjustments and the absence of footnotes.

(b) Since December 31, 2021, there has been no event, development or circumstance that has had or would reasonably be expected to result in a Material Adverse Effect.

(c) No Obligor or any of its Restricted Subsidiaries has as of the Closing Date any material (i) Debt (including Disqualified Equity Interests) or contingent liabilities, (ii) off-balance sheet liabilities or partnership liabilities, (iii) liabilities for past due Taxes, (iv) unusual forward or long-term commitments or (v) unrealized or anticipated losses from any unfavorable commitments, in each case, that would be required by GAAP to be reflected or noted in audited financial statements, except as referred to or reflected or provided for in the Historical Financial Statements or in other written information provided by the Borrowers to the Agent and the Lenders prior to the Closing Date.

9.1.5 Litigation. There are no actions, suits, investigations or proceedings by or before any arbitrator or Governmental Authority pending against or, to the knowledge of the Borrowers, threatened in writing against or affecting any Obligor or any of its Restricted Subsidiaries (i) not fully covered by insurance (except for normal deductibles) as to which there is a reasonable probability of an adverse determination that, if adversely determined, would reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect, or (ii) that involve the enforceability of any Loan Document.

9.1.6 Environmental Matters.

(a) Except for matters set forth on **Schedule 9.1.6** or that, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect:

(i) the Obligors and each of their respective Properties and operations thereon are, and within all applicable statute of limitation periods have been, in compliance with all applicable Environmental Laws;

(ii) the Obligors have obtained all Environmental Permits required for their respective operations and each of their Properties, with all such Environmental Permits being currently in full force and effect, and neither the Company nor the other Obligors has received any written notice or otherwise has knowledge that any such existing Environmental Permit will be revoked or that any application for any new Environmental Permit or renewal of any existing Environmental Permit will be denied;

(iii) there are no claims, demands, suits, orders, inquiries, or proceedings concerning any violation of, or any liability (including as a potentially responsible party or any liability for investigation, remediation, removal, abatement, or monitoring of Hazardous Materials) under, any applicable Environmental Laws that is pending or, to the Obligors' knowledge, threatened in writing against any Obligor or any of its Restricted Subsidiaries or any of their respective Properties or as a result of any operations at such Properties;

(iv) there has been no Environmental Release or, to the Obligors' knowledge, threatened Environmental Release, of Hazardous Materials at, on, under or from the Obligors' Properties, there are no investigations, remediations, abatements, removals, or monitorings of Environmental Releases of Hazardous Materials required under applicable Environmental Laws at such Properties and, to the knowledge of the Obligors, none of such Properties are adversely affected by any Environmental Release or threatened Environmental Release of a Hazardous Material originating or emanating from any other real property;

(v) there has been no exposure of any Person or Property to any Hazardous Materials as a result of or in connection with the operations and businesses of any of the Obligors' Properties that would reasonably be expected to form the basis for a claim for damages or compensation; and

(vi) none of the Properties of the Obligors contain any: (i) underground storage tanks; (ii) asbestos-containing materials; (iii) landfills or dumps; (iv) hazardous waste management units as defined pursuant to RCRA or any comparable state law; or (v) sites on or nominated for the National Priority List promulgated pursuant to CERCLA or any state remedial priority list promulgated or published pursuant to any comparable state law.

(b) The Obligors have made available to the Agent, to the extent requested by the Agent, complete and correct copies of all material written environmental site assessment reports, investigative reports, studies, analyses, and governmental correspondence, in each case on environmental matters (including matters relating to any alleged non-compliance with or liability under Environmental Laws) that are in any of the Borrowers' or any other Obligor's possession or control and relating to their respective Properties or operations thereon.

9.1.7 Compliance with the Laws and Agreements; No Defaults.

(a) Each of the Obligors (i) is in compliance with (A) all Applicable Laws applicable to it or its Property or to the construction of the Sand Facility Improvements, and (B) all agreements and other instruments binding upon it or its Property, and (ii) possesses all licenses, permits, franchises, exemptions, approvals and other governmental authorizations, in each case, necessary for the ownership of its Property, the construction of the Sand Facility Improvements, and the conduct of its business, except where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

(b) There exists no default or event or circumstance that, but for the expiration of any applicable grace period or the giving of notice, or both, would result in or permit the acceleration of the maturity of or would require any Borrower or any other Obligor or any of their respective Restricted Subsidiaries to redeem, defease or otherwise repay or make any offer therefor under any indenture, note, credit agreement or instrument pursuant to which any Material Debt is outstanding or by which any Borrower or any other Obligor or any of their Restricted Subsidiaries or any of their Properties is bound.

(c) No Default or Event of Default has occurred and is continuing.

9.1.8 Investment Company Act. None of the Obligors is an "investment company" or a company "controlled" by an "investment company," within the meaning of, or subject to regulation under, the Investment Company Act of 1940, as amended.

9.1.9 Taxes. Each of the Obligors has (a) timely filed or caused to be filed all federal income Tax returns and all material state and other tax returns and reports, in each case required by Applicable Law to have been filed, and such Tax returns accurately reflect in all material respects all liabilities for Taxes of the Obligors for the periods covered thereby, and (b) paid or caused to be paid all material Taxes required to have been paid by it, except Taxes that are being contested in good faith by appropriate proceedings and for which such Borrower or such other Obligor or its Restricted Subsidiaries, as applicable, has set aside on its books adequate reserves in accordance with GAAP. The charges, accruals and reserves on the books of the Obligors and their Restricted Subsidiaries in respect of Taxes and other governmental charges are, in the reasonable opinion of the Obligors, adequate. To the knowledge of the Obligors, (i) no Tax lien has been filed other than those constituting an Excepted Lien described in clause (a) of the definition thereof and (ii) as of the Closing Date, no claim is being asserted in writing with respect to any such Tax or other such governmental charge.

9.1.10 ERISA. Except as would not reasonably be expected, either individually or in the aggregate, to result in a Material Adverse Effect:

(a) Each Pension Plan is in compliance in all respects with the applicable provisions of ERISA, the Code and other Applicable Laws; and each Pension Plan that is intended to be a qualified plan under Section 401(a) of the Code has received a favorable determination letter from the IRS to the effect that the form of such Pension Plan is qualified under Section 401(a) of the Code and the trust related thereto has been determined by the IRS to be exempt from Federal income tax under Section 501(a) of the Code, or an application for such a letter is currently being processed by the IRS, and, to the knowledge of the Obligors, nothing has occurred that would prevent or cause the loss of such tax-qualified status.

(b) Other than routine claims for benefits, there are no pending or, to the knowledge of any Obligor, threatened claims, actions or lawsuits, or action by any Governmental Authority, with respect to any Pension Plan. To the knowledge of any Obligor, there has been no "prohibited transaction" (as defined in Section 406 of ERISA or Section 4975 of the Code) or violation of the fiduciary responsibility rules with respect to any Pension Plan that.

(c) No ERISA Event has occurred, and neither the Obligors nor any ERISA Affiliate is aware of any fact, event or circumstance that, either individually or in the aggregate, could reasonably be expected to constitute or result in an ERISA Event with respect to any Pension Plan or Multiemployer Plan.

(d) Full payment when due has been made of all amounts which each Borrower, each other Obligor or any Restricted Subsidiaries or any ERISA Affiliate is required, under the terms of each Pension Plan, Multiemployer Plan or Applicable Law, to have paid as contributions to such Pension Plan or Multiemployer Plan as of the date hereof.

(e) None of the Obligors nor any ERISA Affiliate sponsors, maintains, or contributes to an employee welfare benefit plan, as defined in Section 3(1) of ERISA, including, without limitation, any such plan maintained to provide benefits to former employees of such entities (other than in accordance with Section 4980B of the Code or any similar state law), that may not be terminated by any Borrower, any other Obligor or any Restricted Subsidiary or any ERISA Affiliate in its sole discretion at any time without any material liability.

(f) The present value of all accrued benefit liabilities (as defined in Section 4001(a)(16) of ERISA) under each Pension Plan (based on those assumptions used to fund such Pension Plan) did not, as of the last annual valuation date prior to the date on which this representation is made or deemed made, exceed the value of the assets of such Pension Plan allocable to such accrued benefits by a material amount (any such excess, "Unfunded Pension Liabilities"). As of the most recent valuation date for each Multiemployer Plan, the potential liability of any Obligor or any ERISA Affiliate for a complete withdrawal from such Multiemployer Plan (within the meaning of Section 4203 of ERISA), when aggregated with such potential liability for a complete withdrawal from all Multiemployer Plans, is zero.

9.1.11 Disclosure; No Material Misstatements. The reports, financial statements, certificates and other written information, taken as a whole, furnished by or on behalf of the Obligors to the Agent and the Lenders in connection with the negotiation of this Agreement or any other Loan Document or delivered hereunder or under any other Loan Document (as modified or supplemented by other information so furnished) do not contain any material misstatement of fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were or are made, not misleading as of the date such information is dated or certified; *provided* that (a) to the extent any such report, financial statement, certificate

or other written information was based upon or constitutes a forecast or projection, each Obligor represents only that it acted in good faith and utilized reasonable assumptions and due care in the preparation of such report, financial statement, certificate or other written information (it being recognized by the Lenders, however, that projections as to future events are not to be viewed as facts and that results during the period(s) covered by such projections may differ from the projected results and that such differences may be material and that the Obligors make no representation that such projections will be realized) and (b) as to statements, information and reports supplied by third parties, each Obligor represents only that it is not aware of any material misstatement or omission therein. The information included in the Beneficial Ownership Certification most recently delivered under this Agreement is true and correct in all respects.

9.1.12 Insurance. The Obligors have (a) all insurance policies sufficient for the compliance by each of them with all material Applicable Laws and all material agreements and (b) insurance coverage in at least amounts and against such risks (including, without limitation, public liability) that are usually insured against by companies similarly situated and engaged in the same or a similar business for the assets and operations of the Obligors. The Agent and the Lenders have been named as additional insureds in respect of such liability insurance policies and the Agent has been named as a lender loss payee with respect to Property loss insurance.

9.1.13 Restriction on Liens. None of the Obligors is a party to any material agreement or arrangement, or subject to any order, judgment, writ or decree, which either restricts or purports to restrict its ability to grant Liens to the Agent for the benefit of the Secured Parties on or in respect of their Properties that are subject to a Lien under one or more Loan Documents to secure the Obligations, except for Permitted Liens.

9.1.14 Subsidiaries and Capitalization.

(a) Except as set forth on **Schedule 9.1.14(a)** or as disclosed in writing to the Agent (which shall promptly furnish a copy to the Lenders), which shall be deemed to be a supplement to **Schedule 9.1.14(a)**, the Obligors have no Subsidiaries. The Obligors have no Foreign Subsidiaries.

(b) **Schedule 9.1.14(b)** lists the owners of all of the authorized and outstanding Equity Interests of each Obligor on the Closing Date, including options and other equity equivalents of the Obligors, together with the amount and percentage of such Equity Interests held by each such owner. All of the outstanding Equity Interests of each Subsidiary of the Obligors is validly issued and free and clear of any and all Liens (other than Permitted Liens).

9.1.15 Location of Business and Offices. Each Obligor's jurisdiction of organization, name as listed in the public records of its jurisdiction of organization, organizational identification number in its jurisdiction of organization, and the location of its principal place of business or chief executive office, as applicable, is stated on **Schedule 9.1.15** (or as set forth in a notice delivered pursuant to **Section 10.2.7** and **Section 14.3**). Each Subsidiary's jurisdiction of organization, name as listed in the public records of its jurisdiction of organization, organizational identification number in its jurisdiction of organization, and the location of its principal place of business or chief executive office, as applicable, is stated on **Schedule 9.1.15** (or as set forth in a notice delivered pursuant to **Section 10.2.7** and **Section 14.3**).

9.1.16 Properties; Titles, Etc.

(a) Subject to Immaterial Title Deficiencies, each of the Obligors has good and defensible title to all of its real Sand Properties and good title to all of its personal Sand Properties, in each case, free and clear of all Liens except Permitted Liens. All leases and agreements necessary for the conduct of the business of the Obligors are valid and subsisting, in full force and effect, and there exists no default or event or circumstance which with the giving of notice or the passage of time or both would give rise to a default under any such leases or agreements that would reasonably be expected to result in a Material Adverse Effect.

(b) All of the Sand Mines are described on **Schedule 9.1.16(b)** attached hereto or have been disclosed in writing as "Sand Mines" to the Agent after the Closing Date, which shall be deemed to be a supplement to **Schedule 9.1.16(b)**. The Obligors possess all of the real property interests necessary for the operation of the Sand Facilities currently operated by the Obligors, and all of the Sand Properties of the Obligors that are reasonably necessary for the operation of such Sand Facilities are in good working condition and are maintained in accordance with prudent business standards.

(c) Each Obligor and its Restricted Subsidiaries owns, or is licensed to use, all trademarks, trade names, copyrights, patents and other Intellectual Property material to its business (including geological data, geophysical data, engineering data, seismic data, maps and interpretations), and the use thereof by such Obligor and its Restricted Subsidiaries does not infringe upon the rights of any other Person, except for any such infringements that, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

(d) Each Obligor and each of its Restricted Subsidiaries has good and defensible title in fee simple to, or valid leasehold interests in, or easements or other marketable property interests in, all Property necessary in the ordinary conduct of its business, free and clear of all Liens except for minor defects in title that do not materially interfere with its ability to conduct its business or to utilize such assets for their intended purposes and Permitted Liens and except where the failure to have such title or other interest would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

9.1.17 Maintenance of Properties. Except for such acts or failures to act as would not reasonably be expected to result in a Material Adverse Effect, the Sand Facilities currently operated by the Obligors have been maintained, operated, developed and mined in a good and workmanlike manner and in conformity with all Applicable Laws and in conformity with the provisions of all leases, subleases, agreements or other contracts forming a part of the Sand Properties of the Obligors related thereto. All improvements, fixtures and equipment owned in whole or in part by the Obligors that are necessary for the operation of such Sand Facilities are being maintained in a state adequate to conduct normal operations thereof, other than those the failure of which to maintain in accordance with this **Section 9.1.17** would not reasonably be expected to result in a Material Adverse Effect.

9.1.18 Borrowing Base Calculations. The calculation by the Borrowers of the Borrowing Base in any Borrowing Base Report delivered to the Agent and the valuation thereunder is complete and accurate in all material respects as of the date of such delivery.

9.1.19 Validity and Priority of Security Interest. Upon execution and delivery thereof by the parties thereto, the applicable Loan Documents will be effective to create legal and valid Liens on all the applicable Collateral in favor of the Agent for the benefit of the Secured Parties, subject to the effects of Debtor Relief Laws, general equitable principles (whether considered in a proceeding in equity or at law) and an implied covenant of good faith and fair dealing and, upon the taking of such actions set forth in the Loan Documents, but subject to any exceptions to the taking of any actions as set forth therein, such Liens (a) constitute perfected Liens on all of the applicable Collateral, (b) have priority over all other Liens on the Collateral, subject to Permitted Liens and the provisions of any applicable Intercreditor Agreement then in existence, and (c) are enforceable against each Obligor, as applicable, granting such Liens.

9.1.20 Swap Obligations. **Schedule 9.1.20**, as of the Closing Date, and after the date hereof, each report required to be delivered by the Borrowers pursuant to **Section 10.1.2(i)**, sets forth a true and complete list of all Swap Obligations of each Borrower and each other Obligor and its Restricted Subsidiaries, the material terms thereof (including the type, term, effective date, termination date and notional amounts or volumes), all credit support agreements relating thereto and the counterparty to each such agreement.

9.1.21 Use of Loans. The proceeds of the Loans and Letters of Credit shall be used only for the purposes specified in **Section 2.1.3**. The Obligors and their Restricted Subsidiaries are not engaged principally, or as one of its or their important activities, in the business of extending credit for the purpose, whether immediate, incidental or ultimate, of buying or carrying margin stock (within the meaning of Regulation T, U or X of the Board). No part of the proceeds of any Loan or Letter of Credit will be used whether on or following the Closing Date for any purpose which violates the provisions of Regulations T, U or X of the Board.

9.1.22 Solvency. The Obligors and their Restricted Subsidiaries, taken as a whole, are Solvent.

9.1.23 Major Material Contracts. As of the Closing Date, no Obligor or its Restricted Subsidiaries is a party to any Major Material Contract other than those Major Material Contracts set forth on **Schedule 9.1.23**. Each of the Obligors and their Subsidiaries is in compliance with the terms of the Major Material Contracts, except where the failure to so comply would not reasonably be expected to result in a Material Adverse Effect.

9.1.24 Sanctions; Anti-Corruption.

(a) None of Parent, any Obligor or any of their Subsidiaries or, to the knowledge of Parent and such Obligor, any director, officer, employee, or agent of Parent, such Obligor or such Subsidiary, is a Person that is, or is owned or controlled by Persons that are, (i) the target of any Sanction, or (ii) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions.

(b) Parent, the Obligors and their respective Subsidiaries and, to the knowledge of Obligors and Parent, their respective directors, officers employees and agents, are, and have at all times in the past been, in compliance with all applicable Sanctions and Anti-Corruption Laws. Neither any Obligor or Parent has received notice of any action, suit, proceeding, or investigation against it with respect to Sanctions from any Governmental Authority during the past five (5) years. Each Obligor and Parent has instituted and maintains in effect such policies and procedures reasonably designed to ensure compliance with applicable Sanctions and the Anti-Corruption Laws.

9.1.25 Designation of Senior Debt. The Obligations are "Designated Senior Debt" (or any similar term) under the terms of the documentation governing any Subordinated Debt.

9.1.26 Affiliate Transactions. No Obligor or any of its Restricted Subsidiaries has entered into any transaction after the Closing Date that is not permitted by **Section 10.2.14**.

9.1.27 Credit Card Agreements. Set forth on **Schedule 9.1.27** is a correct and complete list of all of the Credit Card Agreements existing as of the Closing Date among any Obligor, Credit Card Issuers, Credit Card Processors and any of their Affiliates.

Section 10. COVENANTS AND CONTINUING AGREEMENTS.

10.1 Affirmative Covenants. As long as any Commitment or Obligations are outstanding, each Obligor shall, and shall cause each Restricted Subsidiary to:

10.1.1 Inspections; Appraisals.

(a) Permit Agent from time to time, subject (unless a Default or Event of Default exists) to reasonable notice and normal business hours, to visit and inspect the Properties of any Obligor or Subsidiary, inspect, audit and make extracts from any Obligor's or Subsidiary's books and records, and discuss with its officers, employees, agents, advisors and independent accountants such Obligor's or Subsidiary's business, financial condition, assets and results of operations; provided that so long as no Event of Default shall have occurred and be continuing, (i) Agent shall limit the number of inspections to not more than four (4) during any twelve (12) month period, and (ii) not more than one such inspection during any twelve (12) month period shall be at Borrowers' expense; provided, further, that if an Exam Trigger Period occurred during such year, Obligors shall reimburse Agent for all charges, costs and expenses associated with two inspections in a 12-month period. During any such inspection, Agent and its employees and agents and any employees and agents of any participating Lender shall comply with Borrowers' standard health and safety policies and procedures. Lenders may participate in any such visit or inspection, at their own expense. Secured Parties shall have no duty to any Obligor to make any inspection, nor to share any results of any inspection, appraisal or report with any Obligor. Obligors acknowledge that all inspections, appraisals and reports are prepared by Agent and Lenders for their purposes, and Obligors shall not be entitled to rely upon them.

(b) Reimburse Agent for all its reasonable and documented charges, costs and expenses in connection with (i) examinations of Obligors' books and records or any other financial or Collateral matters as it deems reasonably appropriate, up to one time per calendar year; and (ii) appraisals of Inventory, up to one time per calendar year; provided, that if (A) an Exam Trigger Period occurred during such year, Obligors shall reimburse Agent for all charges, costs and expenses associated with two examinations and two appraisals in a 12-month period and (B) an examination or appraisal is initiated during an Event of Default, all documented charges, costs and expenses relating thereto shall be reimbursed by Obligors without regard to such limits. Obligors

shall pay Agent's then standard charges for examination activities, including charges for its internal examination and appraisal groups, as well as the charges of any third party used for such purposes. No Borrowing Base calculation shall include Collateral acquired in a Permitted Acquisition or otherwise outside the Ordinary Course of Business until completion of applicable field examinations and appraisals (which shall not be included in the limits provided above) reasonably satisfactory to Agent.

10.1.2 Financial and Other Information. Keep adequate records and books of account with respect to its business activities, in which proper entries are made in accordance with GAAP reflecting all financial transactions; and furnish to Agent:

(a) as soon as available, and in any event within 120 days (or, if applicable, such earlier date on which such annual financial statements are required to be filed with the SEC) after the close of each Fiscal Year, balance sheets as of the end of such Fiscal Year and the related statements of income, cash flow and shareholders equity for such Fiscal Year, on a consolidated basis for the Applicable Reporting Entity and its Subsidiaries, which consolidated statements shall be audited and certified (without any "going concern" or other qualification, exception or explanatory paragraph (except resulting from (i) the impending maturity of the Obligations within the four fiscal quarter period following the relevant audit date or (ii) any potential future breach of the financial covenants under this Agreement) or any qualification, exception or explanatory paragraph as to the scope of such audit) by a firm of independent certified public accountants of recognized standing selected by Borrower Agent and reasonably acceptable to Agent, and shall set forth in comparative form corresponding figures for the preceding Fiscal Year and other information acceptable to Agent;

(b) as soon as available, and in any event within 60 days (or, if applicable, such earlier date on which such quarterly financial statements are required to be filed with the SEC) after the end of each Fiscal Quarter, unaudited balance sheets as of the end of such Fiscal Quarter and the related statements of income, cash flow and shareholders equity for such Fiscal Quarter and for the portion of the Fiscal Year then lapsed, on a consolidated basis for the Applicable Reporting Entity and its Subsidiaries, setting forth in comparative form corresponding figures for the preceding Fiscal Year and certified by the chief financial officer of Borrower Agent as prepared in accordance with GAAP and fairly presenting, in all material respects, the financial position and results of operations for such Fiscal Quarter and period, subject to normal year-end adjustments and the absence of footnotes;

(c) while a Trigger Period is in effect (provided, that if a Trigger Period commenced and is no longer in effect, Agent shall receive at least one set of monthly financial statements pursuant to this clause (c)), as soon as available, and in any event within 30 days after the end of each month, unaudited balance sheets as of the end of such month and the related statements of income, cash flow and shareholders equity for such month and for the portion of the Fiscal Year then elapsed, on a consolidated basis for the Applicable Reporting Entity and its Subsidiaries, setting forth in comparative form corresponding figures for the preceding Fiscal Year and certified by the chief financial officer of Borrower Agent as prepared in accordance with GAAP and fairly presenting, in all material respects, the financial position and results of operations for such month and period, subject to normal year-end adjustments and the absence of footnotes;

(d) concurrently with delivery of financial statements under clauses (a) through (c) above, a Compliance Certificate executed by a Senior Officer of Borrower Agent (which shall calculate the Fixed Charge Coverage Ratio if a Covenant Trigger Period is in effect);

(e) concurrently with delivery of financial statements under clause (a) above, copies of all management letters and other material reports submitted to the Applicable Reporting Entity by its accountants in connection with such financial statements;

(f) concurrently with delivery of financial statements under clause (a) above, projections of Obligors' consolidated balance sheets, results of operations, cash flow and Availability for the current Fiscal Year, month by month;

(g) promptly after the sending or filing thereof, copies of any proxy statements, financial statements or reports that any Obligor or Parent has made generally available to its shareholders; copies of any regular, periodic and special reports or registration statements or prospectuses that any Obligor or Parent files with the Securities and Exchange Commission or any other Governmental Authority, or any securities exchange; and copies of any press releases or other statements made available by an Obligor or Parent to the public concerning material changes to or developments in the business of such Obligor or Parent;

(h) promptly after the sending or filing thereof, copies of any annual report to be filed in connection with each Plan or Foreign Plan;

(i) concurrently with any delivery of financial statements under **clauses (a)** through **(c)** above, a certificate of a financial officer of Borrower Agent, in form and substance reasonably satisfactory to the Agent, setting forth as of a recent date a reasonably detailed summary of the Swaps to which any Obligor or any of its Subsidiaries is a party on such date;

(j) within five Business Days of the sending or effectiveness thereof, copies of (i) any material statement or report furnished by any Obligor to any other party pursuant to the terms of the Term Loan Documents and not otherwise required to be furnished to the Agent pursuant to this Agreement and (ii) any amendment or modification to the Term Loan Documents;

(k) such other reports and information (financial or otherwise, including financial covenant reporting) as Agent may reasonably request from time to time in connection with any Collateral or any Borrower's, Subsidiary's or other Obligor's financial condition, ownership or business;

(l) concurrently with any delivery of financial statements under **clauses (a)** through **(c)** above, a copy of any Major Material Contract (or material amendment or modification thereto) entered into by any Obligor or any of its Subsidiaries after the Closing Date and not previously delivered to the Agent; and

(m) at any time that any Unrestricted Subsidiaries or Parent are included in the financial statements delivered pursuant to**clauses (a)** through **(c)** above, then concurrently with any delivery of such financial statements, a certificate of a financial officer of Borrower Agent setting forth consolidating spreadsheets that show all of the Unrestricted Subsidiaries and Parent and the eliminating entries, in such form as would be presentable to the auditors of the Applicable Reporting Entity, and that summarizes the results of the Obligors and their Restricted Subsidiaries on a stand-alone basis.

Documents, reports and notices required to be delivered pursuant to**clauses (a)** and **(b)** (to the extent any such documents are included in materials otherwise filed with the SEC or any similar regulator or Governmental Authority of any jurisdiction) or **(g)** may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which such documents are posted on the Borrowers' behalf on an Internet or intranet website, if any, to which each Lender and the Agent have access (whether a commercial, third-party website or whether sponsored by the Agent); provided that the Borrower Agent shall notify the Agent (by electronic mail) of the posting of any such documents and shall deliver paper copies of such documents to the Agent or any Lender that so requests.

10.1.3 Notices. Notify Agent in writing, promptly (any in any event within five Business Days) after a Borrower's knowledge thereof, of any of the following affecting an Obligor: (a) the threat in writing or the commencement of any proceeding or investigation, whether or not covered by insurance, that, if adversely determined, would reasonably be expected to have a Material Adverse Effect; (b) the occurrence of any Major Material Contract EOD that has resulted, or would reasonably be expected to result, in liability of any Obligor or any Subsidiary of any Obligor in an aggregate amount in excess of $25,000,000; (c) the early termination of any real property lease that is a Sand Interest; (d) the occurrence of an "Event of Default" under and as defined in the Term Loan Agreement; (e) existence of a Default or Event of Default; (f) any judgment for the payment of money in an amount exceeding $25,000,000; (g) assertion of any Intellectual Property Claim, if an adverse resolution could reasonably be expected to have a Material Adverse Effect; (h) violation or asserted violation of any Applicable Law (including ERISA, OSHA, FLSA or any Sanction or Environmental Law), if an adverse resolution could reasonably be expected to have a Material Adverse Effect; (i) the occurrence of an ERISA Event; (j) any material change in any accounting or financial reporting practice that affects the calculation of the Borrowing Base or the Fixed Charge Coverage Ratio; (k) any change in any information contained in a Beneficial Ownership Certificate delivered to Agent or any Lender; (l) the discharge, withdrawal or resignation of Obligors' independent accountants; (m) the opening or move of the Company's chief executive office, not more than 10 Business Days following such opening or move; or (n) the filing of any Tax lien affecting any Collateral with respect to an amount owing in excess of $1,000,000.

10.1.4 Landlord and Storage Agreements. Promptly upon Agent's request, provide Agent with copies of all existing agreements between an Obligor and any landlord, warehouseman, processor, shipper, bailee or other Person that owns any premises at which any Collateral may be kept or that otherwise may possess or handle any Collateral.

10.1.5 Compliance with Laws. Comply with all Applicable Laws, including ERISA, Environmental Laws, FLSA, OSHA and Anti-Terrorism Laws, and maintain all Governmental Approvals necessary for ownership of its Properties or conduct of its business, unless failure to comply (other than failure to comply with Anti-Terrorism Laws) or maintain could not reasonably be expected to have a Material Adverse Effect. Each Obligor and Subsidiary shall maintain such policies and procedures, if any, as it reasonably deems appropriate, in light of its business and international activities (if any), to promote compliance with applicable Anti-

Corruption Laws and Sanctions. Without limiting the generality of the foregoing, if any Environmental Release occurs at or on any Properties of any Obligor or Subsidiary, it shall act promptly and diligently to investigate and report to Agent and all appropriate Governmental Authorities the extent of, and to make appropriate remedial action to eliminate, such Environmental Release, whether or not directed to do so by any Governmental Authority, except where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

10.1.6 Taxes. Pay and discharge all Taxes prior to the date on which they become delinquent or penalties attach, unless (a) such Taxes are being Properly Contested or (b) the failure to make payment would not reasonably be expected to result in a Material Adverse Effect.

10.1.7 Insurance. In addition to the insurance required hereunder with respect to Collateral, maintain insurance with financially sound and reputable insurance companies with respect to the Properties and business of Obligors and Subsidiaries of such type, in such amounts, and with such coverages and deductibles as are customarily maintained by companies engaged in the same or similar businesses operating in the same or similar locations.

10.1.8 Licenses. Keep each License affecting any Collateral (including the manufacture, distribution or disposition of Inventory) or any other material Property of Obligors and Subsidiaries in full force and effect and pay all royalties and other amounts when due under any License, except where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

10.1.9 Future Subsidiaries. Promptly (and in any event within 10 days) notify Agent if any Person becomes a Subsidiary and deliver any know-your customer or other background diligence information requested by Agent or any Lender with respect to such Subsidiary; and (provided it is not a Foreign Subsidiary, a FSHCO or a Subsidiary of a Foreign Subsidiary or not designated by Borrower Agent as an Unrestricted Subsidiary in accordance with **Section 1.6**) within 30 days (or such later date as Agent may agree in its reasonable discretion) of such Person becoming a Subsidiary (or an Unrestricted Subsidiary being redesignated as a Restricted Subsidiary) cause it to become a "Borrower" or "Guarantor" under this Agreement and to guaranty and grant Liens securing the Obligations, in each case in a manner reasonably satisfactory to Agent, and to execute and deliver such documents, instruments and agreements and to take such other actions as Agent may reasonably request to evidence and perfect a Lien in favor of Agent on all assets of such Person (other than Excluded Property), including, if requested by Agent, delivery of legal opinions, in form and substance reasonably satisfactory to Agent.

10.1.10 [Reserved].

10.1.11 Post-Closing Obligations. Each Obligor will complete each of the actions that is described in**Schedule 10.1.11** as soon as commercially reasonable following the Closing Date, but in any event no later than the date set forth in **Schedule 10.1.11** with respect to such action, or such later date as Agent may agree in its sole discretion.

10.1.12 Credit Card Agreements. Each of the Obligors shall: (a) observe and perform all material terms of the Credit Card Agreements to be observed and performed by it at the times set forth therein; and (b) deposit or cause to be deposited all cash received with respect to Credit Card Agreements into a Credit Card Receivables Account subject to a Deposit Account Control Agreement; provided that the maximum amount on deposit in all Credit Card Receivables Accounts shall not exceed $500,000 at any one time.

10.1.13 Operation and Maintenance of Properties.

(a) Maintain all of its material property necessary and useful in the conduct of its business, taken as a whole, in good operating condition and repair (or, in the case of Inventory, in saleable, useable or rentable condition), ordinary wear and tear and casualty excepted, except, in each case, to the extent the failure to do so would not reasonably be expected to have a Material Adverse Effect;

(b) operate the Sand Facilities and other material Sand Properties, or cause the Sand Facilities and other material Sand Properties to be operated, in a careful manner in accordance with the practices of the industry and in compliance with all applicable contracts and agreements and in compliance with all Applicable Laws, including, without limitation, applicable Environmental Laws, and all other applicable laws, rules and regulations of every Governmental Authority from time to time constituted to regulate the development and operation of the Sand Facilities and the production and sale of sand and minerals therefrom, except, in each case, where the failure to do so would not reasonably be expected to result in a Material Adverse Effect;

(c) keep and maintain all Sand Property material to the conduct of its business in good working order and condition (ordinary wear and tear excepted) and preserve, maintain and keep in good repair and working order (ordinary wear and tear and obsolescence excepted) all of its Properties necessary to operate the Sand Facilities, except where the failure to do so would not reasonably be expected to result in a Material Adverse Effect;

(d) promptly pay and discharge, or make reasonable and customary efforts to cause to be paid and discharged, all rentals, royalties, expenses and indebtedness accruing under the leases or other agreements affecting or pertaining to its Sand Properties and do all other things necessary to keep unimpaired its rights with respect thereto and prevent any forfeiture thereof or default thereunder, except where the failure to do so would not reasonably be expected to result in a Material Adverse Effect;

(e) promptly perform, or make reasonable and customary efforts to cause to be performed, in accordance with customary industry standards, the obligations required by each and all of the assignments, deeds, leases, sub-leases, contracts and agreements affecting its interests in the Sand Facilities and other material Sand Properties, except, in each case, where the failure to do so would not reasonably be expected to result in a Material Adverse Effect; and

(f) pay, satisfy and obtain the release of all other claims and Liens affecting or purporting to affect title to the Mortgaged Property or any part thereof (other than Permitted Liens), and all costs, charges, interest and penalties on account thereof, including without limitation the claims of all subcontractors and other Persons supplying labor or materials to the Mortgaged Property, and to give the Agent within five Business Days of Agent's written demand therefor (including by email), evidence reasonably satisfactory to the Agent of the payment, satisfaction

or release thereof, except those (i) being contested in good faith by appropriate proceedings and for which the Borrowers or any other Obligor or any Subsidiary of any Obligor, as applicable, has set aside on its books adequate reserves in accordance with GAAP and (ii) the failure to pay, satisfy, or release would not reasonably be expected to result in a Material Adverse Effect.

10.2 Negative Covenants. As long as any Commitment or Obligations are outstanding, each Obligor shall not, and shall cause each Restricted Subsidiary not to:

10.2.1 Permitted Debt. Create, incur, guarantee or suffer to exist any Debt, except:

(a) the Obligations;

(b) (i) Debt incurred under the Term Loan Agreement and (ii) Permitted Refinancing Debt incurred to refinance or replace Debt previously incurred in reliance on this **clause (b)**, in each case, in an aggregate principal amount not to exceed an amount at any one time outstanding equal to the result of (x) the sum of (1) $180,000,000 plus (2) additional amounts so long as at the time of incurrence thereof and immediately after giving pro forma effect thereto and the use of proceeds thereof, the Borrowers would be in compliance with a Senior Secured Leverage Ratio on a pro forma basis of less than or equal to 3.00 to 1.00 (and the Borrowers shall, on the date of incurrence of such Debt in reliance on this clause (2), deliver a certificate from a Senior Officer in form and detail reasonably satisfactory to Agent demonstrating compliance with such Senior Secured Leverage Ratio), less (y) the aggregate amount of all payments of the principal of the Debt under the Term Loan Agreement; provided that (A) such Debt incurred in reliance on this **clause (b)** and the Liens securing such Debt are subject to the Intercreditor Agreement and subordinate to the Agent's Liens on the ABL Priority Collateral, (B) no Default or Event of Default is then continuing or would result from incurrence thereof and (C) the scheduled maturity date of such Debt is at least 91 days after the Termination Date (Debt incurred in reliance on this **clause (b)**, the "Term Loan Debt");

(c) Debt that constitutes purchase money Debt or under Capital Leases (or other equipment financing arrangements for mobile excavation equipment, automobiles, trucks, rental equipment or other personal Property (excluding Inventory) to be used in the Ordinary Course of Business) not to exceed in the aggregate principal amount at any one time outstanding the greater of (i) $25,000,000 and (ii) 5.0% of Consolidated Net Tangible Assets;

(d) Debt existing on the Closing Date and not satisfied with the initial Loan proceeds, to the extent set forth on **Schedule 10.2.1** hereto and Permitted Refinancing Debt incurred to refinance, replace or extend any such Debt;

(e) Debt with respect to Bank Products;

(f) Debt incurred or assumed in connection with Permitted Acquisitions (including a Permitted Acquisition effectuated by a Permitted Parent Entity Investment), including Debt consisting of indemnities, obligations in respect of earn outs or other purchase price adjustments or similar obligations in connection therewith, not to exceed (i) $50,000,000 or (ii) an unlimited amount so long as, on the date of creation, incurrence or assumption thereof and after giving pro forma effect thereto, the Borrowers would be in compliance on a pro forma basis with a Consolidated Leverage Ratio of no greater than 3.00 to 1.00 as of such time (and the Borrower Agent shall deliver a certificate of a Senior Officer in form and detail reasonably satisfactory to Agent demonstrating compliance with such Consolidated Leverage Ratio);

(g) (i) Permitted Contingent Obligations and (ii) Debt arising from the honoring by a bank or other financial institution of a check, draft or similar instrument inadvertently (except in the case of daylight overdrafts) drawn against insufficient funds in the Ordinary Course of Business; provided, that such Debt is extinguished within two Business Days of its incurrence;

(h) Debt incurred in connection with the financing of insurance premiums in the Ordinary Course of Business;

(i) intercompany Debt among the Obligors and their Restricted Subsidiaries permitted under **Section 10.2.4**; provided, that any such Debt owing by an Obligor to a non-Obligor must constitute Subordinated Debt;

(j) Debt incurred by the Obligors in respect of Credit Card Agreements in the Ordinary Course of Business not to exceed in the aggregate principal amount at any one time outstanding $500,000;

(k) Debt constituting a guaranty by any Obligor or Restricted Subsidiary of other Debt permitted to be incurred under this **Section 10.2.1**;

(l) Debt and obligations owing under Swap Agreements to the extent permitted under **Section 10.2.12**;

(m) Debt of any Restricted Subsidiary that is not an Obligor incurred under this **clause (m)**; provided that (i) such Debt is not guaranteed by any Obligor, (ii) the holder of such Debt does not have, directly or indirectly, any recourse to any Obligor, whether by reason of representations or warranties, agreements of the parties, operation of law, or otherwise, (iii) such Debt is not secured by any assets of any Obligor and (iv) the aggregate amount of Debt incurred under this **clause (m)** shall not exceed $25,000,000;

(n) Debt incurred under this **clause (n)** and then outstanding in an aggregate principal amount, measured at the time of incurrence and after giving pro forma effect thereto and the use of the proceeds therefrom, not to exceed $35,000,000 at any time;

(o) other unsecured Debt; provided that (i) on the date of incurrence thereof and after giving pro forma effect thereto and the use of proceeds thereof, the Borrowers would be in compliance on a pro forma basis with a Consolidated Leverage Ratio of no greater than 5.00 to 1.00 at such time (and the Borrower Agent shall, on the date of incurrence of such Debt, deliver a certificate of a Senior Officer in form and detail reasonably satisfactory to Agent demonstrating compliance with such Consolidated Leverage Ratio), (ii) no Default or Event of Default shall exist or will result immediately after giving effect to the incurrence of such Debt, (iii) the borrower and the guarantors with respect to such Debt shall only be the Obligors (or if any other Person is a borrower or guarantor in respect of such Debt, such other Person shall become a Guarantor hereunder and under the other Loan Documents pursuant to **Section 10.1.9**), (iv) the maturity of such Debt is not prior to, and such Debt does not require any scheduled amortization or other scheduled prepayments of principal, prior to, the date that is ninety-one (91) days after the Termination Date and (v) the covenants and events of default governing such Debt shall not be, taken as a whole, materially more restrictive to the Obligors than those under this Agreement;

(p) unsecured Debt arising from loan programs of the Small Business Administration or other Governmental Authorities where the principal thereof is eligible for forgiveness under the applicable program or legislation; provided that the Obligor or Restricted Subsidiary incurring such Debt meets the requirements and criteria for forgiveness under such program or legislation; and

(q) Debt consisting of obligations in respect of letters of credit in an aggregate amount not to exceed $25,000,000 at any one time outstanding solely to the extent such letters of credit are issued when no Person is acting in the capacity of Issuing Bank under this Agreement.

10.2.2 Permitted Liens. Create or suffer to exist any Lien upon any of its Property, except the following (collectively, "Permitted Liens"):

(a) Liens in favor of Agent;

(b) Liens now or hereafter securing the Term Loan Debt, so long as such Liens remain subject to the terms of the Intercreditor Agreement;

(c) Liens securing Debt permitted by **Section 10.2.1(c)** (other than Liens on Inventory); provided, that (i) such Liens do not secure any Property other than the Property leased or financed by such Debt (provided that individual financings of equipment or other property permitted under **Section 10.2.1(c)** provided by one lender may be cross collateralized to other financings permitted under **Section 10.2.1(c)** provided by such lender) and (ii) the principal amount of Debt secured by any such Lien shall at no time exceed 100% of the original purchase price or lease payment amount of such Property at the time it was acquired;

(d) Excepted Liens;

(e) Liens on assets that are acquired in a Permitted Acquisition (including a Permitted Acquisition effectuated by a Permitted Parent Entity Investment), securing Debt permitted by **Section 10.2.1(f)**;

(f) Liens arising from precautionary UCC financing statements regarding specifically described assets (which may not include Inventory) that are the subject of an operating lease;

(g) Liens on insurance policies and the proceeds thereof securing the financing of the premiums with respect thereto;

(h) Liens securing Debt permitted by **Section 10.2.1(l)** (other than on Accounts and Inventory); provided that at the time of the incurrence thereof, the aggregate outstanding amount of Debt and other obligations secured by Liens under this **clause (h)** and then-outstanding shall not exceed $10,000,000;

(i) Liens existing on the Closing Date and shown on **Schedule 10.2.2**;

(j) other Liens; provided that the aggregate outstanding amount of Debt and other obligations secured by Liens under this **clause (j)** and then-outstanding shall not exceed $35,000,000 at any one time; provided, further, that the holder of any such Debt or obligations (or an agent representative in respect thereof) shall have entered into an intercreditor agreement in form and substance reasonably satisfactory to Agent and the Borrowers (providing, among other things, that the Liens on the ABL Priority Collateral securing such Debt or other obligations shall rank junior to Agent's Liens on the ABL Priority Collateral);

(k) Liens or rights of setoff against credit balances or cash and Cash Equivalents held in a Credit Card Receivables Account of the Borrowers or any of their Restricted Subsidiaries with Credit Card Issuers or Credit Card Processors to secure indebtedness permitted by **Section 10.2.1(j)**; provided, that the aggregate amount of credit balances or cash or Cash Equivalents subject to such Liens and rights of setoff under this **Section 10.2.2(k)** shall not exceed $500,000 at any one time;

(l) Liens on the Equity Interests of Unrestricted Subsidiaries pledged by an Obligor on anon-recourse basis to secure Debt incurred by one or more Unrestricted Subsidiaries; and

(m) Liens on cash collateral securing Debt permitted under **Section 10.2.1(q)**.

10.2.3 Distributions; Upstream Payments.

(a) Declare or make any Distributions, except, Obligors and Restricted Subsidiaries may make:

(i) Upstream Payments;

(ii) the Company may declare and make Distributions with respect to its Equity Interests payable solely in additional shares of its Equity Interests that do not constitute Disqualified Equity Interests (including exchanges of Equity Interests for different classes);

(iii) Distributions by the Company constituting Permitted Tax Distributions;

(iv) so long as no Default or Event of Default shall have occurred and be continuing or would result therefrom, repurchases or redemptions of any Equity Interests that are not Disqualified Equity Interests of the Company or Parent held by officers, directors or employees (or their transferees, estates or beneficiaries under their estates) of Parent or any Obligor, including any repurchase, retirement or redemption pursuant to stock option plans, employee benefit plans, or any shareholders' agreement or other similar agreement or arrangement then in effect or upon their death, disability, retirement, severance or termination of employment or service, provided, that the aggregate cash consideration paid for all such redemptions and payments shall not exceed $10,000,000 in any Fiscal Year; provided, further that any unused amount in a Fiscal Year may be carried over to the subsequent Fiscal Year for a maximum amount available under this clause of $15,000,000 in any Fiscal Year;

(v) other cash Distributions by the Company so long as the Payment Conditions are satisfied before and after giving effect thereto;

(vi) to the extent constituting Distributions and without duplication of **Section 10.2.14(e)(i)**, Distributions by the Company to Parent to pay Parent's overhead costs and expenses incurred in the Ordinary Course of Business (including legal, accounting and other general and administrative expenses) in each case that are reasonable and customary and directly attributable to the ownership or operations of the Company and its Subsidiaries; provided, that no such Distribution may be made in respect of overhead costs and expenses directly attributable to Unrestricted Subsidiaries unless a like amount has been received by the Obligors and their Restricted Subsidiaries from the Unrestricted Subsidiaries;

(vii) Distributions by the Company to the holders of its Equity Interests in an aggregate amount not to exceed $5,000,000 during the term of this Agreement; provided that no Default or Event of Default has occurred and is continuing or would result therefrom;

(viii) so long as no Default or Event of Default shall have occurred and be continuing or would result therefrom, additional cash Distributions by the Company in an aggregate amount not to exceed the Available Equity Amount at the time of such Distribution;

(ix) repurchases of Equity Interests (i) deemed to occur on the exercise of options by the delivery of Equity Interests in satisfaction of the exercise price of such options and (ii) in consideration of withholding or similar Taxes payable by any future, present or former employee, director, manager or consultant (or any spouses, former spouses, successors, executors, administrators, heirs, legatees or distributees of any of the foregoing), including deemed repurchases in connection with the exercise of stock options or restricted stock units;

(x) Distributions by the Company to Parent (or any other Person of which the Company is a direct or indirect Subsidiary) to finance any Investment (including any Permitted Acquisition) permitted under **Section 10.2.4** (provided that (x) any Distribution under this **clause (a)(x)** shall be made substantially concurrently with the closing of such Investment and (y) Parent (or such other parent entity) shall, promptly following the closing thereof, cause (I) all property acquired to be contributed to the Company or one or more other Obligors, or (II) the merger, consolidation or amalgamation of the Person formed or acquired into the Company or one or more other Obligors, in order to consummate such Investment in compliance with the applicable requirements of **Section 10.2.4** as if undertaken as a direct Investment by the Company or the relevant Obligor) (any such Investment or Permitted Acquisition described in this clause (x), a "**Permitted Parent Entity Investment**"); and

(xi) Specified IPO Event Transactions; or

(b) create or suffer to exist any encumbrance or restriction on the ability of a Restricted Subsidiary to make an Upstream Payment, except for restrictions (i) under the Loan Documents and the Term Loan Documents, (ii) under Applicable Law, (iii) permitted under **Section 10.2.12** and (iv) in effect on the Closing Date as shown on **Schedule 10.2.3**.

10.2.4 Investments. Make any Investment, other than:

(a) (i) Investments in Subsidiaries to the extent existing on the Closing Date and (ii) Investments existing on the Closing Date and set forth on **Schedule 10.2.4**, in each case for this clause (a), excluding increases thereof following the Closing Date;

(b) cash and Cash Equivalents;

(c) advances to an officer or employee for salary, travel expenses, commissions and similar items in the Ordinary Course of Business;

(d) intercompany cash Investments (i) solely among Obligors and (ii) by a Restricted Subsidiary that is not an Obligor in any other Restricted Subsidiary that is not an Obligor or an Obligor; provided, that any Investment in the form of a loan or advance shall be evidenced by an intercompany note and, in the case of a loan or advance by any Obligor, pledged by such Person as Collateral pursuant to the Security Documents;

(e) the grant of trade credit in the Ordinary Course of Business and payable or dischargeable in accordance with customary trade terms, and Investments received in the Ordinary Course of Business in satisfaction or partial satisfaction thereof from financially troubled Account Debtors to the extent reasonably necessary in order to prevent or limit loss;

(f) Investments consisting of lease, utility and other similar deposits in the Ordinary Course of Business;

(g) Permitted Acquisitions;

(h) [Reserved];

(i) so long as no Default or Event of Default shall have occurred and be continuing or would result therefrom, any Investment in an amount not to exceed the Available Equity Amount at such time;

(j) other Investments (excluding Acquisitions) so long as the Payment Conditions are satisfied before and after giving effect thereto;

(k) other Investments; provided that the aggregate unrecovered/then outstanding amount of Investments made pursuant to this **clause (k)** shall not exceed, at the time of the making of such Investment and immediately after giving pro forma effect thereto, $5,000,000;

(l) to the extent constituting an Investment, the guarantee by an Obligor of any Debt of an Unrestricted Subsidiary so long as such guarantee is limited solely to a non-recourse pledge of the Equity Interests of such Unrestricted Subsidiary;

(m) Investments, including Investments in Unrestricted Subsidiaries, to the extent funded with, to the extent Not Otherwise Applied, cash proceeds from contributions to the Company's common equity capital or from the sale of its Equity Interests (other than Disqualified Equity Interests and the proceeds of Cure Amounts and any IPO Event) received by an Obligor after the Closing Date (a "**Pass-Through Equity Contribution**") and applied to such Investments within 90 days of the receipt thereof (it being understood and agreed that (x) the Borrower Agent shall provide Agent prior written notice of any such Pass-Through Equity Contribution, which such notice shall designate the applicable cash proceeds as a Pass-Through Equity Contribution and (y) in no event shall any Pass-Through Equity Contribution increase the Available Equity Amount, the Borrowing Base or Liquidity);

(n) Investments in Unrestricted Subsidiaries to the extent funded solely with prepayments from customers in connection with the conveyor project of one or more of the Unrestricted Subsidiaries that are received by an Obligor in cash after the Closing Date (a "**Pass-Through Customer Prepayment**") and are substantially contemporaneously contributed to such Unrestricted Subsidiaries (it being understood and agreed that (x) the Borrower Agent shall provide Agent prior written notice of (i) any such Pass-Through Customer Prepayment, which such notice shall designate the applicable cash proceeds as a Pass-Through Customer Prepayment and (ii) if, immediately after giving effect to such Investment on a pro forma basis, a Trigger Period would commence, an updated Borrowing Base Report and (y) in no event shall any Pass-Through Customer Prepayment increase the Available Equity Amount, the Borrowing Base or Liquidity);

(o) to the extent constituting an Investment, Permitted Intercompany Activities; and

(p) Specified IPO Event Transactions.

10.2.5 Disposition of Assets. Make any Disposition, except for as long as no Default or Event of Default exists or would result therefrom, a Disposition constituting:

(a) the sale of Inventory in the Ordinary Course of Business;

(b) the use, transfer or disposition of cash and Cash Equivalents pursuant to any transaction not prohibited by the terms of the Loan Documents;

(c) a Disposition of obsolete, unmerchantable or otherwise unsalable Inventory that is not included in the Borrowing Base;

(d) a transfer of Property by a Restricted Subsidiary or Obligor to another Obligor or solely among Restricted Subsidiaries that are not Obligors;

(e) Distributions permitted under **Section 10.2.3** and Investments permitted under **Section 10.2.4**;

(f) the Disposition of any Equity Interest (i) in a Subsidiary to any Obligor and (ii) in any Unrestricted Subsidiary;

(g) the issuance of Equity Interests (other than Disqualified Equity Interests) in the Company to the extent such issuance does not result in a Change of Control;

(h) the sale or transfer of equipment and other personal property that is no longer necessary for the business of an Obligor or is replaced by equipment or other personal property of at least comparable value and use;

(i) non-exclusive licensing and cross-licensing arrangements involving any technology or other intellectual property of the Company or any Restricted Subsidiary in the Ordinary Course of Business;

(j) the abandonment of any rights, franchises, licenses, or intellectual property that any Obligor reasonably determines are no longer useful in its business or commercially desirable;

(k) the transfer of interests in any Sand Properties, or portions thereof, to which no Sand Reserves are attributed;

(l) the transfer of Property (other than ABL Priority Collateral) in connection with a Casualty Event;

(m) the sale, disposition or other transfer of any Properties (other than Accounts) that are not regulated by clauses (a) through (l) of this **Section 10.2.5** having a Fair Market Value not to exceed $10,000,000 in the aggregate during any 12-month period; provided that (i) the Borrower Agent shall deliver an updated Borrowing Base Report prior to giving effect to such sale, disposition, or other transfer if more than 5.0% of the assets included in the most recent calculation of the Borrowing Base are being disposed of pursuant to this **clause (m)**, (ii) no Overadvance shall exist or result therefrom, and (iii) Obligors shall comply with **Section 5.2**, if applicable;

(n) the sale, disposition or other transfer of any Property (other than Accounts), if such Property is so sold, disposed of or transferred for Fair Market Value; provided that the applicable Obligor or Restricted Subsidiary shall receive not less than 75% of such consideration in the form of cash or Cash Equivalents; provided, further, that, for purposes of determining what constitutes cash and Cash Equivalents under this **clause (n)** in connection with any disposition, sale or transfer of any Property (other than with respect to any Disposition of any ABL Priority Collateral), up to $5,000,000 of any Designated Non-Cash Consideration received by the applicable Obligor or such Restricted Subsidiary in respect of such Property, taken together with all other Designated Non-Cash Consideration received pursuant to this **clause (n)** that is outstanding at the time such Designated Non-Cash Consideration is received, shall be deemed to be cash; provided however (i) the Borrower Agent shall deliver an updated Borrowing Base Report if more than 5.0% of the assets included in the most recent calculation of the Borrowing Base are being disposed of pursuant to this **clause (n)**, (ii) Obligors shall comply with **Section 5.2**, if applicable, and (iii) no Overadvance shall exist or result therefrom;

(o) the transfer of Property by means of a transaction expressly permitted under **Section 10.2.7**; and

(p) Specified IPO Event Transactions.

10.2.6 Restrictions on Payment of Certain Debt Make any voluntary prepayments or other Redemptions with respect to any Junior Debt, except (a) regularly scheduled payments of principal, interest and fees and any Permitted Refinancing Debt, in each case but only to the extent permitted under any subordination agreement relating to such Debt (if applicable), (b) to the extent the Payment Conditions are satisfied with respect thereto or (c) so long as no Default or Event of Default shall have occurred and be continuing or would result therefrom, additional prepayments or Redemptions in an aggregate amount not to exceed the Available Equity Amount at the time of such prepayment or Redemption.

10.2.7 Fundamental Changes. (a) Change its legal name or change its form or state of formation or organization, in each case, without giving Agent at least 10 days prior written notice (or such lesser period as Agent may agree in its sole discretion) and taking such actions as Agent may reasonably request with respect thereto to continue the creation and perfection of Agent's Liens in any Collateral or the enforceability of the Loan Documents; (b) liquidate, wind up its affairs or dissolve itself; (c) consummate or unwind a Division; (d) effect a Disposition of substantially all its assets; or (e) merge, combine or consolidate with any Person, in each case whether in a single transaction or series of related transactions, except (i) for mergers or consolidations of a wholly-owned Obligor or Restricted Subsidiary with another wholly-owned Obligor or Restricted Subsidiary, provided, that (A) with respect to any merger or consolidation involving a Borrower, a Borrower is the surviving person in such merger or consolidation and (B) with respect to any merger or consolidation involving a Guarantor (unless **clause (A)** also applies, in which case such clause shall govern), such Guarantor is the surviving person in such merger or consolidation, (ii) Permitted Acquisitions, (iii) Specified IPO Event Transactions, provided that with respect to any merger or consolidation involving an Obligor, the Obligor is the surviving person in such merger or consolidation, and (iv) any non-Obligor Restricted Subsidiary may liquidate or dissolve so long as any remaining assets are transferred to another non-Obligor Restricted Subsidiary or to an Obligor and any Obligor (other than the Company) may liquidate or dissolve so long as any remaining assets of such Obligor are transferred to another Obligor.

10.2.8 Subsidiaries. Form or acquire any Subsidiary after the Closing Date, except in accordance with **Sections 10.1.9**; or permit any existing Restricted Subsidiary to issue any additional Equity Interests except directors' qualifying shares or Equity Interests issued to its immediate parent company. Following the Closing Date, the Obligors shall not form or acquire any Foreign Subsidiaries.

10.2.9 Organic Documents. Amend, modify or otherwise change any of its Organic Documents in a manner that would reasonably be expected to be materially adverse to the Lenders.

10.2.10 Accounting Changes. Make any material change in accounting treatment or reporting practices, except in accordance with **Section 1.2**, or change its Fiscal Year.

10.2.11 Restrictive Agreements. Become a party or be subject to any contract, agreement or understanding (other than those in existence on the Closing Date and set forth on **Schedule 10.2.3**, this Agreement, the Security Documents, agreements with respect to purchase money Debt or Capital Leases creating Liens permitted by **Section 10.2.2(c)** (limited to the Property securing such Debt and the proceeds thereof), documents creating Liens which are described in **clause (d)**, **(g)**, **(i)** or **(l)** of the definition of "Excepted Liens", agreements, instruments, and documents executed in connection with Debt permitted under **Section 10.2.1(b)**, **10.2.1(f)** (limited to the subject of and Property acquired in such Permitted Acquisition and the proceeds thereof), and **10.2.1(n)** (limited to the Property securing such Debt and the proceeds thereof), constituting customary restrictions on assignment in leases and other contracts and customary restrictions and conditions contained in any agreement relating to the sale of any property permitted under this Agreement pending the consummation of such sale) that in any way prohibits or restricts the granting, conveying, creation or imposition of any Lien on any of its Sand Property or Property constituting ABL Priority Collateral in favor of the Agent for the benefit of the Secured Parties or restricts any Restricted Subsidiary from paying dividends or making distributions in respect of its Equity Interests to any Obligor.

10.2.12 Swaps. Enter into any Swap, except (i) Swaps to hedge existing or anticipated interest rate risk in respect of Debt permitted pursuant to **Section 10.2.1** and (ii) Swaps entered into not for speculative purposes and intended to hedge existing or anticipated risk in respect of commodity prices.

10.2.13 Conduct of Business. Engage in any business, other than its business as conducted on the Closing Date and any businesses or activities that are similar, related, ancillary, incidental or complementary thereto or businesses that are a reasonable extension, development or expansion thereof.

10.2.14 Affiliate Transactions. Enter into or be party to any transaction with an Affiliate (or amend or modify any such transaction) involving aggregate payments or consideration in any Fiscal Year in excess of $500,000, except (a) transactions otherwise expressly permitted by the Loan Documents; (b) compensation to, and the terms of any employment contracts with, individuals who are employees, officers, managers or directors of the Obligors (including, the performance of employment, equity award, equity option or equity appreciation agreements, plans or other similar compensation or benefit plans or arrangements (including vacation plans, health and insurance plans, deferred compensation plans and retirement or savings plans)); (c) transactions solely among Obligors or transactions solely among Restricted Subsidiaries that are not Obligors; (d) transactions with Affiliates entered into prior to the Closing Date, as shown on **Schedule 10.2.14**; (e) (i) Distributions permitted under **Section 10.2.3** (or payment of Parent's overhead costs and expenses as described in **Section 10.2.3(a)(vi)** subject to the limitations set forth therein in lieu of Distributions therefor) and (ii) Investments permitted under **clauses (a)**, **(d)(ii)**, **(i)**, **(j)**, **(k)**, **(l)**, **(m)** and **(n)** of **Section 10.2.4**; (f) transactions with Affiliates in the Ordinary Course of Business, upon fair and reasonable terms and no less favorable than would be obtained in a comparable arm's-length transaction with a non-Affiliate; (g) the issuance and sale of Equity Interests issued by the Company (other than Disqualified Equity Interests) or the amendment of the terms of any Equity Interests issued by the Company (other than Disqualified Equity Interests); (h) Permitted Intercompany Activities; (i) Specified IPO Event Transactions; and (j) reasonable and customary fees and compensation to, the reimbursement of reasonable out of pocket costs of,

and indemnities provided on behalf of, officers, directors, and employees of the Obligors (or after the occurrence of an IPO Event, Parent) or any Restricted Subsidiary in their capacity as such; provided, that in the case of clauses (b) and (j) for Persons that also provide services on behalf of any Unrestricted Subsidiary, there is a reasonable allocation of any material costs and expenses for such arrangements as between Borrowers and their Restricted Subsidiaries, on the one hand, and the Unrestricted Subsidiaries, on the other hand.

10.2.15 Plans. Become party to any Multiemployer Plan or Foreign Plan, other than any in existence on the Closing Date.

10.2.16 Amendments to Subordinated Debt or Term Loan Documents. Amend, supplement or otherwise modify (a) the Term Loan Agreement or any other Term Loan Document in each case except to the extent not prohibited by the Intercreditor Agreement or (b) any document, instrument or agreement relating to any Subordinated Debt, if such modification (i) increases the principal balance of such Debt beyond the amount permitted by **Section 10.2.1**, or increases any required payment of principal or interest; (ii) accelerates the date on which any installment of principal or any interest is due, or adds any additional redemption, put or prepayment provisions; (iii) shortens the final maturity date or otherwise accelerates amortization; (iv) increases or adds any recurring fees or charges; (v) modifies any covenant in a manner or adds any covenant or default that is more onerous or restrictive in any material respect for any Obligor or Subsidiary than those set forth in this Agreement, or that is otherwise materially adverse to any Obligor, any Subsidiary or Lenders; or (vi) results in the Obligations not being fully benefited by the subordination provisions thereof.

10.2.17 Passive Holding Company. After the occurrence of an IPO Event, Obligors shall cause Parent to not:

(a) engage at any time in any business or activity other than (i) direct or indirect ownership of Equity Interests in the Company and other miscellaneous non-material assets, and making of Investments in, and contributions to, the Company, together with activities related thereto (including engaging in Permitted Parent Entity Investments and other Permitted Acquisitions and Investments permitted hereunder and the drop down of assets acquired thereunder to the Company and its Subsidiaries), (ii) paying Taxes, (iii) exchanges, issuances, sales, repurchases and redemptions of its Equity Interests and activities in connection therewith and related thereto, (iv) holding directors' and shareholders' meetings, preparing corporate and similar records and other activities required to maintain its corporate or other legal existence or to participate in tax, accounting or other administrative matters related to the Company and its Subsidiaries, (v) preparing reports to, and preparing and making notices to and filings with, Governmental Authorities, securities exchanges and to its holders of Equity Interests, (vi) receiving, and holding proceeds of, Distributions permitted hereunder and distributing the proceeds thereof, (vii) providing customary indemnification to officers, directors, employees and agents subject to the terms hereof, and (viii) hiring, maintaining and compensating executives and other employees and consultants to the extent required or incidental to owning Equity Interests in the Company; and (ix) ownership of cash and immaterial properties and assets incidental to the business or activities described in the foregoing clauses of this **Section 10.2.17**, activities incidental to the business or activities described in the foregoing clauses of this **Section 10.2.17** and payment of costs and expenses in connection with the business or activities described in the foregoing clauses of this **Section 10.2.17**;

(b) (i) create, incur, assume or permit to exist any Debt other than (A) tax liabilities and (B) corporate, administrative and operating expenses in the ordinary course of business or (ii) grant any consensual Lien encumbering any of its properties or assets; or

(c) fail to maintain in full force and effect its legal existence.

10.2.18 Other Amendments. Amend, supplement or otherwise modify the terms and conditions of the Major Material Contracts except to the extent that any such amendment, supplement, modification or change would not reasonably be expected to (i) adversely affect the interests of the Agent or the Lenders in any material respect or (ii) result in a Material Adverse Effect. For the avoidance of doubt, this section shall not prohibit or restrict the expiration or termination of a Major Material Contract in accordance with the terms thereof.

10.3 Fixed Charge Coverage Ratio. As long as any Commitment or Obligations are outstanding, Obligors shall maintain a Fixed Charge Coverage Ratio as of the last day of each four Fiscal Quarter period of at least 1.0 to 1.0 while a Covenant Trigger Period is in effect, measured for the most recent four Fiscal Quarter period ending on the last day of the most recently ended Fiscal Quarter for which financial statements were delivered hereunder prior to the Covenant Trigger Period and each four Fiscal Quarter period ending thereafter until the Covenant Trigger Period is no longer in effect.

Section 11. EVENTS OF DEFAULT; REMEDIES ON DEFAULT.

11.1 Events of Default. Each of the following shall be an "Event of Default" if it occurs for any reason whatsoever, whether voluntary or involuntary, by operation of law or otherwise:

(a) Any Borrower fails to pay (i) any principal on any Loan or any Letter of Credit reimbursement (to the extent such Letter of Credit reimbursement obligation is not refinanced with the proceeds of Base Rate Loans in accordance with **Section 2.2.2(a)** at a time when the conditions in **Section 6.2** are satisfied) when due (whether at stated maturity, on demand, upon acceleration or otherwise) or (ii) any interest, any fee or any other amount (other than an amount referred to in subclause (i) above) payable under any Loan Document when due and such failure under this subclause (ii) continues unremedied for a period of five (5) Business Days;

(b) Any representation, warranty or other written statement of an Obligor made in connection with any Loan Documents or transactions contemplated thereby is incorrect or misleading in any material respect when given;

(c) An Obligor or Restricted Subsidiary (or, in the case of **Section 10.2.17**, Parent) breaches or fails to perform any covenant contained in (i) **Section 7.4.1**, **7.5**, **7.7**, **8.2.4**, **8.2.5**, **8.5**, **10.1.1**, **10.1.3**, **10.1.9**, **10.1.11**, **10.2** or **10.3** or (ii) **Section 7.3.2**, **8.1**, **8.2.1**, **8.3.1** or **10.1.2** and such failure under this clause (ii) shall continue unremedied for a period of five Business Days (provided, that if a Trigger Period is then in effect, the grace period under this clause (ii) with respect to **Section 8.1**, **8.2.1** and **8.3.1** shall be reduced to two Business Days);

(d) An Obligor or Restricted Subsidiary breaches or fails to perform any other covenant contained in any Loan Documents, and such breach or failure is not cured within 30 days after a Senior Officer of such Obligor or Restricted Subsidiary has knowledge thereof or receives notice thereof from Agent, whichever is sooner;

(e) A Guarantor repudiates, revokes or attempts to revoke its Guaranty; an Obligor or third party denies or contests the validity or enforceability of any Loan Documents or Obligations, or the perfection or priority of any Lien granted to Agent; it is unlawful for an Obligor to perform any of its obligations under a Loan Document; or any Loan Document ceases to be in full force or effect for any reason (other than a waiver or release by Agent and Lenders);

(f) Any Security Document after delivery thereof shall cease to create a valid and perfected Lien of the priority required thereby on any Collateral having a Fair Market Value in excess of $10,000,000 and that is purported to be encumbered thereby (other than as a result of the acts or omissions of the Agent), except to the extent permitted by the terms of this Agreement or any other Loan Document, or any Obligor or any of their Subsidiaries shall so state in writing;

(g) (i) Any Obligor or Restricted Subsidiary shall fail to make any payment (whether of principal or interest and regardless of amount) in respect of any Material Debt or any Term Loan Debt, when and as the same shall become due and payable, and such failure to pay shall extend beyond any applicable period of grace or (ii) (A) any event or condition occurs that results in any Material Debt or any Term Loan Debt becoming due prior to its scheduled maturity or (B) any event or condition occurs that enables or permits (after giving effect to all applicable notice and cure periods) the holder or holders of any Material Debt or Term Loan Debt or any trustee or agent on its or their behalf to cause any Material Debt or Term Loan Debt to become due, or to require the Redemption thereof or any offer to Redeem to be made in respect thereof, prior to its scheduled maturity or require any Obligor or Restricted Subsidiary to make an offer in respect thereto;

(h) (i) one or more final judgments for the payment of money in an aggregate amount in excess of $25,000,000 (to the extent not covered by independent third party insurance as to which the insurer does not dispute coverage) or (ii) any one or more final non-monetary judgments that have resulted in, or would reasonably be expected to result in, individually or in the aggregate, a Material Adverse Effect, in either case, shall be rendered against any Obligor or any of its Restricted Subsidiaries or any combination thereof and the same shall remain undischarged for a period of 60 consecutive days during which execution shall not be effectively stayed (by reason of a pending appeal or otherwise), or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of any Obligor or Restricted Subsidiary to enforce any such judgment;

(i) An involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of any Obligor or Restricted Subsidiary or any of their debts, or of a substantial part of any of their assets, under any Debtor Relief Law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for any Obligor or Restricted Subsidiary or for a substantial part of any of their assets, and, in any such case, such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(j) Any Obligor or Restricted Subsidiary shall (i) voluntarily commence any Insolvency Proceeding or file any petition seeking liquidation, reorganization or other relief under any Debtor Relief Law now or hereafter in effect, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in **Section 11.1(i)**, (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for any Obligor or Restricted Subsidiary or for a substantial part of any of their assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors or (vi) take any action for the purpose of effecting any of the foregoing;

(k) Any Obligor or Restricted Subsidiary shall become unable, admit in writing its inability or fail generally to pay its debts as they become due;

(l) An ERISA Event occurs with respect to a Pension Plan or Multiemployer Plan that has resulted or could reasonably be expected to result in liability of an Obligor to a Pension Plan, Multiemployer Plan or PBGC, or that constitutes grounds for appointment of a trustee for or termination by the PBGC of any Pension Plan or Multiemployer Plan; an Obligor or ERISA Affiliate fails to pay when due any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan; or any event similar to the foregoing occurs or exists with respect to a Foreign Plan, in an aggregate amount for all events exceeding $25,000,000; or

(m) A Change of Control occurs.

11.2 Remedies upon Default. If an Event of Default under **Section 11.1(i)** or **(j)** occurs with respect to any Obligor or Parent, then to the extent permitted by Applicable Law, all Obligations (including Secured Bank Product Obligations only to the extent provided in applicable agreements) shall become automatically due and payable and all Commitments shall terminate, without any action by Agent or notice of any kind. In addition, or if any other Event of Default exists, Agent may in its discretion (and shall upon written direction of Required Lenders) do any one or more of the following from time to time:

(a) declare any Obligations (other than Secured Bank Product Obligations) immediately due and payable, whereupon they shall be due and payable without diligence, presentment, demand, protest or notice of any kind, all of which are hereby waived by Obligors to the fullest extent permitted by law;

(b) terminate, reduce or condition any Commitment or adjust the Borrowing Base;

(c) require Obligors to Cash Collateralize LC Obligations, Secured Bank Product Obligations and other Obligations that are contingent or not yet due and payable, and if Obligors fail to deposit such Cash Collateral, Agent may (and shall upon the direction of Required Lenders) advance the required Cash Collateral as Loans (whether or not an Overadvance exists or is created thereby, or the conditions in **Section 6** are satisfied); and

(d) exercise any other rights or remedies afforded under any agreement, by law, at equity or otherwise, including the rights and remedies of a secured party under the UCC. Such rights and remedies include the rights to (i) take possession of any Collateral; (ii) require Obligors to assemble Collateral, at Obligors' expense, and make it available to Agent at a premises owned or leased by an Obligor designated by Agent; (iii) enter any premises where Collateral is located and store Collateral on such premises until sold (and if the premises are owned or leased by an Obligor, Obligors agree not to charge for such storage); and (iv) sell or otherwise dispose of any Collateral in its then condition, or after any further manufacturing or processing thereof, at public or private sale, with such notice as may be required by Applicable Law, in lots or in bulk, at such locations, all as Agent, in its discretion, deems advisable. Each Obligor agrees that 10 days' notice of any proposed sale or other disposition of Collateral by Agent shall be reasonable, and that any sale conducted on the internet or to a licensor of Intellectual Property shall be commercially reasonable. Agent may conduct sales on any Obligor's premises, without charge, and any sale may be adjourned from time to time in accordance with Applicable Law. Agent shall have the right to sell, lease or otherwise dispose of any Collateral for cash, credit or any combination thereof, and Agent may purchase any Collateral at public or, if permitted by law, private sale and, in lieu of actual payment of the purchase price, may credit bid and set off the amount of such price against the Obligations.

11.3 License. Agent is hereby granted an irrevocable, non-exclusive license or other right to use, license or sub-license (without payment of royalty or other compensation to any Person) any or all Intellectual Property of Obligors, computer hardware and software, trade secrets, brochures, customer lists, promotional and advertising materials, labels, packaging materials and other Property, in advertising for sale, marketing, selling, collecting, completing manufacture of, or otherwise exercising any rights or remedies with respect to, any Collateral. Each Obligor's rights and interests under Intellectual Property shall inure to Agent's benefit.

11.4 Setoff. At any time during an Event of Default, Agent, Issuing Bank, Lenders, and any of their Affiliates are authorized, to the fullest extent permitted by Applicable Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by Agent, Issuing Bank, such Lender or such Affiliate to or for the credit or the account of an Obligor against the Obligations, whether or not Agent, Issuing Bank, such Lender or such Affiliate shall have made any demand under this Agreement or any other Loan Document and although such Obligations may be contingent or unmatured or are owed to a branch or office of Agent, Issuing Bank, such Lender or such Affiliate different from the branch or office holding such deposit or obligated on such indebtedness. The rights of Agent, Issuing Bank, each Lender and each such Affiliate under this Section are in addition to other rights and remedies (including other rights of setoff) that such Person may have.

11.5 Remedies Cumulative; No Waiver

11.5.1 Cumulative Rights. All agreements, warranties, guaranties, indemnities and other undertakings of Obligors under the Loan Documents are cumulative and not in derogation of each other. The rights and remedies of Agent, Issuing Bank and Lenders under the Loan Documents are cumulative, may be exercised at any time and from time to time, concurrently or in any order, and are not exclusive of any other rights or remedies available by agreement, by law, at equity or otherwise. All such rights and remedies shall continue in full force and effect until Full Payment of all Obligations.

11.5.2 Waivers. No waiver or course of dealing shall be established by (a) the failure or delay of Agent, Issuing Bank or any Lender to require strict performance by any Obligor under any Loan Document, or to exercise any rights or remedies with respect to Collateral or otherwise; (b) the making of any Loan or issuance of any Letter of Credit during a Default, Event of Default or other failure to satisfy any conditions precedent; or (c) acceptance by Agent, Issuing Bank or any Lender of any payment or performance by an Obligor under any Loan Documents in a manner other than that specified therein. Any failure to satisfy a financial covenant on a measurement date shall not be cured or remedied by satisfaction of such covenant on a subsequent date.

11.6 Right to Cure.

11.6.1 Notwithstanding anything to the contrary contained in **Sections 11.1** through **11.5**, in the event that the Obligors fail to comply with the requirements of **Section 10.3**, the Company shall have the right, during the period beginning at the end of the last Fiscal Quarter of the applicable test period and until the tenth (10th) Business Day after the date on which financial statements with respect to such test period for which such covenant is being measured are required to be delivered pursuant to **Section 10.1.2** (such date, the "**Cure Deadline**"), to include the cash proceeds of an equity contribution to, or the cash proceeds of an issuance of common Equity Interests of, the Company (or other Equity Interests reasonably acceptable to Agent), in each case, received by the Company in cash after the last day of such test period and prior to the Cure Deadline (the "**Cure Right**") in EBITDA for the purposes of calculating the Fixed Charge Coverage Ratio under **Section 10.3**, and upon the receipt by the Company of such cash proceeds pursuant to the exercise of the Cure Right (the "**Cure Amount**"), the Fixed Charge Coverage Ratio shall be recalculated, giving effect to a pro forma increase to EBITDA for such test period in an amount equal to such Cure Amount; provided that such pro forma adjustment to EBITDA shall be given solely for the purpose of determining the existence of a Default or an Event of Default under **Section 10.3** with respect to any period that includes the Fiscal Quarter for which such Cure Right was exercised and not for any other purpose under any Loan Document (including any other use of the Fixed Charge Coverage Ratio).

11.6.2 If, after the receipt of the Cure Amount and the recalculations pursuant to **Section 11.6.1** above, the Obligors shall then be in compliance with the requirements of **Section 10.3** as of the last day of the applicable Fiscal Quarter, the Obligors shall be deemed to have satisfied the requirements of **Section 10.3** as of the relevant date of determination with the same effect as though there had been no failure to comply therewith at such date, and the applicable Event of Default that had occurred shall be deemed cured; provided that (a) the Cure Right may be exercised on no more than five (5) occasions, (b) in each four Fiscal Quarter period, there shall be at least two Fiscal Quarters in respect of which no Cure Right is exercised, (c) with respect to any exercise of the Cure Right, the Cure Amount shall be no greater than the amount required to cause the Obligors to be in compliance with **Section 10.3**, (d) all Cure Amounts shall be disregarded for purposes of determining any baskets or ratios with respect to the covenants contained in the Loan Documents and (e) there shall be no pro forma reduction in Debt (by netting or otherwise) or Consolidated Interest Expense with the proceeds of any Cure Amount for determining compliance with **Section 10.3** for the test period for which such Cure Amount is deemed applied.

11.6.3 Prior to the Cure Deadline if Borrower Agent notifies Agent of its intent to cure, neither Agent nor any Lender shall exercise any rights or remedies under **Section 11** (or under any other Loan Document available during the continuance of any Default or Event of Default) solely on the basis of any actual or purported failure to comply with **Section 10.3** unless such failure is not cured by the Cure Deadline (it being understood that this sentence shall not have any effect on the rights and remedies of the Agent or the Lenders with respect to any other Default or Event of Default pursuant to any other provision of any Loan Document other than breach of **Section 10.3**); provided, that the Agent and the Lenders shall have no obligation to make any Loans, and the Issuing Banks shall have no obligation to issue any Letters of Credit, prior to receipt of the Cure Amount or such Default or Event of Default is otherwise cured or waived.

Section 12. AGENT.

12.1 Appointment, Authority and Duties of Agent.

12.1.1 Appointment and Authority. Each Secured Party appoints and designates Bank of America as Agent under all Loan Documents. Agent may, and each Secured Party authorizes Agent to, enter into all Loan Documents to which Agent is intended to be a party and accept all Security Documents. Any action taken by Agent in accordance with the provisions of the Loan Documents, and the exercise by Agent of any rights or remedies set forth therein, together with all other powers reasonably incidental thereto, shall be authorized by and binding upon all Secured Parties. Without limiting the generality of the foregoing, Agent shall have the sole and exclusive authority to (a) act as the disbursing and collecting agent for Lenders with respect to all payments and collections arising in connection with the Loan Documents; (b) execute and deliver as Agent each Loan Document, including any intercreditor or subordination agreement, and accept delivery of each Loan Document; (c) act as collateral agent for Secured Parties for purposes of perfecting and administering Liens under the Loan Documents, and for all other purposes stated therein; (d) manage, supervise or otherwise deal with Collateral; and (e) take any Enforcement Action or otherwise exercise any rights or remedies with respect to any Collateral or under any Loan Documents, Applicable Law or otherwise. Agent alone is authorized to determine eligibility and applicable advance rates under the Borrowing Base in accordance with the terms of this Agreement, whether to impose or release any reserve, or whether any conditions to funding or issuance of a Letter of Credit have been satisfied, which determinations and judgments, if exercised in good faith, shall exonerate Agent from liability to any Secured Party or other Person for any error in judgment.

12.1.2 Duties. The title of "Agent" is used solely as a matter of market custom and the duties of Agent are administrative in nature only. Agent has no duties except those expressly set forth in the Loan Documents, and in no event does Agent have any agency, fiduciary or implied duty to or relationship with any Secured Party or other Person by reason of any Loan Document or related transaction, even if a Default exists. The conferral upon Agent of any right shall not imply a duty to exercise such right, unless instructed to do so by Lenders in accordance with this Agreement.

12.1.3 Agent Professionals. Agent may perform its duties through employees and agents. Agent may consult with and employ Agent Professionals, and shall be entitled to act upon, and shall be fully protected in any action taken in good faith reliance upon, any advice given by an Agent Professional. Agent shall not be responsible for the negligence or misconduct of any agents, employees or Agent Professionals selected by it with reasonable care.

12.1.4 Instructions of Required Lenders. The rights and remedies conferred upon Agent under the Loan Documents may be exercised without the necessity of joining any other party, unless required by Applicable Law. In determining compliance with a condition for any action hereunder, including satisfaction of any condition in **Section 6**, Agent may presume that the condition is satisfactory to a Secured Party unless Agent has received notice to the contrary from such Secured Party before Agent takes the action. Agent may request instructions from Required Lenders or other Secured Parties with respect to any act (including the failure to act) in connection with any Loan Documents or Collateral, and may seek assurances to its satisfaction from Secured Parties of their indemnification obligations against Claims that could be incurred by Agent. Agent may refrain from any act until it has received such instructions or assurances, and shall not incur liability to any Person by reason of so refraining. Instructions of Required Lenders shall be binding upon all Secured Parties, and no Secured Party shall have any right of action whatsoever against Agent as a result of Agent acting or refraining from acting pursuant to instructions of Required Lenders. Notwithstanding the foregoing, instructions by and consent of specific parties shall be required to the extent provided in **Section 14.1.1**. In no event shall Agent be required to take any action that it determines in its discretion is contrary to Applicable Law or any Loan Documents or could expose any Agent Indemnitee to potential liability.

12.2 Agreements Regarding Collateral and Borrower Materials

12.2.1 Lien Releases; Care of Collateral. Secured Parties authorize Agent to release any Lien on any Collateral (a) upon Full Payment of the Obligations; (b) that is the subject of a disposition or Lien that Borrower Agent certifies in writing is a Permitted Disposition or a Permitted Lien entitled to priority over Agent's Liens (and Agent may rely conclusively on such certificate without further inquiry); (c) that does not constitute a material part of the Collateral; (d) subject to **Section 14.1**, with the consent of Required Lenders; or (e) constituting real property interests upon the occurrence of a Release Event with respect thereto. Secured Parties authorize Agent to subordinate its Liens to any Purchase Money Lien or other Lien entitled to priority hereunder. Agent has no obligation to assure that any Collateral exists or is owned by an Obligor, or is cared for, protected or insured, nor to assure that Agent's Liens have been properly created, perfected or enforced, or are entitled to any particular priority, nor to exercise any duty of care with respect to any Collateral. To the extent required under the laws of any foreign jurisdiction, each Secured Party hereby grants to Agent any required power of attorney to take any action with respect to Collateral or to execute any Loan Document on the Secured Party's behalf.

12.2.2 Possession of Collateral. Agent and Secured Parties appoint each Secured Party as agent (for the benefit of Secured Parties) for the purpose of perfecting Liens in Collateral held or controlled by it, to the extent such Liens are perfected by possession or control. If a Secured Party obtains possession or control of any Collateral, it shall notify Agent thereof and, promptly upon Agent's request, deliver such Collateral to Agent or otherwise deal with it in accordance with Agent's instructions.

12.2.3 Reports. Agent shall promptly provide to Lenders, when complete, any field examination, audit, appraisal or consultant report prepared for Agent with respect to any Obligor or Collateral ("Report"). Reports and other Borrower Materials may be made available to Lenders by posting them on the Platform, but Agent shall not be responsible for system failures or access issues that may occur from time to time. Each Lender agrees (a) that Reports are not intended to be comprehensive audits or examinations, and that Agent or any other Person performing an audit or examination will inspect only limited information and will rely significantly upon Borrowers' books, records and representations; (b) that Agent makes no representation or warranty as to the accuracy or completeness of any Borrower Materials and shall not be liable for any information contained in or omitted from any Borrower Materials; and (c) to keep all Borrower Materials confidential and strictly for such Lender's internal use, not to distribute any Report or other Borrower Materials (or contents thereof) to any Person (except to such Lender's Participants, attorneys and accountants), and to use all Borrower Materials solely for administration of the Obligations. Each Lender shall indemnify and hold harmless Agent and any other Person preparing a Report from any action such Lender may take as a result of or any conclusion it may draw from any Borrower Materials, as well as from any Claims arising as a direct or indirect result of Agent furnishing same to such Lender, via the Platform or otherwise.

12.3 Reliance By Agent. Agent shall be entitled to rely, and shall be fully protected in relying, upon any Communication (including those by telephone, telex, telegram, telecopy, e-mail or other electronic means) believed by it to be genuine and correct and to have been signed, sent or made by the proper Person. Agent shall have a reasonable and practicable amount of time to act on any Communication and shall not be liable for any delay in acting.

12.4 Action Upon Default. Agent shall not be deemed to have knowledge of any Default or Event of Default, or of any failure to satisfy any conditions in **Section 6**, unless it has received written notice from a Borrower or Required Lenders specifying the occurrence and nature thereof. If a Lender acquires knowledge of a Default, Event of Default or failure of such conditions, it shall promptly notify Agent and the other Lenders thereof in writing. Each Secured Party agrees that, except as otherwise provided in any Loan Documents or with the written consent of Agent and Required Lenders, it will not take any Enforcement Action, accelerate Obligations (other than Secured Bank Product Obligations) or assert any rights relating to any Collateral. Agent is hereby authorized to file a proof of claim and vote claims for the Obligations in any proceeding under the Bankruptcy Code. At any foreclosure or other realization event with respect to the Collateral (including any 363 sale pursuant to the Bankruptcy Code), Agent shall be entitled to credit bid the Obligations and establish vehicles and procedures therefor.

12.5 Ratable Sharing. If any Secured Party obtains any payment or reduction of any Obligation, whether through set-off or otherwise, in excess of its ratable share of such Obligation, such Secured Party shall forthwith purchase from the other Secured Parties participations in the affected Obligation as are necessary to share the excess payment or reduction on a Pro Rata basis or in accordance with **Section 5.5.2**, as applicable. If any of such payment or reduction is thereafter recovered from the purchasing Secured Party, the purchase shall be rescinded and the purchase price restored to the extent of such recovery, but without interest. Notwithstanding the foregoing, if a Defaulting Lender obtains a payment or reduction of any Obligation, it shall immediately turn over the full amount thereof to Agent for application under **Section 4.2.2** and it shall provide a written statement to Agent describing the Obligation affected by such payment or reduction. No Secured Party shall set off against a Deposit Account without Agent's prior consent.

12.6 Indemnification. EACH SECURED PARTY SHALL INDEMNIFY AND HOLD HARMLESS AGENT INDEMNITEES AND ISSUING BANK INDEMNITEES, TO THE EXTENT NOT REIMBURSED BY OBLIGORS, ON A PRO RATA BASIS, AGAINST ALL CLAIMS THAT MAY BE INCURRED BY OR ASSERTED AGAINST ANY SUCH INDEMNITEE, PROVIDED THAT ANY CLAIM AGAINST AN AGENT INDEMNITEE RELATES TO OR ARISES FROM ITS ACTING AS OR FOR AGENT (IN THE CAPACITY OF AGENT). In Agent's discretion, it may reserve for any Claims made against an Agent Indemnitee or Issuing Bank Indemnitee, and may satisfy any judgment, order or settlement relating thereto, from proceeds of Collateral prior to making any distribution of Collateral proceeds to Secured Parties. If Agent is sued by any receiver, trustee or other Person for any alleged preference or fraudulent transfer, then any monies paid by Agent in settlement or satisfaction of such proceeding, together with all interest, costs and expenses (including attorneys' fees) incurred in the defense of same, shall be promptly reimbursed to Agent by each Secured Party to the extent of its Pro Rata share.

12.7 Limitation on Responsibilities of Agent. Agent shall not be liable to any Secured Party for any action taken or omitted to be taken under the Loan Documents, except for losses directly and solely caused by Agent's gross negligence or willful misconduct. Agent does not assume any responsibility for any failure or delay in performance or any breach by any Obligor, Lender or other Secured Party of any obligations under the Loan Documents. Agent does not make any express or implied representation, warranty or guarantee to Secured Parties with respect to any Obligations, Collateral, Liens, Loan Documents or Obligor. No Agent Indemnitee shall be responsible to Secured Parties for any recitals, statements, information, representations or warranties contained in any Loan Documents or Borrower Materials; the execution, validity, genuineness, effectiveness or enforceability of any Loan Documents; the genuineness, enforceability, collectability, value, sufficiency, location or existence of any Collateral, or the validity, extent, perfection or priority of any Lien therein; the validity, enforceability or collectability of any Obligations; or the assets, liabilities, financial condition, results of operations, business, creditworthiness or legal status of any Obligor or Account Debtor. No Agent Indemnitee shall have any obligation to any Secured Party to ascertain or inquire into the existence of any Default or Event of Default, the observance by any Obligor of any terms of the Loan Documents, or the satisfaction of any conditions precedent contained in any Loan Documents.

12.8 Successor Agent and Co-Agents.

12.8.1 Resignation; Successor Agent. Agent may resign at any time by giving at least 30 days written notice thereof to Lenders and Borrower Agent. Required Lenders may appoint a successor that is (a) a Lender or Affiliate of a Lender; or (b) a financial institution reasonably acceptable to Required Lenders and (provided no Default or Event of Default exists) Borrower Agent. If no successor is appointed by the effective date of Agent's resignation, then on such date, Agent may appoint a successor acceptable to it in its discretion (which shall be a Lender unless no Lender accepts the role) or, in the absence of such appointment, Required Lenders shall automatically assume all rights and duties of Agent. The successor Agent shall thereupon succeed to and become vested with all the powers and duties of the retiring Agent without further act. The

retiring Agent shall be discharged from its duties hereunder on the effective date of its resignation, but shall continue to have all rights and protections available to Agent under the Loan Documents with respect to actions, omissions, circumstances or Claims relating to or arising while it was acting or transferring responsibilities as Agent or holding any Collateral on behalf of Secured Parties, including indemnification under **Sections 12.6** and **14.2**, and all rights and protections under this **Section 12**. Any successor to Bank of America by merger or acquisition of stock or this loan shall continue to be Agent hereunder without further act on the part of any Secured Party or Obligor.

12.8.2 Co-Collateral Agent. If appropriate under Applicable Law, Agent may appoint a Person to serve as aco-collateral agent or separate collateral agent under any Loan Document. Each right, remedy and protection intended to be available to Agent under the Loan Documents shall also be vested in such agent. Secured Parties shall execute and deliver any instrument or agreement that Agent may request to effect such appointment. If any such agent shall die, dissolve, become incapable of acting, resign or be removed, then all the rights and remedies of the agent, to the extent permitted by Applicable Law, shall vest in and be exercised by Agent until appointment of a new agent.

12.9 Due Diligence and Non-Reliance. Each Lender acknowledges and agrees that it has, independently and without reliance upon Agent or any other Lenders, and based upon such documents, information and analyses as it has deemed appropriate, made its own credit analysis of each Obligor and its own decision to enter into this Agreement and to fund Loans and participate in LC Obligations hereunder. Each Secured Party has made such inquiries as it feels necessary concerning the Loan Documents, Collateral and Obligors. Each Secured Party acknowledges and agrees that the other Secured Parties have made no representations or warranties concerning any Obligor, any Collateral or the legality, validity, sufficiency or enforceability of any Loan Documents or Obligations. No act by Agent, including any consent, amendment, acceptance of assignment or due diligence by Agent, shall be deemed to constitute a representation by Agent to any Secured Party as to any matter, including whether Agent has disclosed material information in its possession. Each Secured Party will, independently and without reliance upon any other Secured Party, and based upon such financial statements, documents and information as it deems appropriate at the time, continue to make and rely upon its own credit decisions in making Loans and participating in LC Obligations, and in taking or refraining from any action under any Loan Documents. Except for notices, reports and other information expressly requested by a Lender, Agent shall have no duty or responsibility to provide any Secured Party with any notices, reports or certificates furnished to Agent by any Obligor or any credit or other information concerning the affairs, financial condition, business or Properties of any Obligor (or any of its Affiliates) which may come into possession of Agent or its Affiliates. Each Lender represents and warrants that (a) the Loan Documents set forth the terms of a commercial lending facility, and (b) it is engaged in making, acquiring or holding commercial loans in the ordinary course, is sophisticated with respect to making such decisions and holding such loans, and is entering into this Agreement for the purpose of making, acquiring or holding commercial loans and providing other facilities as set forth herein, and not for the purpose of purchasing, acquiring or holding any other type of financial instrument. Each Lender agrees not to assert any claim in contravention of the foregoing.

12.10 Remittance of Payments and Collections.

12.10.1 Remittances Generally. Payments by any Secured Party to Agent shall be made by the time and date provided herein, in immediately available funds. If no time for payment is specified or if payment is due on demand and request for payment is made by Agent by 1:00 p.m. on a Business Day, then payment shall be made by the Secured Party by 3:00 p.m. on such day, and if request is made after 1:00 p.m., then payment shall be made by 11:00 a.m. on the next Business Day. Payment by Agent to any Secured Party shall be made by wire transfer, in the type of funds received by Agent. Any such payment shall be subject to Agent's right of offset for any amounts due from such payee under the Loan Documents.

12.10.2 Recovery of Erroneous Payments. Without limitation of any other provision herein, if at any time Agent makes a payment hereunder in error to any Secured Party, whether or not in respect of an Obligation due and owing by Borrowers at such time, where such payment is a Rescindable Amount, then in any such event each Secured Party receiving a Rescindable Amount severally agrees to repay to Agent forthwith on demand the Rescindable Amount received by such Secured Party in immediately available funds in the currency so received, with interest thereon for each day from and including the date such Rescindable Amount is received by it to but excluding the date of repayment to Agent, at the greater of the Federal Funds Rate and a rate determined by Agent in accordance with banking industry rules on interbank compensation. Each Secured Party irrevocably waives any and all defenses, including any defense of discharge for value (under which a creditor might otherwise claim a right to retain funds mistakenly paid by a third party in respect of a debt owed by another) or similar defense to its obligation to return any Rescindable Amount. Agent shall inform each Secured Party promptly upon determining that any payment made to such Secured Party was comprised, in whole or in part, of a Rescindable Amount.

12.10.3 Distributions. If Agent determines that an amount received by it must be returned or paid to an Obligor or other Person pursuant to Applicable Law or otherwise, then Agent shall not be required to distribute such amount to any Secured Party. If Agent is required to return any amounts applied by it to Obligations held by a Secured Party, such Secured Party shall pay to Agent, **on demand**, its share of the amounts required to be returned.

12.11 Individual Capacities. As a Lender, Bank of America shall have the same rights and remedies under the Loan Documents as any other Lender, and the terms "Lenders," "Required Lenders" or any similar term shall include Bank of America in its capacity as a Lender. Agent, Lenders and their Affiliates may accept deposits from, lend money to, provide Bank Products to, act as financial or other advisor to, and generally engage in any kind of business with, Obligors and their Affiliates, as if they were not Agent or Lenders hereunder, without any duty to account therefor to any Secured Party. In their individual capacities, Agent, Lenders and their Affiliates may receive information regarding Obligors, their Affiliates and their Account Debtors (including information subject to confidentiality obligations), and shall have no obligation to provide such information to any Secured Party.

12.12 Titles. Each Lender, other than Bank of America, that is designated in connection with this credit facility as an "Arranger," "Bookrunner" or "Agent" of any kind shall have no right or duty under any Loan Documents other than those applicable to all Lenders, and shall in no event have any fiduciary duty to any Secured Party.

12.13 Certain ERISA Matters.

12.13.1 Lender Representations. Each Lender represents and warrants, as of the date it became a Lender party hereto, and covenants, from the date it became a Lender party hereto to the date it ceases being a Lender party hereto, for the benefit of, Agent and not, for the avoidance of doubt, to or for the benefit of Obligors, that at least one of the following is and will be true: (a) Lender is not using "plan assets" (within the meaning of ERISA Section 3(42) or otherwise) of one or more Benefit Plans with respect to Lender's entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments or Loan Documents; (b) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to Lender's entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Documents; (c)(i) Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (ii) such Qualified Professional Asset Manager made the investment decision on behalf of Lender to enter into, participate in, administer and perform the Loans, Letters of Credit, Commitments and Loan Documents, (iii) the entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Documents satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14, and (iv) to the best knowledge of Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to Lender's entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Documents; or (d) such other representation, warranty and covenant as may be agreed in writing between Agent, in its discretion, and Lender.

12.13.2 Further Lender Representation. Unless **Section 12.13.1(a)** or **(d)** is true with respect to a Lender, such Lender further represents and warrants, as of the date it became a Lender hereunder, and covenants, from the date it became a Lender to the date it ceases to be a Lender hereunder, for the benefit of, Agent and not, for the avoidance of doubt, to or for the benefit of any Obligor, that Agent is not a fiduciary with respect to the assets of such Lender involved in its entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Documents (including in connection with the reservation or exercise of any rights by Agent under any Loan Document).

12.14 Bank Product Providers. Each Secured Bank Product Provider, by delivery of a notice to Agent of a Bank Product, agrees to be bound by the Loan Documents, including **Sections 5.5**, **12**, **14.3.3** and **14.17**, and agrees to indemnify and hold harmless Agent Indemnitees, to the extent not reimbursed by Obligors, against all Claims that may be incurred by or asserted against any Agent Indemnitee in connection with such provider's Secured Bank Product Obligations.

12.15 No Third Party Beneficiaries. This **Section 12** is an agreement solely among Secured Parties and Agent, and shall survive Full Payment of the Obligations. This **Section 12** does not confer any rights or benefits upon Obligors or any other Person. As between Obligors and Agent, any action that Agent may take under any Loan Documents or with respect to any Obligations shall be conclusively presumed to have been authorized and directed by Secured Parties.

Section 13. BENEFIT OF AGREEMENT; ASSIGNMENTS.

13.1 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of Obligors, Agent, Lenders, Secured Parties, and their respective successors and assigns, except that (a) no Obligor may assign or delegate its rights or obligations under any Loan Documents; and (b) any assignment by a Lender must be made in compliance with **Section 13.3**. Agent may treat the Person which made any Loan as the owner thereof for all purposes until such Person makes an assignment in accordance with **Section 13.3**. Any authorization or consent of a Lender shall be conclusive and binding on any subsequent transferee or assignee of such Lender.

13.2 Participations.

13.2.1 Permitted Participants; Effect. Subject to **Section 13.3.3**, any Lender may sell to a financial institution ("Participant") a participating interest in the rights and obligations of such Lender under any Loan Documents; provided that no participation may be sold to a Defaulting Lender or one or more natural persons (or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural person). Despite any sale by a Lender of participating interests to a Participant, such Lender's obligations under the Loan Documents shall remain unchanged, it shall remain solely responsible to the other parties hereto for performance of such obligations, it shall remain the holder of its Loans and Commitments for all purposes, all amounts payable by Borrowers shall be determined as if it had not sold such participating interests, and Borrowers and Agent shall continue to deal solely and directly with such Lender in connection with the Loan Documents. Each Lender shall be solely responsible for notifying its Participants of any matters under the Loan Documents, and Agent and the other Lenders shall not have any obligation or liability to any such Participant. Borrowers agree that each Participant shall be entitled to the benefits of **Sections 3.7**, **3.9** and **5.8** (subject to the requirements and limitations therein, including the requirements under **Section 5.9** (it being understood that the documentation required under **Section 5.9** shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to **Section 13.3**; provided that such Participant (i) agrees to be subject to the provisions of **Section 13.4** as if it were a Lender and had acquired its interest by assignment pursuant to **Section 13.3**; and (ii) shall not be entitled to receive any greater payment under **Section 3.7** or **5.8**, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrowers' request and expense, to use reasonable efforts to cooperate with the Borrowers to effectuate the provisions of **Section 13.4** with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of **Section 11.4** as though it were a Lender; provided that such Participant agrees to be subject to **Sections 5.5** and **12.5** as though it were a Lender.

13.2.2 Voting Rights. Each Lender shall retain the sole right to approve, without the consent of any Participant, any amendment, waiver or other modification of a Loan Document other than that which forgives principal, interest or fees, reduces the stated interest rate or fees payable with respect to any Loan or Commitment in which such Participant has an interest, postpones the Termination Date or any date fixed for any regularly scheduled payment of principal, interest or fees on such Loan or Commitment, or releases any Borrower, Guarantor or substantially all Collateral.

13.2.3 Participant Register. Each Lender that sells a participation shall, acting as a non-fiduciary agent of Borrowers (solely for tax purposes), maintain a register in which it enters the Participant's name, address and interest in Commitments, Loans (and stated interest) and LC Obligations (the "**Participant Register**"). Entries in the register shall be conclusive, absent manifest error, and such Lender shall treat each Person recorded in the register as the owner of the participation for all purposes, notwithstanding any notice to the contrary. No Lender shall have an obligation to disclose any information in such register except to the extent necessary to establish that a Participant's interest is in registered form under the Code.

13.2.4 Benefit of Setoff. Each Participant shall have a right of set-off in respect of its participating interest to the same extent as if such interest were owing directly to a Lender, and each Lender shall also retain the right of set-off with respect to any participating interests sold by it. By exercising any right of set-off, a Participant agrees to share with Lenders all amounts received through its set-off, in accordance with **Section 12.5** as if such Participant were a Lender.

13.3 Assignments.

13.3.1 Permitted Assignments. A Lender may assign to an Eligible Assignee any of its rights and obligations under the Loan Documents, as long as (a) each assignment is of a constant, and not a varying, percentage of the transferor Lender's rights and obligations under the Loan Documents and, in the case of a partial assignment, is in a minimum principal amount of $5,000,000 (unless otherwise agreed by Agent in its discretion) and integral multiples of $1,000,000 in excess of that amount; (b) except in the case of an assignment in whole of a Lender's rights and obligations, the aggregate amount of the Commitments retained by the transferor Lender is at least $5,000,000 (unless otherwise agreed by Agent in its discretion); and (c) the parties to each such assignment shall execute and deliver an Assignment to Agent for acceptance and recording. Nothing herein shall limit the right of a Lender to pledge or assign any rights under the Loan Documents to secure obligations of such Lender, including a pledge or assignment to a Federal Reserve Bank; provided, that no such pledge or assignment shall release the Lender from its obligations hereunder nor substitute the pledgee or assignee for such Lender as a party hereto.

13.3.2 Effect; Effective Date. Upon delivery to Agent of a fully executed and completed Assignment accompanied by a processing fee of $3,500 (unless otherwise agreed by Agent in its discretion), the assignment specified therein shall be effective as provided in the Assignment as long as it complies with this **Section 13.3**. From such effective date, the Eligible Assignee shall for all purposes be a Lender under the Loan Documents, and shall have all rights and obligations of a Lender thereunder. Upon consummation of an assignment, the transferor Lender, Agent and Borrowers shall make appropriate arrangements for issuance of replacement and/or new notes, if applicable. The transferee Lender shall comply with **Section 5.9** and deliver, upon request, an administrative questionnaire satisfactory to Agent.

13.3.3 Certain Assignees. No assignment or participation may be made to Parent,an Obligor, an Affiliate of an Obligor or Parent (including Bud Brigham and the Brigham Family), a Defaulting Lender or one or more natural persons (or a holding company, investment vehicle or trust for, or owned and operating for the primary benefit of, a natural person). Agent shall have no obligation to determine whether any assignment is permitted under the Loan Documents. Any assignment by a Defaulting Lender must be accompanied by satisfaction of its outstanding obligations under the Loan Documents in a manner satisfactory to Agent, including payment by the Defaulting Lender or Eligible Assignee of an amount sufficient upon distribution (through direct payment, purchases of participations or other methods acceptable to Agent in its discretion) to satisfy all funding and payment liabilities of the Defaulting Lender. If any assignment by a Defaulting Lender (by operation of law or otherwise) does not comply with the foregoing, the assignee shall be deemed a Defaulting Lender for all purposes until compliance occurs.

13.3.4 Register. Agent, acting as a non-fiduciary agent of Borrowers (solely for tax purposes), shall maintain (a) a copy (or electronic equivalent) of each Assignment and Acceptance delivered to it, and (b) a register for recordation of the names, addresses and Commitments of, and the Loans, interest and LC Obligations owing to, each Lender. Entries in the register shall be conclusive, absent manifest error, and Borrowers, Agent and Lenders shall treat each Person recorded in such register as a Lender for all purposes under the Loan Documents, notwithstanding any notice to the contrary. Agent may choose to show only one Borrower as the borrower in the register, without any effect on the liability of any Obligor with respect to the Obligations. The register shall be available for inspection by Borrowers or any Lender, from time to time upon reasonable notice.

13.4 Replacement of Certain Lenders. If a Lender (a) within the last 120 days failed to give its consent to any amendment, waiver or action for which consent of all Lenders was required and Required Lenders consented, (b) is a Defaulting Lender, or (c) within the last 180 days gave a notice under **Section 3.5** or requested payment or compensation under **Section 3.7** or **5.8** (and has not designated a different Lending Office pursuant to **Section 3.8**), then Agent or Borrower Agent may, upon 10 days' notice to such Lender, require it to assign its rights and obligations under the Loan Documents to Eligible Assignee(s), pursuant to appropriate Assignment(s), within 20 days after the notice. Agent is irrevocably appointed as attorney-in-fact to execute any such Assignment if the Lender fails to execute it. Such Lender shall be entitled to receive, in cash, concurrently with such assignment, all amounts owed to it under the Loan Documents through the date of assignment.

Section 14. MISCELLANEOUS.

14.1 Consents, Amendments and Waivers

14.1.1 Amendment. No Modification of a Loan Document shall be effective without the prior written agreement of Agent (with the consent of Required Lenders) and each Obligor party to such Loan Document; provided, that:

(a) without the prior written consent of Agent, no Modification shall alter any provision in a Loan Document that relates to any rights, duties or discretion of Agent;

(b) without the prior written consent of Issuing Bank, no Modification shall alter **Section 2.2** or any other provision in a Loan Document that relates to Letters of Credit or any rights, duties or discretion of Issuing Bank;

(c) without the prior written consent of each affected Lender, including a Defaulting Lender, no Modification shall (i) increase the Commitment of such Lender; (ii) reduce the amount of, or waive or delay payment of, any principal, interest or fees payable to such Lender (except as provided in **Section 4.2** and excluding any waiver of the Default Rate of interest); (iii) extend the Termination Date applicable to such Lender's Obligations; (iv) change **Section 5.5.2** or any other provision hereof in a manner that alters the ratable reduction of Commitments or the pro rata sharing of payments; or (v) amend this clause (c);

(d) without the prior written consent of all Lenders (except any Defaulting Lender), no Modification shall (i) alter this **Section 14.1.1**; (ii) amend the definition of (A) Pro Rata, (B) Required Lenders, or (C) Borrowing Base, Accounts Formula Amount or Inventory Formula Amount (or any defined term used in such definitions) if the effect of such amendment is to increase borrowing availability; (iii) subordinate, or have the effect of subordinating, the Obligations hereunder to any other Debt or other obligation; (iv) subordinate, or have the effect of subordinating, the Liens on the ABL Priority Collateral securing the Obligations to Liens securing any other Debt or other obligation; (v) release all or substantially all Collateral; (vi) except in connection with a merger, disposition or similar transaction expressly permitted hereby, release any Obligor from liability for any Obligations; or (vii) change any Loan Document provision requiring consent or action by all Lenders; and

(e) if Real Estate secures any Obligations, no Modification of a Loan Document shall add, increase, renew or extend any credit line hereunder until the completion of flood diligence and documentation as required by Flood Laws or as otherwise satisfactory to all Lenders.

14.1.2 Limitations. Notwithstanding anything in any Loan Document to the contrary, Agent may make or adopt Conforming Changes from time to time in consultation with Borrower Agent and any amendment or notice implementing such changes will become effective without further action or consent of any other party; provided, that Agent shall post or otherwise provide same to Borrowers and Lenders reasonably promptly after it becomes effective. Only the consent of the parties to any agreement relating to fees or a Bank Product shall be required for Modification of such agreement, and no Bank Product provider (in such capacity) shall have any right to consent to Modification of any Loan Document. Any waiver or consent granted by Agent, Issuing Bank or Lenders hereunder shall be effective only if in writing and only for the matter specified. Each Lender irrevocably authorizes the Agent of its behalf, and without further consent of any Lender (but with the consent of Borrowers and the Agent), to amend and restate this Agreement and other Loan Documents if, upon giving effect to such amendment and restatement, such Lender shall no longer be a party to this Agreement (as so amended and restated), the Commitments of such Lender shall have been terminated, such Lender shall have no other commitment or other obligation hereunder and shall have be paid in full all principal, interest and other amounts owing to it or accrued for its account under this Agreement and the other Loan Documents.

14.1.3 Corrections. Without action or consent by any other party to this Agreement, (a) Agent and Borrower Agent may amend a Loan Document to cure an ambiguity, omission, mistake, typographical error, or other defect in any provision, schedule or exhibit thereof; and (b) Agent may revise **Schedule 1.1** to reflect changes in Commitments from time to time.

14.2 Indemnity. **EACH OBLIGOR SHALL INDEMNIFY AND HOLD HARMLESS THE INDEMNITEES AGAINST ANY CLAIMS THAT MAY BE INCURRED BY OR ASSERTED AGAINST ANY INDEMNITEE, INCLUDING CLAIMS ASSERTED BY ANY OBLIGOR OR OTHER PERSON OR ARISING FROM THE NEGLIGENCE OF AN INDEMNITEE**. Notwithstanding the foregoing, in no event shall any party to a Loan Document have any obligation thereunder to indemnify or hold harmless an Indemnitee with respect to a Claim that is determined in a final, non-appealable judgment by a court of competent jurisdiction to result from the gross negligence or willful misconduct of such Indemnitee. The Obligors' obligations under this **Section 14.2** shall be subject to the Legal Expenses Limitation. This **Section 14.2** shall not apply to Taxes, except any Taxes that represent liabilities, obligations, losses, damages, penalties, claims, demands, actions, prepayments, suits, costs, expenses and disbursements arising from any non-Tax claims.

14.3 Notices and Communications

14.3.1 Notice Address. Subject to **Section 14.3.2**, all Communications by or to a party hereto shall be in writing and shall be given to any Obligor, at Borrower Agent's address shown on the signature pages hereof, and to any other Person at its address shown on the signature pages hereof (or, in the case of a Person who becomes a Lender after the Closing Date, at the address shown on its Assignment), or at such other address as a party may hereafter specify by notice in accordance with this **Section 14.3**. In addition, a Communication from Agent to Lenders or Obligors may, to the extent permitted by law, be delivered electronically (i) by transmitting the Communication to the electronic address specified to Agent in writing by the applicable Lender or Borrower Agent from time to time, or (ii) by posting the Communication on a website and sending the Lender or Borrower Agent notice (electronically or otherwise) that the Communication has been posted and providing instructions (at such time or prior to delivery of such Communication) for viewing it. Each Communication shall be effective only (a) if given by facsimile transmission, when transmitted to the applicable facsimile number, if confirmation of receipt is received; (b) if given by mail, three Business Days after deposit in the U.S. mail, with first-class postage pre-paid, addressed to the applicable address; (c) if given by personal delivery, when duly delivered to the notice address with receipt acknowledged; or (d) if provided electronically by Agent to Lenders or Obligors, when the Communication (or notice advising of its posting to a website) is sent to the Lender's or Borrower Agent's electronic address. Notwithstanding the foregoing, no notice to Agent pursuant to **Section 2.1.4**, **2.2**, **3.1.2** or **4.1.1** shall be effective until actually received by the individual to whose attention at Agent such notice is required to be sent. Any written Communication not sent in conformity with the foregoing provisions shall nevertheless be effective on the date actually received by the noticed party. Any notice received by Borrower Agent shall be deemed received by all Obligors.

14.3.2 Communications. Electronic and telephonic Communications (including e-mail, messaging, voice mail and websites) may be used only in a manner acceptable to Agent and Borrower Agent. Agent makes no assurance as to the privacy or security of electronic or telephonic Communications. E-mail and voice mail shall not be effective notices under the Loan Documents except as expressly provided herein.

14.3.3 Platform. Borrower Materials shall be delivered pursuant to procedures approved by Agent, including electronic delivery (if requested by Agent) to an electronic system maintained by it ("Platform"). Borrower Agent shall notify Agent of each posting of Borrower Materials on the Platform and the materials shall be deemed received by Agent only upon its receipt of such notice. Communications and other information relating to this credit facility may be made available to Secured Parties on the Platform. The Platform is provided "as is" and "as available." Agent does not warrant the accuracy or completeness of any information on the Platform nor the adequacy or functioning of the Platform, and expressly disclaims liability for any errors or omissions in the Borrower Materials or any issues involving the Platform. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS, OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY AGENT WITH RESPECT TO BORROWER MATERIALS OR THE PLATFORM. No Agent Indemnitee shall have any liability to Obligors, Secured Parties or any other Person for losses, claims, damages, liabilities or expenses of any kind (whether in tort, contract or otherwise) relating to use by any Person of the Platform, including any unintended recipient, nor for delivery of Borrower Materials and other information via the Platform, internet, e-mail, or any other electronic platform or messaging system except to the extent that is determined in a final, non-appealable judgment by a court of competent jurisdiction to result from the gross negligence or willful misconduct of such Agent Indemnitee. Agent may, but is not obligated to, make Communications available to Obligors and Lenders by posting them on IntraLinks™, DebtDomain, SyndTrak, ClearPar or other electronic platform.

14.3.4 Public Information. Obligors and Secured Parties acknowledge that "public" information may not be segregated from material non-public information on the Platform. Secured Parties acknowledge that Borrower Materials may include Obligors' materialnon-public information, which should not be made available to personnel who do not wish to receive such information or may be engaged in trading, investment or other market-related activities with respect to an Obligor's securities.

14.3.5 Non-Conforming Communications. Agent and Lenders may rely on any Communication purportedly given by or on behalf of an Obligor even if it is not made in a manner specified herein, incomplete or not confirmed, or if the terms thereof, as understood by the recipient, vary from an earlier Communication or later confirmation. Each Obligor shall indemnify and hold harmless each Indemnitee from any liabilities, losses, costs and expenses arising from any Communication purportedly given by or on behalf of any Obligor, except to the extent that such liabilities, losses, costs or expenses are determined in a final, non-appealable judgment by a court of competent jurisdiction to result from the gross negligence or willful misconduct of such Indemnitee.

14.3.6 Reliance on Communications. No Secured Party shall be responsible for or have any duty to ascertain or inquire into the sufficiency, validity, enforceability, effectiveness or genuineness of any Loan Document or any other agreement, instrument or document (including, for the avoidance of doubt, in connection with an Electronic Signature transmitted by telecopy, emailed .pdf or other electronic means). Secured Parties may rely on, and shall incur no liability under or in respect of any Loan Document by acting on, any Communication (which may be a fax, electronic message, internet or intranet website posting, or other distribution, or signed by an Electronic Signature) or any statement made to it orally or by telephone and believed by it to be genuine and signed or sent or otherwise authenticated (whether or not such Person in fact meets the requirements set forth in the Loan Documents for being the maker thereof). Agent shall be entitled to rely on the e-mail addresses and telephone numbers provided by Obligors, Lenders and their authorized representatives. Each Obligor hereby waives (a) any argument, defense or right to contest the legal effect, validity or enforceability of any Loan Document or other Communication based solely on the lack of a paper original copy thereof, and (b) waives any claim against any Indemnitee for liabilities arising from its reliance on or use of Electronic Signatures, including liabilities relating to an Obligor's failure to use a security measure in connection with execution, delivery or transmission of an Electronic Signature.

14.4 Performance of Obligors' Obligations. Agent may, in its discretion at any time and from time to time, at Obligors' expense, pay any amount or do any act required of an Obligor under any Loan Documents (to the extent such Obligor has failed to do so on or prior to the date required for such performance) to (a) after the occurrence and during the continuation of an Event of Default, enforce any Loan Documents or collect any Obligations; (b) protect, insure, maintain or, after the occurrence and during the continuation of an Event of Default, realize upon any Collateral; or (c) defend or maintain the validity or priority of Agent's Liens in any Collateral, including any payment of a judgment, insurance premium, warehouse charge, finishing or processing charge, or landlord claim, or any discharge of a Lien. All documented out-of-pocket payments, costs and expenses (including Extraordinary Expenses) of Agent under this Section shall be reimbursed to Agent by Obligors, within one Business Day of written demand therefor, with interest from the date of Agent's demand therefor until paid in full, at the rate applicable to Base Rate Loans. Any payment made or action taken by Agent under this Section shall be without prejudice to any right to assert an Event of Default or to exercise any other rights or remedies under the Loan Documents.

14.5 Credit Inquiries. Agent and Lenders may (but shall have no obligation) to respond to usual and customary credit inquiries from third parties concerning any Obligor or Subsidiary.

14.6 Severability. Wherever possible, each provision of the Loan Documents shall be interpreted in such manner as to be valid under Applicable Law. If any provision is found to be invalid under Applicable Law, it shall be ineffective only to the extent of such invalidity and the remaining provisions of the Loan Documents shall remain in full force and effect.

14.7 Cumulative Effect; Conflict of Terms. The provisions of the Loan Documents are cumulative. The parties acknowledge that the Loan Documents may use several limitations or measurements to regulate similar matters, and they agree that these are cumulative and that each must be performed as provided. Except as otherwise provided in another Loan Document (by specific reference to the applicable provision of this Agreement), if any provision contained herein is in direct conflict with any provision in another Loan Document, the provision herein shall govern and control.

14.8 Execution; Electronic Records. Any Loan Document, including any required to be in writing, may (if agreed by Agent) be in the form of an Electronic Record and may be executed using Electronic Signatures. An Electronic Signature on or associated with any Communication shall be valid and binding on each Obligor and other party thereto to the same extent as a manual, original signature, and any Communication entered into by Electronic Signature shall constitute the legal, valid and binding obligation of each party, enforceable to the same extent as if a manually executed original signature were delivered. A Communication may be executed in as many counterparts as necessary or convenient, including both paper and electronic counterparts, but all such counterparts are one and the same Communication. The parties may use or accept manually signed paper Communications converted into electronic form (such as scanned into pdf), or electronically signed Communications converted into other formats, for transmission, delivery and/or retention. Agent and Lenders may, at their option, create one or more copies of a Communication in the form of an imaged Electronic Record ("Electronic Copy"), which shall be deemed created in the ordinary course of the Person's business, and may destroy the original paper document. Any Communication in the form or format of an Electronic Record, including an Electronic Copy, shall be considered an original for all purposes, and shall have the same legal effect, validity and enforceability as a paper record. Notwithstanding anything herein, (a) Agent is under no obligation to accept an Electronic Signature in any form unless expressly agreed by it pursuant to procedures approved by it; (b) each Secured Party shall be entitled to rely on any Electronic Signature purportedly given by or on behalf of an Obligor without further verification and regardless of the appearance or form of such Electronic Signature; and (c) upon request by Agent, any Loan Document using an Electronic Signature shall be promptly followed by a manually executed original counterpart.

14.9 Entire Agreement. This Agreement shall be effective when executed by Agent and when Agent has received counterparts hereof that, taken together, bear the signature of each other party hereto. Time is of the essence with respect to all Loan Documents and Obligations. The Loan Documents constitute the entire agreement, and supersede all prior understandings and agreements, among the parties relating to the subject matter thereof.

14.10 Relationship with Lenders. The obligations of each Lender hereunder are several, and no Lender shall be responsible for the obligations or Commitments of any other Lender. Amounts payable hereunder to each Lender shall be a separate and independent debt. It shall not be necessary for Agent or any other Lender to be joined as an additional party in any proceeding for such purposes. Nothing in this Agreement and no action of Agent, Lenders or any other Secured Party pursuant to the Loan Documents or otherwise shall be deemed to constitute Agent and any Secured Party to be a partnership, joint venture or similar arrangement, nor to constitute control of any Obligor.

14.11 No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated by any Loan Document, Obligors acknowledge and agree that (a)(i) this credit facility and any arranging or other services by Agent, any Lender, any of their Affiliates or any arranger are arm's-length commercial transactions between Obligors and their Affiliates, on one hand, and Agent, any Lender, any of their Affiliates or any arranger, on the other hand;

(ii) Obligors have consulted their own legal, accounting, regulatory, tax and other advisors to the extent they have deemed appropriate; and (iii) Obligors are capable of evaluating, and understand and accept, the terms, risks and conditions of the transactions contemplated by the Loan Documents; (b) each of Agent, Lenders, their Affiliates and any arranger is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary for Obligors, their Affiliates or any other Person, and has no obligation with respect to the transactions contemplated by the Loan Documents except as expressly set forth therein; and (c) Agent, Lenders, their Affiliates and any arranger may be engaged in a broad range of transactions that involve interests that differ from those of Obligors and their Affiliates, and have no obligation to disclose any of such interests to Obligors or their Affiliates. To the fullest extent permitted by Applicable Law, each Obligor hereby waives and releases any claims that it may have against Agent, Lenders, their Affiliates and any arranger with respect to any breach of agency or fiduciary duty in connection with any transaction contemplated by a Loan Document.

14.12 Confidentiality. Each of Agent, Lenders and Issuing Bank shall maintain the confidentiality of all Information (as defined below), except that Information may be disclosed (a) to its Affiliates, and to its and their partners, directors, officers, employees, agents, auditors, advisors, attorneys, consultants, service providers and other representatives (provided they are informed of the confidential nature of the Information and instructed to keep it confidential); (b) to the extent requested by any governmental, regulatory or self-regulatory authority purporting to have jurisdiction over it or its Affiliates; (c) to the extent required by Applicable Law or by any subpoena or other legal process; (d) to any other party hereto; (e) in connection with any action or proceeding relating to any Loan Documents or Obligations; (f) subject to an agreement containing provisions substantially the same as this Section, to any Transferee or any actual or prospective party (or its advisors) to any Bank Product or to any swap, derivative or other transaction under which payments are to be made by reference to an Obligor or Obligor's obligations; (g) to the extent such Information is (i) publicly available other than as a result of a breach of this Section, (ii) available to Agent, any Lender, Issuing Bank or any of their Affiliates on a nonconfidential basis from a source other than Borrowers, or (iii) independently discovered or developed by a party hereto without utilizing any Information or violating this Section; (h) on a confidential basis to a provider of a Platform; or (i) with the consent of Borrower Agent. Agent and Lenders may disclose information regarding this Agreement and the credit facility hereunder to market data collectors, similar service providers to the lending industry, and service providers to Agent and Lenders in connection with the Loan Documents and Commitments. As used herein, "Information" means information received from an Obligor or Subsidiary relating to it or its business that is identified as confidential when delivered. A Person required to maintain confidentiality of Information pursuant to this Section shall be deemed to have complied if it exercises a degree of care similar to that accorded its own confidential information. Each of Agent, Lenders and Issuing Bank acknowledges that (i) Information may include material non-public information; (ii) it has developed compliance procedures regarding the use of such information; and (iii) it will handle the material non-public information in accordance with Applicable Law.

14.13 [Reserved].

14.14 GOVERNING LAW. UNLESS EXPRESSLY PROVIDED IN ANY LOAN DOCUMENT, THIS AGREEMENT, THE OTHER LOAN DOCUMENTS AND ALL CLAIMS SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICT OF LAW PRINCIPLES EXCEPT FEDERAL LAWS RELATING TO NATIONAL BANKS.

14.15 Consent to Forum

14.15.1 Forum. **EACH PARTY HERETO CONSENTS TO THE EXCLUSIVE JURISDICTION OF ANY STATE COURT SITTING IN NEW YORK COUNTY, NEW YORK, OR THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, IN ANY DISPUTE, ACTION, LITIGATION OR OTHER PROCEEDING RELATING IN ANY WAY TO ANY LOAN DOCUMENTS, AND AGREES THAT ANY DISPUTE, ACTION, LITIGATION OR OTHER PROCEEDING SHALL BE BROUGHT BY IT SOLELY IN ANY SUCH COURT. EACH OBLIGOR IRREVOCABLY AND UNCONDITIONALLY WAIVES ALL CLAIMS, OBJECTIONS AND DEFENSES THAT IT MAY HAVE REGARDING ANY SUCH COURT'S PERSONAL OR SUBJECT MATTER JURISDICTION, VENUE OR INCONVENIENT FORUM. EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE JURISDICTION OF SUCH COURTS AND CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 14.3.1**. A final judgment in any proceeding of any such court shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or any other manner provided by Applicable Law.

14.15.2 Other Jurisdictions. Nothing herein shall limit the right of Agent to bring proceedings against any Obligor in any other court Agent deems necessary or appropriate in order to realize on the Collateral or other security for the Obligations or enforce any judgment, nor limit the right of any party to serve process in any other manner permitted by Applicable Law. Nothing in this Agreement shall be deemed to preclude enforcement by Agent of any judgment or order obtained in any forum or jurisdiction.

14.16 Waivers. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH OBLIGOR WAIVES (A) PRESENTMENT, DEMAND, PROTEST, NOTICE OF PRESENTMENT, DEFAULT, NON-PAYMENT, MATURITY, RELEASE, COMPROMISE, SETTLEMENT, EXTENSION OR RENEWAL OF ANY COMMERCIAL PAPER, ACCOUNTS, DOCUMENTS, INSTRUMENTS, CHATTEL PAPER AND GUARANTIES AT ANY TIME HELD BY AGENT ON WHICH AN OBLIGOR MAY IN ANY WAY BE LIABLE, AND HEREBY RATIFIES ANYTHING AGENT MAY DO IN THIS REGARD; (B) NOTICE PRIOR TO TAKING POSSESSION OR CONTROL OF ANY COLLATERAL; (C) ANY BOND OR SECURITY THAT MIGHT BE REQUIRED BY A COURT PRIOR TO ALLOWING AGENT TO EXERCISE ANY RIGHTS OR REMEDIES; (D) THE BENEFIT OF ALL VALUATION, APPRAISEMENT AND EXEMPTION LAWS; AND (E) NOTICE OF ACCEPTANCE HEREOF. EACH OBLIGOR ACKNOWLEDGES THAT THE FOREGOING WAIVERS ARE A MATERIAL INDUCEMENT TO AGENT, ISSUING BANK AND LENDERS ENTERING INTO THIS AGREEMENT AND THAT THEY ARE RELYING UPON THE FOREGOING IN THEIR DEALINGS WITH OBLIGORS. EACH PARTY HEREBY (i) IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING

RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AND FOR ANY COUNTERCLAIM THEREIN; (ii) IRREVOCABLY WAIVES, TO THE MAXIMUM EXTENT NOT PROHIBITED BY LAW, ANY RIGHT IT MAY HAVE TO CLAIM OR RECOVER ANY SPECIAL, INDIRECT, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES, OR DAMAGES OTHER THAN, OR IN ADDITION TO, ACTUAL DAMAGES IN ANY WAY RELATING TO THE LOAN DOCUMENTS OR THE TRANSACTIONS RELATING HERETO (BUT WITHOUT LIMITATION TO THE INDEMNITEES ABILITY TO REQUEST INDEMNIFICATION FOR SUCH DAMAGES INCURRED BY INDEMNITEES AS PART OF A THIRD PARTY CLAIM) (iii) CERTIFIES THAT NO PARTY HERETO NOR ANY REPRESENTATIVE OR AGENT OF COUNSEL FOR ANY PARTY HERETO HAS REPRESENTED, EXPRESSLY OR OTHERWISE, OR IMPLIED THAT SUCH PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVERS, AND (iv) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT, THE LOAN DOCUMENTS AND THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS CONTAINED IN THIS SECTION 14.16. Each party hereto has reviewed the foregoing waivers with its legal counsel and has knowingly and voluntarily waived its jury trial and other rights following consultation with legal counsel. In the event of litigation, this Agreement may be filed as a written consent to a trial by the court.

14.17 Acknowledgement Regarding Supported QFCs To the extent that the Loan Documents provide support, through a guarantee or otherwise, for any Swap or any other agreement or instrument that is a QFC (such support, "QFC Credit Support", and each such QFC, a "Supported QFC"), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the "U.S. Special Resolution Regimes") in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

14.17.1 Covered Party. If a Covered Entity that is party to a Supported QFC (each, a "Covered Party") becomes subject to a proceeding under a U.S. Special Resolution Regime, transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regimes if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. If a Covered Party or BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regimes if the Supported QFC and Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

14.17.2 Definitions. As used in this Section, (a) "BHC Act Affiliate" means an "affiliate," as defined in and interpreted in accordance with 12 U.S.C. §1841(k); (b) "Default Right" has the meaning assigned in and interpreted in accordance with 12 C.F.R. §§252.81, 47.2 or 382.1, as applicable; and (c) "QFC" means a "qualified financial contract," as defined in and interpreted in accordance with 12 U.S.C. §5390(c)(8)(D).

14.18 Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among the parties, each party hereto (including each Secured Party) acknowledges that, with respect to any Secured Party that is an Affected Financial Institution, any liability of such Secured Party arising under a Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority, and each party hereto agrees and consents to, and acknowledges and agrees to be bound by, (a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liability which may be payable to it by such Secured Party; and (b) the effects of any Bail-in Action on any such liability, including (i) a reduction in full or in part or cancellation of any such liability; (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under any Loan Document; or (iii) the variation of the terms of such liability in connection with the exercise of any Write-Down and Conversion Powers.

14.19 Patriot Act Notice. Agent and Lenders hereby notify Obligors that pursuant to the Patriot Act, Agent and Lenders are required to obtain, verify and record information that identifies each Obligor, including its legal name, address, tax ID number and other information that will allow Agent and Lenders to identify it in accordance with the Patriot Act. Agent and Lenders will also require information regarding any personal guarantor and may require information regarding Obligors' management and owners, such as legal name, address, social security number and date of birth. Obligors shall, promptly upon request, provide all documentation and other information as Agent, Issuing Bank or any Lender may request from time to time for purposes of complying with any "know your customer," anti-money laundering or other requirements of Applicable Law, including the Patriot Act and Beneficial Ownership Regulation.

14.20 Intercreditor Agreement.

14.20.1 Acknowledgment. Each of the Lenders hereby acknowledges that it has received and reviewed the Intercreditor Agreement and agrees to be bound by the terms thereof as if such Lender was a signatory thereto. Each Lender (and each Person that agrees to become a Lender pursuant to **Section 13**) hereby authorizes and directs Agent to enter into the Intercreditor Agreement on behalf of such Lender and agrees that Agent, in its capacity thereunder, may take such actions on its behalf as is contemplated by the terms of the Intercreditor Agreement.

14.20.2 General. Notwithstanding anything to the contrary herein, Agent's Liens and the exercise of any right or remedy by Agent under this Agreement or any other Loan Document against the Collateral are subject to the provisions of the Intercreditor Agreement. In the event of a conflict between this Agreement or any other Loan Document and the Intercreditor Agreement, the Intercreditor Agreement will control.

14.21 NO ORAL AGREEMENT. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS REPRESENT THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL AGREEMENTS BETWEEN THE PARTIES. THERE ARE NO UNWRITTEN AGREEMENTS BETWEEN THE PARTIES.

[Remainder of Page Intentionally Left Blank; Signatures Begin on Following Page]

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the date set forth above.

BORROWERS:

ATLAS SAND COMPANY, LLC, a Delaware limited liability company

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer
Address:
5918 Courtyard Drive, Suite 500
Austin, TX 78730
Attn: John Turner and Brian Leveille

GUARANTORS:

ATLAS SAND CONSTRUCTION, LLC, a Texas limited liability company

By: Atlas Sand Company, LLC, its sole member

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer

ATLAS SAND EMPLOYEE COMPANY, LLC, a Texas limited liability company

By: Atlas Sand Company, LLC, its sole member

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer

ATLAS SAND EMPLOYEE HOLDING COMPANY, LLC, a Texas limited liability company

By: Atlas Sand Company, LLC, its sole member

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer

FOUNTAINHEAD LOGISTICS EMPLOYEE COMPANY, LLC, a Texas limited liability company

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer

FOUNTAINHEAD LOGISTICS, LLC, a Texas limited liability company

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer

ATLAS SAND CONSTRUCTION EMPLOYEE, LLC, a Texas limited liability company

By: Atlas Sand Company, LLC, its sole member

By: /s/ John Turner
Name: John Turner
Title: President and Chief Financial Officer

Address for Guarantors:

5918 Courtyard Drive, Suite 500
Austin, TX 78730
Attn: John Turner and Brian Leville

AGENT AND LENDERS:

BANK OF AMERICA, N.A., as Agent and Lender

By: /s/ Jason Stowe
Name: Jason Stowe
Title: Vice President
Address:
901 Main Street, 11th Floor
Mailcode TX1-492-11-23
Dallas, TX 75202
Attn: Tanner Pump
Fax: 214.209.4766

GOLDMAN SACHS BANK USA, as a Lender

By: /s/ Andrew B. Vernon
Name: Andrew Vernon
Title: Authorized Signatory

EXHIBIT A
to
Loan, Security and Guaranty Agreement

ASSIGNMENT AND ASSUMPTION

This Assignment and Assumption ("Assignment") is dated as of the Effective Date set forth below, between the Assignor ("Assignor") and Assignee ("Assignee") identified below. Capitalized terms are used herein as defined in the Loan Agreement described below ("Loan Agreement"), receipt of a copy of which is acknowledged by Assignee. The Standard Terms and Conditions set forth in the Annex attached hereto ("Standard Terms") are incorporated by reference and made a part of this Assignment as if fully set forth herein.

For valuable consideration hereby acknowledged, Assignor hereby irrevocably sells and assigns to Assignee, and Assignee hereby irrevocably purchases and assumes from Assignor, as of the Effective Date and subject to and in accordance with the Standard Terms and Loan Agreement, (a) all of Assignor's rights and obligations in its capacity as a Lender under the Loan Documents in the amount and percentage interest shown below (including all outstanding rights and obligations under the Loan Agreement relating to outstanding Loans and Letters of Credit thereunder) and (b) to the extent permitted to be assigned under applicable law, all claims, suits, causes of action and any other rights of Assignor (in its capacity as a Lender) against any Person, whether known or unknown, arising under or in connection with the Loan Agreement, Loan Documents or loan transactions governed thereby, or in any way based on or related to any of the foregoing, including all contract claims, tort claims, malpractice claims, statutory claims, and other claims at law or in equity related to the rights and obligations assigned pursuant to clause (a) above (the rights and obligations assigned by Assignor to Assignee pursuant to clauses (a) and (b) above being, collectively, the "Assigned Interest"). This sale and assignment is without recourse to Assignor and, except as expressly provided herein, without representation or warranty by Assignor.

1. Assignor: _____

2. Assignee: _____

3. Borrowers: Atlas Sand Company, LLC

4. Agent: Bank of America, N.A., as Agent under the Loan Agreement

5. Loan Agreement: Loan, Security and Guaranty Agreement dated as of February 22, 2023, as amended, among Borrowers, Agent and certain financial institutions as Lenders

6. Assigned Interest:

Amount of Commitment Assigned	Aggregate Commitments of all Lenders	Assigned Percentage of Aggregate Commitments
$	$	%

7. Effective Date of Assignment (to be inserted by Agent and which shall be the effective date of recordation of transfer by Agent in the loan register): _____, 20__

[Remainder of Page Intentionally Left Blank]

The terms set forth in this Assignment and Assumption are hereby agreed to:

ASSIGNOR:

_____

By: _____
Name:
Title:

ASSIGNEE:

_____

By: _____
Name:
Title:

Consented to and Accepted:

BANK OF AMERICA, N.A., as Agent

By: _____
Name:
Title:

[Consented to:

_____

By: _____
Name:
Title:][1]

[1] If applicable.

ANNEX TO ASSIGNMENT AND ASSUMPTION

Standard Terms and Conditions for Assignment and Assumption

1. Representations and Warranties.

1.1. Assignor. Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of the Assigned Interest, (ii) the Assigned Interest is free and clear of any lien, encumbrance or other adverse claim, and (iii) Assignor has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and to consummate the transactions contemplated hereby; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the Loan Agreement or any other Loan Document, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Documents or any collateral thereunder, (iii) the financial condition of any Obligors, their Subsidiaries or Affiliates, or any other Person obligated in respect of any Loan Document, or (iv) the performance or observance by any Obligors or any such Subsidiaries, Affiliates or other Persons of any of their respective obligations under any Loan Document.

1.2. Assignee. Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and to consummate the transactions contemplated hereby and to become a Lender under the Loan Agreement, (ii) it is an Eligible Assignee and meets all requirements to be an assignee under the terms of the Loan Agreement (subject to any consents required under the Loan Agreement), (iii) from and after the Effective Date, Assignee shall be bound by the provisions of the Loan Agreement and other Loan Documents as a Lender and, to the extent of the Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by the Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire the Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the Loan Agreement and of such Loan Documents as it has deemed appropriate, and has received or been accorded the opportunity to receive copies of the most recent financial statements delivered pursuant to the terms of the Loan Agreement, and such other documents and information as it deems appropriate to make its own credit analysis and decision to enter into this Assignment and to purchase the Assigned Interest, (vi) it has, independently and without reliance upon Agent, Assignor or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Assignment and to purchase the Assigned Interest, and (vii) attached hereto is any documentation required to be delivered by it in connection with this Assignment pursuant to the terms of the Loan Agreement or otherwise reasonably requested by Agent, duly completed and executed by Assignee; and (b) agrees that (i) it will, independently and without reliance upon Agent, Assignor or any other Lender, and based on such documents and information as Assignee shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Loan Documents are required to be performed by Assignee as a Lender.

Assignee represents and warrants, as of the Effective Date, to and covenants from the Effective Date to the date such Person ceases being a Lender under the Loan Agreement, for the benefit of Assignor, Agent, Arranger(s) and their respective Affiliates, and not (for the avoidance of doubt) to or for the benefit of any Obligor, that at least one of the following is and will be true: (w) Assignee is not using "plan assets" (within the meaning of 29 CFR §2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the Loans, Letters of Credit or Commitments; (x) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined byin-house asset managers), is applicable with respect to Assignee's entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Agreement, and acquisition and holding of the Assigned Interest; (y) (I) Assignee is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (II) such Qualified Professional Asset Manager made the investment decision on behalf of Assignee to enter into, participate in, administer and perform the Loans, Letters of Credit, Commitments and Loan Agreement, and to acquire and hold the Assigned Interest, (III) the entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Agreement, and the acquisition and holding of the Assigned Interest, satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14, and (IV) to the best knowledge of Assignee, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to Assignee's entrance into, participation in, administration of and performance of the Loans, Letters of Credit, Commitments and Loan Agreement, and acquisition and holding of the Assigned Interest; or (z) such other representation, warranty and covenant as may be agreed in writing between Assignor in its sole discretion, Agent in its sole discretion and Assignee.

2. Payments. From and after the Effective Date, Agent shall make all payments in respect of the Assigned Interest (including payments of principal, interest, fees and other amounts) to Assignor for amounts which have accrued to but excluding the Effective Date and to Assignee for amounts which accrue on and after the Effective Date.

3. General Provisions. This Assignment shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. This Assignment may be executed in any number of counterparts, which together shall constitute one instrument. Delivery of an executed counterpart of a signature page of this Assignment and Assumption by fax transmission or other electronic mail transmission (e.g., "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Assignment. This Assignment shall be governed by, and construed in accordance with, the laws of the State of New York.

EXHIBIT B
to
Loan, Security and Guaranty Agreement

COMPLIANCE CERTIFICATE

DATE: _____, 20_

This Compliance Certificate (this "**Certificate**") is given by **ATLAS SAND COMPANY, LLC**, a Delaware limited liability company ("**Borrower Agent**"), pursuant to **Section 10.1.2(d)** of that certain Loan, Security and Guaranty Agreement dated as of February 22, 2023 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"), among Borrower Agent, the other Borrowers and Guarantors from time to time party thereto, the financial institutions from time to time party to the Loan Agreement (the "**Lenders**"), and **BANK OF AMERICA, N.A.**, as agent for the Lenders (in such capacity, "**Agent**"). Capitalized terms used herein without definition shall have the meanings set forth in the Loan Agreement and all applicable calculations set forth herein shall be calculated in the manner required by the Loan Agreement.

The officer executing this Certificate is the [chief financial officer] of Borrower Agent and as such is duly authorized to execute and deliver this Certificate in his/her representative capacity on behalf of Obligors. By so executing this Certificate, Borrower Agent hereby certifies to Agent that:

1. the financial statements delivered with this Certificate in accordance with **Section 10.1.2** of the Loan Agreement fairly present, in all material respects and in accordance with GAAP, the financial position and results of operations of Obligors as of, and for the respective periods ending on, the dates of such financial statements[, subject to normal year-end adjustments and absence of footnotes][2];

2. the undersigned has reviewed and is familiar with the terms of the Loan Agreement and has made, or caused to be made under his/her supervision, a detailed review of the transactions and financial condition of Obligors during the accounting period covered by such financial statements;

3. no Default or Event of Default has occurred and is continuing or existed during such fiscal period, except as set forth in Schedule 1 attached hereto, which includes a description of the nature and status and period of existence of such Default or Event of Default, if any;

4. during such fiscal period, Obligors have engaged in the transactions set forth on Schedule 2 attached hereto for which Obligors relied on compliance with the Payment Conditions test, and the Payment Conditions were satisfied at the time of each such transaction;[3] and

[2] Include only for quarterly or monthly financial statements.
[3] Include only transactions for which a certificate was not previously delivered in accordance with clause (c) of the definition of Payment Conditions.

5. the representations and warranties of Obligors contained in Section 9 of the Loan Agreement or any other Loan Document are true and correct in all material respects (without duplication of any materiality qualification applicable thereto) as of the date hereof, except for representations and warranties that expressly apply only on an earlier date, which are true and correct in all material respects (or all respects, as applicable) as of such earlier date.

[*Remainder of page intentionally left blank; signature page follows*]

IN WITNESS WHEREOF, the undersigned has executed this Compliance Certificate as of _____, ____.

ATLAS SAND COMPANY, LLC, a Delaware limited liability company

By: _____
Name:
Title:

Schedule 1
to
Compliance Certificate

Defaults or Events of Default

Schedule 2
to
Compliance Certificate

Payment Conditions Transactions

[See attached.]

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Loan, Security and Guaranty Agreement

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SCHEDULE 1.1(b)
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SPECIFIED FOREIGN ACCOUNT DEBTORS

SCHEDULE 6.1(o)
to
Loan, Security and Guaranty Agreement

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SCHEDULE 7.3
to
Loan, Security and Guaranty Agreement

PLEDGED COLLATERAL

SCHEDULE 7.5
to
Loan, Security and Guaranty Agreement

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Loan, Security and Guaranty Agreement

BORROWING BASE REPORTING

SCHEDULE 8.4
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to
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SCHEDULE 9.1.14(b)
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Loan, Security and Guaranty Agreement

CAPITALIZATION

Schedule 9.1.14(b)

SCHEDULE 9.1.15
to
Loan, Security and Guaranty Agreement

ENTITY INFORMATION

SCHEDULE 9.1.16(b)
to
Loan, Security and Guaranty Agreement

SAND MINES

Schedule 9.1.16(b)

SCHEDULE 9.1.20
to
Loan, Security and Guaranty Agreement

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to
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to
Loan, Security and Guaranty Agreement

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Schedule 10.1.11

SCHEDULE 10.2.1
to
Loan, Security and Guaranty Agreement

EXISTING DEBT

Schedule 10.2.1

SCHEDULE 10.2.2
to
Loan, Security and Guaranty Agreement

EXISTING LIENS

SCHEDULE 10.2.3
to
Loan, Security and Guaranty Agreement

RESTRICTIVE AGREEMENTS

Schedule 10.2.3

SCHEDULE 10.2.4
to
Loan, Security and Guaranty Agreement

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Schedule 10.2.4

SCHEDULE 10.2.14
to
Loan, Security and Guaranty Agreement

EXISTING AFFILIATE TRANSACTIONS

Schedule 10.2.14

Exhibit 10.8

THIRD AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

ATLAS SAND COMPANY, LLC

A Delaware Limited Liability Company

Dated as of January 30, 2018

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THE SECURITIES REPRESENTED HEREBY:

(1) HAVE NOT BEEN REGISTERED OR QUALIFIED UNDER THE U.S. FEDERAL SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER ANY STATE SECURITIES LAWS AND ARE "RESTRICTED SECURITIES" AS DEFINED IN RULE 144 PROMULGATED UNDER THE SECURITIES ACT;

(2) HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO OR IN CONNECTION WITH THE DISTRIBUTION THEREOF; AND

(3) MAY NOT BE TRANSFERRED EXCEPT UPON DELIVERY TO THE COMPANY OF AN EFFECTIVE FEDERAL REGISTRATION STATEMENT AND STATE QUALIFICATION RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE BOARD OF MANAGERS THAT SUCH REGISTRATION AND STATE QUALIFICATION IS NOT REQUIRED FOR SUCH TRANSFER AND/OR THE SUBMISSION TO THE COMPANY OF SUCH OTHER EVIDENCE AS MAY BE REASONABLY SATISFACTORY TO THE BOARD OF MANAGERS TO THE EFFECT THAT SUCH TRANSFER WILL NOT BE IN VIOLATION OF THE SECURITIES ACT, APPLICABLE STATE SECURITIES LAWS, AND/OR ANY RULE OR REGULATION PROMULGATED THEREUNDER.

* * * * *

THIRD AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

ATLAS SAND COMPANY, LLC

A Delaware Limited Liability Company

PREAMBLE

THIS THIRD AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT, dated to be effective as of January 30, 2018, (the "Effective Date"), is hereby duly adopted as the Third Amended and Restated Limited Liability Company Agreement of Atlas Sand Company, LLC, a Delaware limited liability company, by the Members who agree to be bound hereby.

WHEREAS, Ben M. Brigham, the initial member and a Manager of the Company (the "Initial Member"), executed that certain Limited Liability Company Agreement, dated as of April 20, 2017, (as thereafter amended or modified, the "Original Company Agreement");

WHEREAS, the Original Company Agreement was amended by that certain First Amendment to Limited Liability Company Agreement, dated as of May 23, 2017 (the "First Amendment") to provide for a change of the name of the Company;

WHEREAS, pursuant to that certain Assignment of Membership Interest effective as of June 1, 2017, the Initial Member transferred all of his interests in the Company to the Atlas Member;

WHEREAS, the Original Company Agreement and the First Amendment were replaced and superseded in their entirety by that certain First Amended and Restated Limited Liability Company Agreement, effective as of August 4, 2017, which was subsequently replaced and superseded in its entirety by that certain Second Amended and Restated Limited Liability Company Agreement, effective as of December 15, 2017, (the "Second A&R Company Agreement");

WHEREAS, the Atlas Member has determined that it is in the best interest of the Company to amend and restate the Second A&R Company Agreement to create an additional class of Units to expand the assets and resources of the Company;

WHEREAS, the Members now desire to amend and restate the Second A&R Company Agreement to modify the ownership of the Company and the terms by which it shall be governed, as provided herein; and

WHEREAS, the parties hereto constitute all of the parties necessary to amend the Second A&R Company Agreement.

NOW, THEREFORE, in consideration of the covenants contained herein and for other good and valuable consideration, the parties hereto hereby amend and restate the Second A&R Company Agreement in its entirety as set forth herein:

ARTICLE 1.
DEFINITIONS

1.1 Definitions. As used in this Agreement, the following terms have the following meanings:

"AAA" has the meaning given to such term in Section 14.9.

"Accredited Investor" has the meaning ascribed to such term in Rule 501(a) promulgated under the 1933 Act.

"Accumulated Net Income" means the cumulative sum of Net Income commencing with the first quarter that sand is produced and sold by the Company which has not been previously distributed.

"Additional Capital Contributions" has the meaning given such term in Section 3.5(a).

"Adjusted Capital Account Deficit" means, with respect to any Member, the deficit balance, if any, in the Member's Capital Account maintained for such Member, after giving effect to the following adjustments:

(a) The Capital Account will be increased by any amounts that the Member is obligated to restore to the Company or is deemed to be obligated to restore pursuant to Sections 1.704-2(g)(1) and 1.704-2(i)(5) of the Regulations.

(b) The Capital Account will be decreased by the items described in Sections 1.704-1 (b) (2) (ii) (d) (4), (5), and (6) of the Regulations.

The foregoing definition of "Adjusted Capital Account Deficit" and the application of the term in the manner provided in this Agreement are intended to comply with the provisions of Section 1.704-1(b)(2)(ii)(d) of the Regulations and shall be interpreted consistently therewith.

"Adjustment Period" means any period of time that begins on the Effective Date or the day following the end of the immediately preceding Adjustment Period (with respect to each subsequent Adjustment Period) and ends on the first to occur of: (a) the last day of a Fiscal Year, (b) the day immediately preceding the date of the "liquidation" of a Member's interest in the Company (within the meaning of Section 1.704-1(b)(2)(ii)(g) of the Regulations), or (c) the date on which the Company is terminated under Article 13.

"Affiliate" means, as to any Person, any other Person that directly or indirectly, through one or more intermediaries controls, is controlled by, or is under common control with such specified Person. For the purposes of this Agreement, "*control*," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract, or otherwise; and the terms "*affiliated*," "*controlling*," and "*controlled*" have meanings correlative to the foregoing.

"Agreement" means this Limited Liability Company Agreement, including the Exhibits attached hereto, as amended in accordance with the terms hereto and in effect from time to time.

"Atlas Designee" means a Manager appointed in accordance withSection 6.2(b).

"Atlas Member" means Atlas Sand Management Company, LLC.

"Bankruptcy Laws" means the Federal Bankruptcy Code or any other present or future applicable federal, state, or other statute or law relating to bankruptcy, insolvency, reorganization, moratorium, or similar relief for debtors.

"BlackGold" means BlackGold Capital Management LP or an Affiliate.

"Brigham" means Ben M. Brigham, as stated in Section 6.2(a).

"Business Day" means any day other than a Saturday, a Sunday, or a holiday on which national banking associations in the State of Delaware are closed.

"Capital Account" means, with respect to any Member, the capital account maintained for such Member in accordance with the rules of Section 1.704-1(b)(2)(iv) of the Regulations. Subject to Section 1.704-1(b) (2) (iv) of the Regulations:

(a) To each Member's Capital Account there shall be credited such Member's Capital Contribution (net of liabilities that the Company is considered to assume or to take subject to under Code Section 752) and such Member's distributive share of Net Profit and any items in the nature of income or gain that are specially allocated pursuant to Section 4.3 or Section 4.4.

(b) To each Member's Capital Account there shall be debited the amount of cash and the Gross Asset Value of any property distributed to such Member pursuant to any provision of this Agreement (net of liabilities that such Member is considered to assume or to take subject to under Code Section 752) and such Member's distributive share of Net Loss and any items in the nature of expenses or losses that are specially allocated pursuant to Section 4.3 or Section 4.4.

(c) In the event all or a portion of a Membership Interest is Transferred in accordance with the terms of this Agreement, the Transferee shall succeed to the Capital Account of the transferor to the extent it relates to the Transferred Membership Interest.

The provisions of this Agreement relating to the maintenance of Capital Accounts are intended to comply with Section 1.704-1(b) of the Regulations, and they shall be interpreted and applied in a manner consistent with such Regulations.

"Capital Contribution" means, with respect to any Member, the amount of money and the initial Gross Asset Value of any property (other than money), but including goodwill, contributed to the Company by such Member (or its predecessors in interest) with respect to the interest in the Company held by such Member, as reduced by any indebtedness either assumed by the Company or to which such property is subject when contributed. Such term does not include any loan made by a Member to the Company or any Subsidiary, but does include any Additional Capital Contributions made by a Member to the Company.

"Capital Event" means (a) a Qualified Public Offering, (b) the sale of all or substantially all of the assets or equity of the Company or (c) the conversion of Class C Units into Class A Units by the Permian Dunes Member in accordance with Section 3.4.

"Certificate of Formation" means, at any date, the Certificate of Formation of the Company, as filed with the Secretary of State of the State of Delaware, as the same may be amended or restated and in effect at such date pursuant to the LLC Act and this Agreement.

"Champion Designee" means a Manager appointed in accordance withSection 6.2(c).

"Champion Group Member" means each of the following Members: the Champion Member, CamCol Consultants, LLC, Christopher P. Liles, Michael Jobe, Kermit Royalty, LLC and Harold J. Rasmussen.

"Champion Member" means Champion Lone Star, LLC, a Texas limited liability company.

"Class A Distributable Funds" shall mean the Distributable Cash to be distributed under Section 4.1(a) multiplied by the Class A Percentage.

"Class A Member" means any Member that holds Class A Units.

"Class A Payout" shall mean any point in time when the Class A Members who have made Recoverable Capital Contributions to the Company have received cumulative distributions under Section 4.1(a)(i)(A) equal to the aggregate amount of Recoverable Capital Contributions attributable to such Class A Members.

"Class A Percentage" shall mean A divided by B, where A equals the total number of Class A Units and Class C Units issued and outstanding at the time of determination, and B equals the total number of Class A Units, Class C Units and Class D Units issued and outstanding at the time of determination.

"Class A Sharing Ratio" shall mean for any Class A Member, at any given time, a percentage equal to such Class A Member's number of Class A Units divided by the total number of Class A Units held by all Class A Members.

"Class A Units" means those Units established and designated on Exhibit A as Class A Units.

"Class C Member" means any Member that holds Class C Units.

"Class C Units" means those Units established and designated on Exhibit A as Class C Units.

"Class D Distributable Funds" shall mean the Distributable Cash to be distributed under Section 4.1(a) multiplied by the Class D Percentage.

"Class D Member" means any Member that holds Class D Units.

"Class D Payout" shall mean the first point in time when the Class D Members have received cumulative distributions under Section 4.1(a)(ii)(A) equal to $1.00 multiplied by the number of Class D Units then outstanding.

"Class D Percentage" shall mean A divided by B, where A equals the total number of Class D Units issued and outstanding at the time of determination, and B equals the total number of Class A Units, Class C Units and Class D Units issued and outstanding at the time of determination.

"Class D Sharing Ratio" shall mean for any Class D Member, at any given time, a percentage equal to such Class D Member's number of Class D Units divided by the total number of Class D Units held by all Class D Members.

"Class D Units" means those Units established and designated on Exhibit A as Class D Units.

"Class D Warrant" has the meaning given to such term in Section 6.1(c)(iii).

"Class P Sharing Ratio" shall mean for any Participant, at any given time, a percentage equal to such Participant's number of Class P Units divided by the total number of Class P Units held by all Participants.

"Class P Units" mean those interests to be distributed to the Participants pursuant to the Long Term Incentive Plan. Class P Units may be issued in separate series designated as such, as determined by the Managers. Unless expressly set forth in this Agreement, references to Class P Units shall be deemed to include any and all series of Class P Units.

"Code" means, at any time, the Internal Revenue Code of 1986, as amended, or, from and after the date any successor statute becomes, by its terms, applicable to the Company, such successor statute, in each case as amended at such time by amendments that are, at that time, applicable to the Company. All references to sections of the Code include any corresponding provision or provisions of any such successor statute.

"Combined Group" has the meaning given such term in Section 9.2.

"Combined Report Year" has the meaning given such term in Section 9.2.

"Commercial Rules" has the meaning given to such term in Section 14.9.

"Company" means Atlas Sand Company, LLC, a Delaware limited liability company.

"Company Minimum Gain" has the same meaning as "partnership minimum gain" as set forth in Section 1.704-2(b)(2) of the Regulations, and the amount of Company Minimum Gain, as well as any net increase or decrease in Company Minimum Gain, for an Adjustment Period shall be determined in accordance with the rules of Section 1.704-2(d) of the Regulations.

"Company Nonrecourse Deductions" means any loss, deduction, or Code Section 705(a)(2)(B) expenditure, or item thereof, that is attributable to nonrecourse liabilities of the Company as defined in Section 1.752-1(a)(2) of the Regulations.

"Company Value" means in connection with the tag-along right in Section 11.2(a), the aggregate value of the Company implied by the consideration offered for Offered Units as stated in the applicable Offer Notice, such that, had the Company sold all its assets for cash in an aggregate amount equal to the Company Value so determined, satisfied all of its liabilities, and then liquidated in accordance with the terms of this Agreement, the portion of the Company Value payable to the Offeror would exactly equal the consideration offered for Offered Units as stated in the applicable Offer Notice, without taking into account any minority discounts.

"Covered Person" means (a) each current and former (i) Member and each of its Affiliates (excluding, for purposes of this definition, the Company and its Subsidiaries), and its and their respective officers, directors, partners, stockholders, managers, members and employees, (ii) Manager (solely in such Person's capacity as a Manager), and (iii) Officer (solely in such Person's capacity as an Officer) and (b) each Person not identified in clause (a) of this definition who is a current or former manager, director or officer of any Subsidiary of the Company or who served in such a capacity (in each case, solely in such Person's capacity as such) for any other entity or enterprise at the request of the Company, in each case of clause (a) or (b) of this definition, whether or not such Person continues to have the applicable status and whom the Managers expressly designate as a Covered Person in a written resolution.

"Determination Date" has the meaning given such term in Section 11.2(c).

"DGCL" means the Delaware General Corporation Law or, from and after the date any successor statute becomes, by its terms, effective, such successor statute, in each case as amended at such time by amendments that are, at that time, effective. All references to sections of the DGCL include any corresponding provision or provisions of any such successor statute.

"Distributable Cash" means all cash funds of the Company on hand at any time after payment of all Operating Expenses and Member Loans, payable as of such time reduced by the amount of the Working Capital Reserve, if any, at such time.

"Drag-Along Transaction" has the meaning given such term in Section 11.5.

"Drag-Along Transaction Proponents" has the meaning given such term in Section 11.5.

"Dragged Member" has the meaning given such term in Section 11.5.

"Dragging Members" has the meaning given such term in Section 11.5.

"Effective Date" has the meaning given it in the preamble of this Agreement.

"Fair Value" means, with respect to any Units, the fair value of such Units, as agreed upon by the Company and the holder of such Units, or if they are unable to agree, as determined by an independent appraiser selected by the Managers, the cost of such appraisal to be split between the Company and the holder of the Units that are being valued.

"Family Group" shall mean, with respect to (a) any Member that is a natural person, such Member, such Member's spouse, siblings, ancestors and descendants (whether natural, by marriage or adopted) and any trust or other estate planning vehicle solely for the benefit of such Member and/or such Member's spouse, siblings, ancestors and/or descendants (whether natural, by marriage or adopted), and with respect to (b) any Member that is an entity, any Person controlling such Member entity and such Person's spouse, siblings, ancestors and descendants (whether natural, by marriage or adopted) and any trust or other estate planning vehicle solely for the benefit of such Person's spouse, siblings, ancestors and/or descendants (whether natural, by marriage or adopted).

"First Amendment" has the meaning given such term in the recitals.

"Fiscal Year" means the taxable year of the Company, which shall be the calendar year or such other period determined by the Managers in accordance with the Code.

"Funding Notice" has the meaning given such term in Section 3.5(b).

"Gross Asset Value" means, with respect to any asset, the asset's adjusted basis for federal income tax purposes, except as follows:

(a) The initial Gross Asset Value of any asset contributed (or deemed to have been contributed) by a Member to the Company in connection with the execution and delivery of this Agreement and the initial Gross Asset Value of any other asset contributed (or deemed to have been contributed) by a Member to the Company shall be the gross fair market value of such asset, as determined by the Managers.

(b) The Gross Asset Values of all Company assets shall be adjusted to equal their respective gross fair market values, as determined by the Managers, as of the following times: (i) the acquisition of an additional Membership Interest by any new or existing Member in exchange for more than a de minimis Capital Contribution; (ii) the distribution by the Company to a Member of more than a de minimis amount of property as consideration for a Membership Interest; (iii) the liquidation of the Company within the meaning of Section 1.704-1(b)(2)(ii)(g) of the Regulations; or (iv) a grant of an interest in the Company as consideration for the provision of services to or for the benefit of the Company by a new or existing Member; *provided*, *however*, that the adjustments to clauses (i) and (ii) above will only be made if the Managers reasonably determine that such adjustments are necessary or appropriate to reflect the relative economic interests of the Members in the Company.

(c) The Gross Asset Value of any Company asset distributed to any Member shall be adjusted to equal the gross fair market value of such asset, as determined by the Managers, on the date of the distribution.

(d) The Gross Asset Value of Company assets shall be increased (or decreased) to reflect any adjustments to the adjusted basis of such assets pursuant to Code Section 732(d), Code Section 734(b), or Code Section 743(b), but only to the extent that (i) such adjustments are taken into account in determining Capital Accounts pursuant to clause (f) of the definition of "Net Profit" or "Net Loss" in this Section 1.1 and (ii) an adjustment pursuant to clause (b) immediately above is not required in connection with the transaction.

"Gross Income" means, for each Adjustment Period, an amount equal to the Company's gross income as determined for federal income tax purposes for the Adjustment Period but computed with the adjustments in paragraphs (a) through (f) of the definition of "Net Profit" or "Net Loss" in this Section 1.1.

"Incentive Liquidation Value" means, as of the date of determination and with respect to the relevant new Class P Units to be issued, the aggregate amount that would be distributed to the Participants pursuant to Section 4.1 if, immediately prior to the issuance of the relevant new Class P Units, the Company sold all of its assets for fair market value and immediately liquidated, the Company's debts and liabilities were satisfied and the proceeds of the liquidation were distributed pursuant to Section 13.1.

"Initial Member" has the meaning given to such term in the preamble.

"IPO Exchange" has the meaning set forth in Section 4.8(a).

"IPO Issuer" means the Company or a successor to the Company that is an Affiliate of the Company or a subsidiary of the Company or any of the Company's Affiliates and which will be the issuer in a Qualified Public Offering.

"IPO Securities" means equity securities of an IPO Issuer of the same class or series as the securities of such IPO Issuer proposed to be offered to the public in a Qualified Public Offering.

"Liquidating Manager" means a Manager of the Company selected by the Members or, in the failure of the Members to select a Liquidating Manager, the Person or Persons appointed by a court of competent jurisdiction pursuant to Subsection 18-803 of the LLC Act.

"LLC Act" means, at any time, the Delaware Limited Liability Company Act or, from and after the date any successor statute becomes, by its terms, applicable to the Company, such successor statute, in each case as amended at such time by amendments that are, at that time, applicable to the Company (to the extent the provisions of the LLC Act are not modified by the Certificate of Formation or this Agreement). All references to sections of the LLC Act include any corresponding provision or provisions of any such successor statute.

"Long Term Incentive Plan" means that certain incentive plan set forth on Exhibit C.

"Manager" means, at any time, a Person who is then a Manager with the authority to exercise or direct the exercise of the powers of the Company and manage the business and affairs of the Company except to the extent the LLC Act, the Certificate of Formation, or this Agreement restricts the powers, rights, and duties of a Manager.

"Maximum Tag-Along Number" has the meaning given such term in Section 11.2(a).

"Member" means any Person admitted pursuant to this Agreement in the capacity of a Member, each for only so long as such Person remains as a member in accordance with the Certificate of Formation, this Agreement and the LLC Act. If a Member Transfers its Membership Interest to a Person other than the Company, such transferring Member shall remain a Member in respect of such Membership Interest until a Transferee of a Membership Interest is admitted as a Member in respect of such Membership Interest in accordance with the Certificate of Formation, this Agreement, and the LLC Act, if ever.

"Member Loans" has the meaning given such term in Section 3.5(a).

"Member Nonrecourse Debt" means any nonrecourse debt of the Company for which any Member bears the economic risk of loss as determined under Sections 1.704-2(b) (4) and 1.752-2 of the Regulations.

"Member Nonrecourse Debt Minimum Gain" has the same meaning as "partnership nonrecourse debt minimum gain" as set forth in Section 1.704-2(i)(2) of the Regulations and as determined under Section 1.704-2(i)(3) of the Regulations.

"Member Nonrecourse Deductions" means any loss, deduction, or Code Section 705(a)(2)(B) expenditure, or item thereof, that is attributable to a Member Nonrecourse Debt as determined under Section 1.704-2(i)(2) of the Regulations.

"Membership Interest" means, with respect to any Member, in conjunction with the ownership of one or more Class A Units, Class C Units, or Class D Units, the Member's share of profits and losses of the Company, the Member's right to receive distributions of the Company's assets, or the Member's conversion rights, as applicable in accordance with the class of Units held by such Member. Except as expressly set forth in this Agreement or the Certificate of Formation, the rights of a Transferee who has not been admitted as a Member will be no greater than the rights mandated by the LLC Act and, to the extent the rights mandated by the LLC Act may be denied, they are hereby expressly denied. A Membership Interest does not include the Status Rights unless the Person holding such Membership Interest has been admitted as a Member of the Company.

"Net Income" means net income as calculated in accordance with generally accepted accounting principles and as stated on the Company's consolidated income statement in each period plus all Non-Cash Charges reported in each period.

"Net Profit" or "Net Loss" means, for each Adjustment Period, the Company's taxable income or taxable loss for such Adjustment Period, as determined in accordance with Section 703(a) of the Code and Section 1.703-1 of the Regulations (and for this purpose all items of income, gain, loss, or deduction required to be stated separately pursuant to Section 703(a)(1) of the Code will be included in taxable income or taxable loss), but with the following adjustments:

(a) Any tax-exempt income, as described in Section 705(a)(1)(B) of the Code, realized by the Company during the Adjustment Period will be taken into account in computing the taxable income or taxable loss as if it were taxable income;

(b) Any expenditures of the Company described in Section 705(a) (2) (B) of the Code for the Adjustment Period, including any items treated under Section 1.704-1 (b) (2) (iv) (i) of the Regulations as items described in Section 705(a) (2) (B) of the Code, will be taken into account in computing the taxable income or taxable loss as if they were deductible items;

(c) In the event the Gross Asset Value of any Company asset is adjusted pursuant toclause (b) or (c) of the definition of "Gross Asset Value" in this Section 1.1, the amount of such adjustment shall be taken into account as gain or loss from the disposition of such asset for purposes of computing Net Profit or Net Loss;

(d) Gain or loss resulting from any disposition of any Company asset with respect to which gain or loss is recognized for federal income tax purposes shall be computed by reference to the Gross Asset Value of the asset disposed of, notwithstanding that the adjusted tax basis of such asset differs from its Gross Asset Value;

(e) The depreciation, amortization, and other cost recovery deductions taken into account in computing such taxable income or loss shall be taken into account for such Adjustment Period in accordance with Section 1.704-1(b)(2)(iv)(g) of the Regulations; and

(f) Notwithstanding any other provisions of this definition, any items that are specially allocated pursuant to Section 4.3 or Section 4.4 shall not be taken into account in computing Net Profit or Net Loss.

The amounts of the items of Company income, gain, loss, or deduction available to be specially allocated pursuant to Section 4.3 or Section 4.4 shall be determined by applying rules analogous to those set forth in clauses (a) through (f) above.

"Non-Cash Charges" means all expenses reported on the Company's consolidated income statement in any period which do not represent a cash expenditure, including but not limited to depletion, depreciation, amortization, non-cash or paid in kind interest, non-cash compensation, impairment, deferred income taxes, gains and losses on disposal of property, plant and equipment, bad debt provisions, or any other expense which does not represent an outlay of cash within the reporting period. Non-Cash Charges may include non-cash charges that may be embedded within a line item that includes both cash and non-cash charges.

"Offer Notice" has the meaning given to such term in Section 11.2(a).

"Offered Units" has the meaning given such term in Section 11.2(a).

"Offeree Members" has the meaning given such term in Section 11.2(a).

"Offeror" has the meaning given such term in Section 11.2(a).

"Operating Expenses" means all ordinary and necessary costs, expenses, or charges with respect to the Company's operations, including, without limitation, payments of interest and principal and other monetary obligations due under any loan made to the Company; cost of goods and services sold; selling, general and administrative expenses; labor; employee training and other benefits; working capital investments; development costs; accounting, legal, consulting and auditing fees; taxes payable by the Company; public or private utility charges; sales and use taxes, payroll taxes and withholding taxes related thereto; management fees; buying, leasing, remodeling and maintenance of real property; marketing, promotional and other company sponsored promotions; working capital reserves as determined by the Managers in their sole discretion; and all other advertising, management, leasing, governmental approval, and other operating costs, expenses, and capital expenditures actually paid with respect to the Company's business and operations generally.

"Original Company Agreement" has the meaning given it in the preamble of this Agreement.

"Partially Adjusted Capital Accounts" means, with respect to any Member as of the close of business on the last day of any Adjustment Period, the Capital Account of such Member as of the beginning of such Adjustment Period, after giving effect to all allocations of items of income, gain, loss, or deduction not included in Net Profit and Net Loss and all Capital Contributions and distributions during such period but before giving effect to any allocations of Net Profit or Net Loss for such period pursuant to Section 4.2, increased by (a) such Member's share of Company Minimum Gain, as determined pursuant to Section 1.704-(2)(d) of the Regulations, as of the end of such Adjustment Period and (b) such Member's share of Member Nonrecourse Debt Minimum Gain, as determined pursuant to Section 1.704-(2)(i) of the Regulations, as of the end of such Adjustment Period.

"Participant" means a participant in the Long Term Incentive Plan, as further described on Exhibit C.

"Participant Agreement" means each certain Participant Agreement by and between the Company and a Participant being granted Class P Units pursuant to the terms and provisions of the Long Term Incentive Plan.

"Partnership Representative" has the meaning given such term in Section 9.4(a).

"Pass Thru Partner" has the meaning given such term in Section 9.4(b).

"Paying Member" has the meaning given such term in Section 9.2.

"Permian Dunes Member" means Permian Dunes Holding Company, LLC, a Texas limited liability company.

"Person" includes any individual, partnership, limited partnership, joint venture, corporation, limited liability company, trust, estate, custodian, trustee, executor, administrator, nominee, representative, unincorporated organization, sole proprietorship, trust, employee benefit plan, tribunal, governmental entity, department, agency, or other entity.

"Pre-Approved Transfer" means a Transfer of Units by Harold J. Rasmussen to (a) Dianne and Willie Greene or (b) Stout Energy, Inc., a Texas corporation.

"Pre-IPO Value" means offering price of the Publicly Offered Securities sold by the IPO Issuer pursuant to a Qualified Public Offering.

"Prime Rate" means the rate of interest per annum quoted in the "Money Rates" section of The Wall Street Journal from time to time and designated as the "Prime Rate". If such prime rate, as so quoted, is split between two or more different interest rates, then the Prime Rate shall be the highest of such interest rates. If such prime rate shall cease to be published or is published infrequently or sporadically, then the Prime Rate shall be determined by reference to another base rate, prime rate or similar lending rate index, generally accepted on a national basis, as selected by the Managers in their sole and absolute discretion.

"Proceeding" means any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, arbitrative, or investigative, any appeal in such an action, suit, or proceeding, and any inquiry or investigation that could lead to such an action, suit, or proceeding.

"Profits Interest" has the meaning given to such term in Section 3.1(b).

"Profits Interest Hurdle" means an amount set forth in each Participant Agreement reflecting the Incentive Liquidation Value of the relevant Class P Units at the time the units are issued.

"Project Area" means the area in Winkler and Ward Counties, Texas, where the Company now or will operate, as further described on Exhibit B.

"Proportionate Percentage" means, as to any Member, the percentage figure that expresses the ratio between the number of Units owned by such Member and the aggregate number of Units owned by all Members participating with the affected Member in any action for which the determination of Proportionate Percentage is relevant.

"Publicly Offered Securities" means equity securities of the IPO Issuer proposed to be offered to the public in the Qualified Public Offering.

"Purchase Price" has the meaning given such term in Section 11.2(c).

"Qualified Appraiser" shall mean a qualified independent appraiser selected by the Managers.

"Qualified Public Offering" means any underwritten initial public offering by the IPO Issuer of equity securities pursuant to an effective registration statement under the 1933 Act pursuant to which such equity securities are authorized and approved for listing on the New York Stock Exchange, the Nasdaq Stock Market, LLC or a similar nationally recognized market or exchange; *provided* that, that a Qualified Public Offering shall not include an offering made in connection with a business acquisition or combination pursuant to a registration statement on Form S-4 or any similar form, or an employee benefit plan pursuant to a registration statement on Form S-8 or any similar form.

"Qualifying Class P Units" has the meaning given to such term in Section 4.1(c).

"Recoverable Capital Contribution" of any Class A Member means the amount identified on Exhibit A as that Class A Member's Capital Contribution. The Recoverable Capital Contribution of each Class A Member shall be reduced by distributions to such Member under Section 4.1(a)(i)(A), and the Manager shall update Exhibit A periodically to reflect such reductions.

"Regulations" means the income tax regulations promulgated under the Code and effective as of the date of this Agreement and any future amendments to the regulations and any corresponding provisions of succeeding regulations that are mandatory.

"Required Interest" means one or more Class A Members or Class D Members of the Company who own more than 50% of the aggregate of the Class A Units and Class D Units owned by all Members after giving effect to the conversion rights of any other class of Members. For purposes of this definition, (a) a Member is deemed to own a Class A Unit or Class D Unit with respect to which it has been admitted as a Member, even if such Unit has been Transferred, until a substitute Member is admitted with respect to such Unit, and (b) if a Member owns a class of Unit that can be converted to Class A Units such Member shall be allowed to vote on any matter that requires approval of the Required Interest and shall have the number of votes represented by the number of Class A Units into which the Units may be converted.

"Sand Interest" means any leases, fee interests, and other rights to frac sands located within the Project Area.

"Second A&R Company Agreement" has the meaning given it in the preamble of this Agreement.

"Section" means a section of this Agreement, unless the text indicates otherwise.

"Securities Act" means the Securities Act of 1933, as amended.

"Selling Members" has the meaning given such term in Section 11.2(a).

"Separate Return" has the meaning given such term in Section 9.2.

"Separate Return Tax" has the meaning given such term in Section 9.2.

"Service Providers" has the meaning given such term in Section 14.20.

"Status Rights" means, with respect to any Membership Interest, any rights and powers of a Member in the Company to participate in the management of the business and affairs of the Company, and the rights to consent to or approve certain actions of the Company but not including the right to share in profits and losses, to receive distributions, and to receive allocations of income, gain, loss, deductions, and similar items of the Company.

"Subsection" means a subsection of this Agreement, unless the text indicates otherwise.

"Subsidiary" means an entity in which the Company directly or indirectly owns at least a majority of the equity.

"Tag-Along Notice" has the meaning given such term in Section 11.2(a).

"Target Capital Account" means, with respect to any Member as of the close of business on the last day of any Adjustment Period, an amount (which may be either a positive or a deficit balance) equal to the amount such Member would receive as a distribution if all assets of the Company as of such date were sold for cash equal to the Gross Asset Value of such assets, all the Company liabilities were satisfied to the extent required by their terms, and the net proceeds were distributed pursuant to Section 4.1(a).

"Tax Distribution" has the meaning given such term in Section 4.1(b).

"Tax Matters Partner" has the meaning given such term in Section 9.4.

"Tax Rate" means a rate (expressed as a percentage and which may be a blended rate) reasonably determined by the Managers which takes into account the tax character of the income (i.e., ordinary income, capital gain, or alternative minimum taxable income) allocated by the Company to the Members with respect to their Units, the amount of income from each different characterization allocated to such Members, and the tax rates applicable to such income characterizations; *provided* that in no event may the Tax Rate exceed the combined maximum marginal U.S. federal income tax rate applicable to ordinary income of individuals.

"Terminated Participant" means any Participant with respect to which a Termination Event has occurred.

"Termination Date" means the date on which a Termination Event has occurred.

"Termination Event" means (a) with respect to any Participant, the termination for any reason, other than death or disability, of such Participant's employment or consulting relationship with the Company (unless the relationship merely changes from employee to consultant) and (b) with respect to any Participant, the institution against such Participant under Bankruptcy Law of any legal proceedings seeking reorganization, rehabilitation, arrangement, composition, readjustment, liquidation, dissolution, or similar relief.

"Texas Securities Act" has the meaning given such term in Section 14.20.

"Transfer" means, with respect to any item, (a) any sale, transfer, encumbrance, gift, donation, assignment, pledge, hypothecation, or other disposition of such item, any part thereof, or any interest therein, including, if the item is a Membership Interest, any pledge or assignment of rights to receive distributions under this Agreement, in each case whether voluntary or involuntary, and whether during a Person's lifetime or upon or after the Person's death, including any Transfer by operation of law, by court order, by judicial process, or by foreclosure, levy, or attachment; or (b) the act of making any of the foregoing.

"Transfer Notice" has the meaning given such term in Section 11.2(b).

"Transferee" means a Person to whom a Transfer is made.

"Transferring Member" has the meaning given such term in Section 11.2(b).

"Unit" means any Class A Unit, Class C Unit, Class D Unit, or Class P Unit of the Company and any other class of unit authorized and issued pursuant to the terms of this Agreement.

"Unrecaptured Section 1250 Gain" has the meaning given such term in Section 4.6(d).

"Working Capital Reserve" has the meaning given it in Section 4.7.

1.2 Other Definitions. Certain other terms are defined elsewhere herein and have the meanings so given them.

1.3 Construction. Whenever the context requires, the gender of all words used in this Agreement includes the masculine, feminine, and neuter. Unless the text indicates otherwise, all references to Articles, Sections, or Subsections are to articles, sections, or subsections of this Agreement and all references to Attachments and Exhibits are to attachments and exhibits attached to this Agreement, each of which is made a part of this Agreement for all purposes. All references in this Agreement to "dollars" or "$" means United States of America dollars. The term "including" and variations of the term mean including without limitation. The captions, headings, and arrangements used in this Agreement are for convenience only and do not in any way affect, limit, amplify, or modify the terms and provisions of this Agreement.

1.4 Interest Calculations. Any interest or amounts like interest that are to be calculated under this Agreement shall be computed on the daily outstanding balance of the amount on which interest or amounts like interest accrue hereunder. The calculation of interest and amounts like interest under this Agreement shall be made monthly and shall be computed on the basis of a fraction, the denominator of which is 365 and the numerator of which is the actual number of days in the period for which interest or amounts like interest are being calculated.

ARTICLE 2.
ORGANIZATION

2.1 Formation. The Company was organized on April 20, 2017, as a Delaware limited liability company by filing the Certificate of Formation in the office of the Secretary of State of the State of Delaware under and pursuant to the LLC Act.

2.2 Name. The name of the Company is "Atlas Sand Company, LLC" and all Company business must be conducted in that name or such other name or names that comply with applicable law as the Managers may select at any time and from time to time.

2.3 Purposes. The purposes of the Company are to acquire process, develop and market frac sands and to generally engage in any and all lawful activities and transactions as may be necessary or advisable in connection therewith. The Company is authorized to engage in any lawful activity approved by the Members, in addition to the particular purposes set forth in the preceding sentence.

2.4 Registered Office and Registered Agent. The registered office and registered agent of the Company in the State of Delaware are as set forth in the Certificate of Formation. At any time and from time to time, the Managers may change the Company's registered office and/or registered agent in the State of Delaware in the manner provided in the LLC Act.

2.5 Principal Office and Other Offices. The principal address and place of business of the Company and the place where the Company's books and records will be kept or made available as required by the LLC Act is currently located at 5914 W. Courtyard Drive, Suite 200, Austin, Texas 78730-4918. The Managers may change the principal place of business of the Company and the place at which the Company's books and records are kept or made available at any time and from time to time by notice to the Members. The Company may have such other office or offices as the Managers may designate at any time and from time to time by notice to the Members.

2.6 Foreign Qualification. Prior to commencing any activities in any jurisdiction other than the State of Delaware, including opening any office in such other jurisdiction(s), the Managers shall, to the full extent required by or advisable under the laws of such jurisdiction (including to the extent required to limit the liability of the Members as contemplated by this Agreement and the LLC Act), cause the Company to comply with all requirements for the qualification of the Company as a foreign limited liability company in such jurisdiction, including appointing a registered agent and maintaining a registered office in such jurisdiction.

2.7 Required Documents. Upon the reasonable request of the Managers, each Member shall immediately execute all certificates and other documents consistent with the terms of this Agreement necessary or desirable for the Managers to accomplish all filing, recording, publishing, and other acts as may be appropriate to comply with all requirements to form, operate, qualify, continue, and terminate the Company as (a) a limited liability company under the LLC Act and the laws of the State of Delaware and (b) a foreign limited liability company in all other jurisdictions where the Company proposes to operate.

2.8 Term. The existence of the Company commenced on the date the Certificate of Formation was filed in the office of the Secretary of State of the State of Delaware and shall continue until terminated following an event of dissolution.

2.9 Mergers, Conversions, and Exchanges. The Company may adopt and affect a plan of merger or a plan of conversion and may adopt and affect a plan of exchange if such action is approved by the Managers and is otherwise in compliance with the LLC Act.

2.10 No Partnership. Other than for federal and state income tax purposes, the Members intend that the Company not be a partnership (including a limited partnership) or joint venture and that no Member or Manager be a partner or joint venturer of any other Member or Manager. This Agreement may not be construed to suggest otherwise.

ARTICLE 3.
MEMBERSHIP INTERESTS AND CAPITAL CONTRIBUTIONS

3.1 Authorized Units; Additional Members.

(a) The Company has authority to issue an unlimited number of Units of different classes or series, which initially shall be designated as Class A Units, Class C Units, Class D Units, and Class P Units, and any subsequent class or series of Units issued, and any subsequent class or series of Units issued pursuant to the terms of this Agreement. The rights, powers, preferences, duties, liabilities and obligations of holders of the Class A Units, Class C Units, Class D Units, and Class P Units shall be as set forth herein. Additional Units, of the same or different classes or series, having the same or different rights, powers, and duties as preexisting Units may be created and issued to Persons (including existing Members); *provided* that the holders of Class A Units, Class D Units, and Class C Units shall not be eligible to participate in the Long Term Incentive Plan.

(b) The Company and each Member hereby acknowledge and agree that, with respect to any Participant, such Participant's Class P Units constitute a "profits interest" in the Company within the meaning of Rev. Proc. 93-27 (a "Profits Interest"), and that any and all Class P Units received by a Participant are received in exchange for the provision of services by the Participant to or for the benefit of the Company in a Service Provider capacity or in anticipation of becoming a Participant. The Company and each Participant who receives Class P Units hereby agree to comply with the provisions of Rev. Proc. 2001-43, and neither the Company nor any Participant who receives Class P Units shall perform any act or take any position inconsistent with the application of Rev. Proc. 2001-43 or any future Internal Revenue Service guidance or other Governmental Authority that supplements or supersedes the foregoing Revenue Procedures.

(c) Additional Members having the same or different rights, powers, and duties as preexisting Members may be admitted as Members, on such terms and conditions as the Managers may determine at the time of such issuance and admission, subject to the approval of the Required Interest of the Members and subject to the terms of Section 6.1(c). Any such admission is effective only after the new Member has executed and delivered to the Managers a document including the new Member's address for notices, its agreement to be bound by this Agreement, its representation and warranty that the representations and warranties in Section 5.7 are true and correct with respect to the new Member, and any additional representations, warranties, and covenants as the Managers determine. Upon admission of a new Member, that new Member shall automatically be vested with the Status Rights related to the Class A Unit, Class C Unit, or Class D Unit in respect of which such Member is admitted and the Managers shall reflect the authorization and/or issuance of any additional Units in an amendment to this Agreement indicating the number and type of such additional Units, and their rights, powers, preferences and duties. The provisions of this Section shall not apply to Membership Interests that are Transferred by a Member. The rights, powers, preferences, duties, liabilities and obligations of holders of the Units shall be as set forth herein.

3.2 Capital Contributions. Each Class A Member has committed to contribute, or contemporaneously with the execution of this Agreement, has contributed, to the capital of the Company the amount in cash, property or goodwill that is set forth across from the name of such Member on Exhibit A, which contribution is such Class A Member's Capital Contribution to the Company. In exchange for such Capital Contribution, each Class A Member is hereby issued the number of Class A Units, and is hereby admitted as a Member in respect of such Units, shown across from the name of such Member on Exhibit A. Neither Class C Members nor Participants are required to make Capital Contributions to the Company. No Member shall be required to make any contributions to the capital of the Company except to the extent provided by Section 3.5 or Section 4.6(a).

3.3 Units Owned. The Units owned by each Person who hereafter becomes a Member and any changes in the number of Units shall be as set forth in the records of the Company and Exhibit A will be deemed amended accordingly, without further act or deed. The Managers are hereby authorized to substitute a new Exhibit A (indicating the effective date) to reflect Additional Capital Contributions and new or changed number of Units owned by a Member. The records of the Company shall be prima facie evidence of the number of Units owned by any Person.

3.4 Class C Unit Conversion. Immediately prior to the closing of a Capital Event, the Class C Units issued to the Permian Dunes Member shall automatically convert to an equal number of Class A Units. Upon such conversion, the Permian Dunes Member shall become a Class A Member. Additionally, the Permian Dunes Member may elect at any time prior to the approval of a Capital Event to convert its Class C Units into the number of Class A Units provided for in this Section 3.4 by providing ten (10) day's advance notice to the Company; *provided*, *however*, any such conversion shall be in whole and not in part.

3.5 Additional Capital Contribution and Member Loans.

(a) General. The Class A Members and Class D Members may make certain additional Capital Contributions (the "Additional Capital Contributions") or loans ("Member Loans") to the Company in accordance with the provisions of this Section 3.5.

(b) Funding Notice. Each time the Managers in good faith determine that the Company needs additional funds for a use that is consistent with the purposes of the Company, the Managers may, in their sole and absolute discretion, give notice (the "Funding Notice") to each of the Class A Members and Class D Members. Any Funding Notice issued by the Managers shall (i) state whether Additional Capital Contributions or Member Loans are sought, (ii) specify the amount of the Additional Capital Contributions or Member Loans, as applicable, being requested, (iii) specify the number of Units to be issued in connection with any Additional Capital Contributions requested, (iv) state that each Class A Member and Class D Member has a right to make Additional Capital Contributions or Member Loans in accordance with the provisions of this Section 3.5, (v) state each Class A Member's and each Class D Member's pro rata share of such Additional Capital Contributions or Member Loans, as applicable, based on each Class A Member's and each Class D Member's ownership of Units at such time, (vi) specify the date on which any Additional Capital Contribution is due; and (vii) specify the account or accounts to which such Additional Capital Contributions or Member Loans, as applicable, should be paid. Nothing in this Section 3.5(b) shall be deemed to require the approval of the Champion Member to admit a new Member that is not an Affiliate of the Atlas Member or the contribution of capital by such Member to the Company.

(c) Voluntary Funding of Contributions and Loans. If a Funding Notice requests Additional Capital Contributions or Member Loans, each Member will have the right, but not the obligation, to make its pro rata share of such Additional Capital Contributions or Member Loans based on such Member's relative ownership of Units at such time. Upon receipt of a Funding Notice from the Managers, each Class A Member and Class D Member shall promptly (and in any event within 10 Business Days) notify the Managers as to whether such Member consents to provide its pro rata share of the requested funds. A Class A Member or Class D Member who consents to provide the requested funds shall then make such Additional Capital Contribution or Member Loan, as the case may be, in accordance with this Section 3.5 and the Funding Notice. For convenience, the Company may borrow funds from a Class A Member or a Person who is not a Class A Member prior to giving the Funding Notice; *provided*, *however*, the Managers will give the Funding Notice within ten (10) days after the Company borrows such funds.

(d) Terms of Loans. The amount of any Member Loan shall not be deemed an increase in the Capital Contributions of the Member that makes such loan or entitle that lending Member to any increase in its share of distributions. A Member Loan shall (i) bear interest at a rate determined by the Managers to be in the best interests of the Company considering prevailing commercial lending rates, equity returns and the circumstances of the loan, (ii) be recourse to the Company but not to any Member, and (iii) have such other terms as are agreed to by the Managers and the lending Member. Each Member shall have fifteen (15) days from the date it receives a Funding Notice requesting Member Loans to

make its pro rata portion (based on such Member's relative ownership of Units at such time) of such Member Loans and, if it does so and if a Member Loan was made under this Section 3.5 prior to giving the Funding Notice, the proceeds of such advance shall be used to repay the original advance that gave rise to the need to give such notice. Failure of a Member to make its pro rata portion of the requested Member Loans within such time period shall be a waiver of its right to make any Member Loan in response to such Funding Notice and to object to the original advance that gave rise to the need to give such notice. There are no limits on the amount of Member Loans that may be made by any single Member; *provided*, *however*, Member Loans may be made only to the extent requested by the Managers, and the aggregate amount of Member Loans may not exceed the amount requested by the Managers.

(e) Terms of Capital Contributions. All Additional Capital Contributions made by a Member to the Company shall be payable in U.S. dollars and made by wire transfer of immediately available funds to the account or accounts designated by the Managers in the Funding Notice. Each Additional Capital Contribution shall be made by each Member on or before the due date specified in the Funding Notice and shall be deemed made on the date received by the Company.

(f) Non-consenting Members. If any Member does not consent to a Funding Notice or otherwise declines to make its pro rata portion of any Additional Capital Contribution or Member Loans, each non-declining Member may make an Additional Capital Contribution or Member Loan of any amount up to its pro rata portion (based on the relative Units owned at such time by each non-declining Member who desires to make an additional Member Loan) of such declined amount. Such process shall be continued until the entire amount of the Additional Capital Contribution or Member Loans, as the case may be, requested in the Funding Notice have been made or each Member has made all of the Member Loans that it desires to make.

(g) Member Loan Request. If the Managers issue a Funding Notice seeking Additional Capital Contributions pursuant to Section 3.5(b), and if any Champion Group Member sends written notice to the Atlas Member requesting that the Atlas Member loan funds to such Champion Group Member in order to enable such Champion Group Member to make his or its pro rata share of the Additional Capital Contribution sought by the Managers, then the Atlas Member or any of its Affiliates may, in such Person's sole discretion, make such loan to such Champion Group Member in an amount and at such time as may be necessary for the Champion Group Member to satisfy the terms of the applicable Funding Notice. Any such loan shall (i) bear interest at a rate of twenty percent (20.0%) per annum, (ii) be secured by the number of Units acquired by the Champion Group Member with the funds loaned to such Champion Group Member by the Atlas Member or its Affiliates, as applicable, (iii) be recourse to the Champion Group Member and (iv) have such other terms as are agreed to by the Champion Group Member and the applicable lender.

(h) New Units Issued. Upon a Class A Member making an Additional Capital Contribution, new Class A Units shall automatically be issued to such contributing Member in proportion with the amount of the Additional Capital Contribution; *provided*, *however*, that notwithstanding anything herein to the contrary, as among only the Atlas Member and the Champion Group Members, if and to the extent any such Member makes Additional Capital Contributions, the number of the additional Units issued to such Member in connection with such Additional Capital Contribution shall correspond proportionately with the aggregate number of Units then held by the Persons who were Members of the Company as of the Effective Date.

3.6 Return of Contributions. Except as provided herein, a Member is not entitled to the return of any part of its Capital Contributions or to be paid interest in respect of either its Capital Account or its Capital Contributions. Neither the Company nor any Member is liable for any unreturned Capital Contribution.

3.7 No Duty to Restore Negative Capital Account. Except to the extent otherwise expressly provided herein, a Member is not required to contribute or lend any cash or property to the Company to enable the Company to return any other Member's Capital Contributions or to make any distribution to any other Member, even if such first Member has a deficit balance in its Capital Account.

3.8 Capital Accounts. There shall be established for each Member a Capital Account on the books of the Company to be maintained and adjusted pursuant to this Agreement. The Managers, in their sole discretion, may maintain such other accounts for the Members as it deems necessary or appropriate for financial reporting purposes.

3.9 Other Provisions With Respect to Capital Contributions. Except as otherwise expressly provided in this Agreement, no Member shall be entitled to priority over any other Member with respect to a return of its Capital Contributions. No payment of fees, salary, or loans or of other amounts paid to a Member in transactions that are for fair value or that are approved by the Managers shall be considered a distribution or a return of Capital Contributions.

ARTICLE 4.
DISTRIBUTIONS AND ALLOCATIONS

4.1 Distributable Cash.

(a) Subject to Section 4.1(b), Section 4.1(c) and Section 4.1(d), at such times as the Managers determine in their sole discretion, Distributable Cash will be applied by the Company or distributed as follows:

(i) The Class A Distributable Funds shall be distributed among the Members as follows and in the following order of priority:

(A) First, 100% to the Class A Members pro rata in accordance with their respective Class A Sharing Ratios, until such time as Class A Payout occurs; *provided* that no Class A Member shall receive any distribution pursuant to this Section 4.1(a)(i)(A) in excess of the amount that would cause Class A Payout to occur if calculated solely with respect to such Class A Member; and

(B) Second, 87% to the Class A Members pro rata in accordance with their respective Class A Sharing Ratios, and 13% to the Participants pro rata in accordance with their respective Class P Sharing Ratios.

(ii) The Class D Distributable Funds shall be distributed among the Members as follows and in the following order of priority:

(A) First, 100% to the Class D Members pro rata in accordance with their respective Class D Sharing Ratios, until such time as Class D Payout occurs; *provided* that no Class D Member shall receive any distribution pursuant to this Section 4.1(a)(ii)(A) in excess of the amount that would cause Class D Payout to occur if calculated solely with respect to such Class D Member; and

(B) Second, 80% to the Class D Members pro rata in accordance with their respective Class D Sharing Ratios, and 20% to the Participants pro rata in accordance with their respective Class P Sharing Ratios.

(b) Notwithstanding the provisions of Section 4.1(a), in the event a Member requests in writing in any Adjustment Period that the Company make a Tax Distribution to such Member and the Company has a sufficient amount of Distributable Cash to make such Tax Distribution, the Company may, at the discretion of the Managers, distribute to the requesting Member cash in an amount equal to the product of (i) the taxable income of the Company for such Adjustment Period allocable to such Member multiplied by (ii) the Tax Rate (the "Tax Distribution"); *provided*, *however*, that (A) if the Company makes distributions pursuant to Section 4.1(a) during an Adjustment Period, such distributions shall reduce the amount of Tax Distributions the Company otherwise would be required to make and (B) if the aggregate amounts distributed to any Member for any Adjustment Period pursuant to this Section 4.1(b), including by way of advances, exceed the amount the Company was obligated to distribute to such Member pursuant to this Section 4.1(b) for such Adjustment Period, the amount of such excess shall be applied to reduce the amount the Company would otherwise be obligated to distribute to such Member pursuant to this Section 4.1(b) for the following Adjustment Period. The Capital Account of any Member to whom a Tax Distribution is made shall be debited accordingly. Amounts distributed under this Section 4.1(b) shall be deemed an advance of distributions under Section 4.1(a). For the avoidance of doubt, holders of Class P Units shall have the same rights as Members holding Class A Units pursuant to this Section 4.1(b).

(c) It is the intention of the parties to this Agreement that distributions to any Participant with respect to the Class P Units be limited to the extent necessary so that the related interest constitutes a Profits Interest. In furtherance of the foregoing, and notwithstanding anything to the contrary in this Agreement, the Managers shall, if necessary, limit any distributions to any Participant with respect to its Class P Units so that such distributions do not exceed the available profits in respect of such Participant's related Profits Interest. Available profits shall include the aggregate amount of profit and unrealized appreciation in all of the assets of the Company between the date of issuance of such Class P Units and the date of such distribution, it being understood that such

unrealized appreciation shall be determined on the basis of the Profits Interest Hurdle applicable to such Unit. In the event that a Participant's distributions and allocations with respect to its Class P Units are reduced pursuant to this Section 4.1(c), an amount equal to such excess distributions shall be treated as instead apportioned to the holders of Class A Units, Class D Units, and Class P Units that have met their Profits Interest Hurdle (such Class P Units, "Qualifying Class P Units"), pro rata in proportion to their aggregate holdings of Class A Units, Class D Units, and Qualifying Class P Units treated as one class of Unit.

(d) Notwithstanding the provisions of Section 4.1(a), in the event that prior to a Capital Event Distributable Cash in excess of the Accumulated Net Income of the Company is distributed, distributions that are in excess of the Accumulated Net Income shall be made to the Members (including the Class C Members) as if a conversion of the Class C Units into Class A Units had occurred pursuant to Section 3.4 even if the conversion has not occurred.

(e) In the event of a Qualified Public Offering distributions shall be made in accordance with Section 4.8.

4.2 Allocation of Net Profit and Net Loss. After application of Section 4.3 and Section 4.4, Net Profit or Net Loss for each Adjustment Period shall be allocated among the Members so as to reduce, proportionately, in the case of any Net Profit, the difference between their respective Target Capital Accounts and Partially Adjusted Capital Accounts for such Adjustment Period and, in the case of Net Loss, the difference between their respective Partially Adjusted Capital Accounts and Target Capital Accounts for such Adjustment Period. No portion of Net Profit or Net Loss for any Adjustment Period shall be allocated to a Member, in the case of Net Profit, whose Partially Adjusted Capital Account is greater than its Target Capital Account or, in the case of Net Loss, whose Target Capital Account is greater than or equal to its Partially Adjusted Capital Account for such Adjustment Period.

4.3 Special Allocations. The following special allocations will be made in the following order before allocations of Net Profit or Net Loss are made:

(a) Company Minimum Gain Chargeback. Notwithstanding any other provision of this Agreement to the contrary, if in any Adjustment Period there is a net decrease in Company Minimum Gain, then each Member will first be allocated items of Gross Income for the Adjustment Period (and, if necessary, subsequent Adjustment Periods) in an amount equal to the portion of such Member's share of the net decrease in Company Minimum Gain, determined in accordance with the provisions of Section 1.704-2(g) of the Regulations, that is attributable to the disposition of Company property subject to one or more nonrecourse liabilities of the Company that are not Member Nonrecourse Debts; *provided*, *however*, if there is insufficient Gross Income in an Adjustment Period to make the above allocation for all Members for the Adjustment Period, the Gross Income will be allocated among the Members in proportion to the respective amounts they would have been allocated had there been an unlimited amount of Gross Income for the Adjustment Period.

(b) Minimum Gain Chargeback for Member Nonrecourse Debt Notwithstanding any other provision of this Agreement to the contrary other than Subsection 4.3(a), if in any Adjustment Period there is a net decrease in Member Nonrecourse Debt Minimum Gain, then each Member will first be allocated items of Gross Income for the Adjustment Period (and, if necessary, subsequent Adjustment Periods) in an amount equal to the portion of such Member's share of the net decrease in the Member Nonrecourse Debt Minimum Gain during the Adjustment Period (as determined in accordance with Section 1.704-2(i) of the Regulations) attributable to the disposition of Company property subject to one or more Member Nonrecourse Debts; *provided*, *however*, if there is insufficient Gross Income in an Adjustment Period to make the above allocation for all Members for the year, the Gross Income will be allocated among the Members in proportion to the respective amounts they would have been allocated had there been an unlimited amount of Gross Income for the Adjustment Period.

(c) Qualified Income Offset. After application of Subsections 4.3(a) and 4.3(b), if in any taxable year a Member unexpectedly receives any adjustment, allocation, or distribution described in Sections 1.704-1(b)(2)(ii)(d)(4), (5), or (6) of the Regulations and if the Member has an Adjusted Capital Account Deficit, items of Gross Income will be allocated to the Member in the amount and in the manner sufficient to eliminate the Adjusted Capital Account Deficit as quickly as possible; *provided*, *however*, that an allocation under this Subsection 4.3(c) will be made only if and to the extent that the Member would have an Adjusted Capital Account Deficit after all other allocations provided for in this Article 4 have been tentatively made as if this Subsection 4.3(c) were not in this Agreement.

(d) Gross Income Allocation. In the event a Member has a deficit Capital Account at the end of any Adjustment Period that is in excess of the sum of (i) the amount the Member is obligated to restore to the Company pursuant to any provision of this Agreement, (ii) the amount that the Member is deemed to be obligated to restore to the Company pursuant to Section 1.704-1(b)(2)(ii)(c) of the Regulations, and (iii) the amounts that the Member is deemed to be obligated to restore to the Company pursuant to Sections 1.704-2(g)(1) and 1.704-2(i)(5) of the Regulations, items of Gross Income will be allocated to the Member in the amount and in the manner sufficient to eliminate such deficit as quickly as possible; *provided*, *however*, that an allocation under this Subsection 4.3(d) will be made only if and to the extent that the Member would have a deficit Capital Account in excess of such sum after all other allocations provided for in this Article 4 have been tentatively made as if Subsection 4.3(c) and this Subsection 4.3(d) were not in this Agreement.

(e) Company Nonrecourse Deductions. Company Nonrecourse Deductions for any Adjustment Period shall be allocated to the Members pro rata in proportion to their respective ownership of Units. If the Managers determine in its good faith discretion that the Company Nonrecourse Deductions must be allocated in a different ratio to satisfy the safe harbor requirements of the Regulations promulgated under Section 704(b) of the Code, the Managers are authorized, upon notice to the Members, to revise the prescribed ratio to the numerically closest ratio that does satisfy such requirements.

(f) Member Nonrecourse Deductions. Member Nonrecourse Deductions for any Adjustment Period or other period will be allocated to the Member who bears the economic risk of loss with respect to the Member Nonrecourse Debt to which such Member Nonrecourse Deductions are attributable.

(g) Basis Adjustments. To the extent an adjustment to the adjusted tax basis of any Company asset is required pursuant to Code Section 732(d), Code Section 734(b), or Code Section 743(b), the Capital Accounts of the Members will be adjusted pursuant to Section 1.704-1(b)(2)(iv)(m) of the Regulations.

4.4 Other Special Allocations.

(a) If the Company has Net Profit for any Adjustment Period (determined prior to giving effect to this Section 4.4) and the balance of any Member's Partially Adjusted Capital Account is greater than the balance of its Target Capital Account, then the Member with such excess balance shall be specially allocated items of Company deduction or loss for such Adjustment Period (to the extent available) equal to the difference between its Partially Adjusted Capital Account and its Target Capital Account;

(b) If the Company has Net Loss for any Adjustment Period (determined prior to giving effect to this Section 4.4) and the balance of any Member's Partially Adjusted Capital Account is less than the balance of its Target Capital Account, then the Member with such deficit balance shall be specially allocated items of Company income or gain for such Adjustment Period (to the extent available) equal to the difference between its Partially Adjusted Capital Account and its Target Capital Account; and

(c) If the Company has neither Net Profit nor Net Loss for any Adjustment Period (determined prior to giving effect to this Section 4.4) and, notwithstanding the application of Section 4.2, the balance of any Member's Partially Adjusted Capital Account differs from the balance of its Target Capital Account, then the Member with a positive or negative difference, as the case may be, shall be specially allocated items of Company deduction or loss or income or gain, as the case may be, for such Adjustment Period (to the extent available) to eliminate the difference between its Partially Adjusted Capital Account and its Target Capital Account; *provided*, *however*, that no Member shall be allocated any Net Loss or items in the nature of deduction or loss pursuant to Section 4.2 or this Section 4.4 to the extent that such allocation would cause or increase an Adjusted Capital Account Deficit. Allocations of Net Loss that would be made to a Member but for the proviso in the first sentence of this clause shall be made to the remaining Members to the extent not inconsistent with such proviso. To the extent allocations of Net Loss cannot be made to any Member because of such proviso, such allocations shall be made to the Members in accordance with their respective ownership of Units, notwithstanding such proviso.

4.5 Tax Allocations: Code Section 704(c). In accordance with Code Section 704(c) and the Regulations promulgated thereunder, income, gain, loss, and deduction with respect to any property contributed to the capital of the Company will, solely for tax purposes, be allocated among the Members so as to take account of any variation between the adjusted basis to the Company of the property for federal income tax purposes and the Gross Asset Value of the property. In the event the Gross Asset Value of any Company property is adjusted pursuant to clause (b) of the definition of "Gross Asset Value" in Section 1.1, subsequent allocations of income, gain, loss, and deduction with respect to such asset will take account of any variation between the adjusted basis of such asset for federal income tax purposes and its Gross Asset Value in the same manner as under Code Section 704(c) and the Regulations promulgated thereunder. Any elections or other decisions relating to allocations pursuant to this Section 4.5 will be made in any manner that the Managers determine in their sole discretion (including any manner that may benefit a Manager that is also a Member and its Affiliates). Allocations under this Section 4.5 are solely for purposes of federal, state, and local income taxes and will not affect, or in any way be taken into account in computing, any Member's Capital Account or share of Net Profit, Net Loss, or other items or distributions under any provision of this Agreement.

4.6 Other Distribution and Allocation Rules.

(a) Withholding. Notwithstanding anything to the contrary contained in this Agreement, the Managers, in their sole good faith discretion, may withhold from any distribution of Distributable Cash or other cash or other property to any Member contemplated by this Agreement any amounts due from such Member to the Company. If any provision of the Code, the Regulations, or state or local law or regulations requires the Company to withhold any tax with respect to a Member's distributive share of Company income, gain, loss, deduction, or credit, the Company will withhold the required amount and pay the same over to the taxing authorities as required by such provision. The amount withheld will be deducted from the amount that would otherwise be distributed to that Member but will be treated as though it had been distributed to the Member with respect to which the Company is required to withhold. If at any time the amount required to be withheld by the Company exceeds the amount of money that would otherwise be distributed to the Member with respect to which the withholding requirement applies, then that Member will make a Capital Contribution to the Company equal to the excess of the amount required to be withheld over the amount, if any, of money that would otherwise be distributed to that Member and that is available to be applied against the withholding requirement. Each of the Members represents that such Member is not aware of any provision of the Code, the Regulations, or state or local law or regulations that currently requires withholding of any tax by the Company with respect to such Member.

(b) Allocations Upon Transfers of Membership Interests. If any Membership Interest is Transferred in compliance with the provisions of Article 11, on any day other than the first day of an Adjustment Period, then Net Profit, Net Loss, each item thereof, and all other items attributable to such Membership Interest for such Adjustment Period will be allocated to the transferor and to the Transferee by taking into account their varying interests during the Adjustment Period in accordance with Section 706(d) of the Code, using any permissible method selected by the Managers, in their sole discretion. Solely for purposes of making such allocations, for Transfers that occur on or prior to the 15th day of a calendar month, each of such items for the entire calendar month in which the Transfer occurs will be allocated to the transferor, and for Transfers that occur after the 15th day of a calendar month, each of such items for the entire calendar month in which the Transfer occurs will be allocated to the Transferee; *provided*, *however*, that gain or loss on a Transfer

of all or substantially all of the Company assets or on a sale or other Transfer of a substantial capital asset of the Company not in the ordinary course of business, as determined by the Managers, will be allocated to the Person who is the holder of a Membership Interest on the date of such Transfer and any distribution of proceeds of any such Transfer will be made to the Person who is the holder of such Membership Interest on the date of such Transfer.

(c) Other Items. Except as otherwise provided in this Agreement, all items of Company income, gain, loss, deduction, and other allocations not otherwise provided for will be divided among the Members in the same proportions as they share Net Profit or Net Loss, as the case may be for the period during which such items were allocated.

(d) Recapture Income. For purposes of determining the nature (as ordinary income or unrecaptured Section 1250 gain (as defined in Code Section 1(h)(6)(A) ("Unrecaptured Section 1250 Gain"))) of any item of Gross Income, income, or gain allocated among the Members for Federal income tax purposes pursuant to Section 4.2, Section 4.3 Section 4.4, the portion of such item required to be recognized as ordinary income pursuant to Code Section 1245 or Unrecaptured Section 1250 Gain shall be deemed to be allocated among the Members in the same proportion that they were allocated and claimed the tax depreciation deductions, or basis reductions, directly or indirectly giving rise to such treatment under Code Section 1245 or Code Section 1(h)(6), but each Member shall be allocated such amounts only to the extent that such Member is allocated any tax gain from the sale or other disposition of such property. The balance of such recapture, if any, shall be allocated to the Members whose share of tax gain exceeds their share of such recapture ("excess gain"), and such balance shall be allocated between such Members in the proportion in which the excess gain of such Member bears to the excess gains of all Members.

(e) Distributions. Distributions of cash or property in respect of a Unit will be made only to the Member who, according to the books and records of the Company, is the holder of such Units in respect of which such distribution is made on the date of such distribution. The date for any distribution of Distributable Cash will be determined by the Managers, in their sole discretion.

4.7 Working Capital Reserve. At any time and from time to time, the Managers may establish and maintain a reserve of working capital (the "Working Capital Reserve"). If and to the extent the Managers determine that funds in the Working Capital Reserve that have not been utilized by the Company are no longer required to be so maintained, such funds will be released from the Working Capital Reserve and treated as Distributable Cash.

4.8 Qualified Public Offering.

(a) In connection with any proposed Qualified Public Offering approved in accordance with this Agreement, each outstanding Unit (other than any Units that are IPO Securities) will be converted or exchanged in accordance with this Section 4.8 into IPO Securities in a transaction or series of transactions that give effect to the provisions of Section 4.1 (the "IPO Exchange") such that each holder of Units will receive IPO Securities

having a value equal to the same proportion of the aggregate Pre-IPO Value that such holder would have received if the Company were sold as a going concern and the gross proceeds from such sale had been distributed by the Company in complete liquidation pursuant to the rights and preferences set forth in Section 4.1(a) as in effect immediately prior to such distribution assuming that (i) the value of the IPO Issuer immediately prior to such liquidation distribution were equal to the Pre-IPO Value and (ii) all unvested Class P Units were vested Class P Units and therefore entitled to all distributions with respect to such unvested Class P Units. If, in connection with the IPO Exchange, the Managers determine that it is advisable to have the holders of all of the outstanding Units contribute such Units to the IPO Issuer in one or a series of transactions pursuant to an agreement that provides for the exchange of Units into IPO Securities of the IPO Issuer (with the amount of IPO Securities to be received by each such holder being determined in accordance with this Section 4.8), each holder of Units agrees to participate in such an exchange.

(b) Notwithstanding anything to the contrary in this Agreement, at any time after the approval of a Qualified Public Offering in accordance with Section 6.1(c), the Managers shall be entitled to approve the transaction or transactions to effect the IPO Exchange and to take all such other actions as are required or necessary to facilitate the Qualified Public Offering including:

(i) determining the terms of the organizational documents of the IPO Issuer;

(ii) forming any entities required or necessary in connection with the Qualified Public Offering;

(iii) transferring or causing to be transferred any assets between or among the Company, the IPO Issuer and any of the Company's subsidiaries; and

(iv) subject to Section 14.6, amending the terms of this Agreement, in each case without the consent or approval of any other Person (including the Members). If the Managers elect to exercise such rights under this Section 4.8, then each of the Members and the Managers shall:

(A) take such actions as may be reasonably requested in connection with consummating the IPO Exchange, including such actions as are required or prudent to (1) transfer all of the issued and outstanding Units or the assets of the Company to an IPO Issuer (including a Blocker Corporation) and (2) merge or consolidate the Company into or with an IPO Issuer; and

(B) use commercially reasonable efforts to (1) cooperate with the other Members so that the IPO Exchange is undertaken in a tax-efficient manner and (2) if any Member or its limited partners or investors has a structure involving ownership of all or a portion of its interests in the Company, directly or indirectly, through one or more single purpose entities (a "Blocker Corporation"), at the request of any such Member and if

approved by Members constituting or acting with the approval of a Required Interest, merge its Blocker Corporation into the IPO Issuer in a tax-free reorganization, utilize such Blocker Corporation as the IPO Issuer or otherwise structure the transaction in atax-efficient manner; *provided* that the interest of such persons in the IPO Issuer shall not be increased compared to the interest of such Persons immediately preceding such reorganization.

(c) Each recipient of IPO Securities shall enter into a customarylock-up agreement with the underwriters in connection with the Qualified Public Offering, with the lock-up period not to exceed 180 days, except to the extent that the managing underwriter agrees to a shorter period with respect to one or more comparable recipients, in which case such lock-up period shall not exceed such shorter period.

(d) Each Member shall sell any fractional IPO Securities owned by such party (after taking into account all IPO Securities held by such party) to the IPO Issuer, upon the request of the Company in connection with or in anticipation of the consummation of a Qualified Public Offering, for cash consideration equal to the fair market value of such fractional IPO Securities as determined by the Qualified Appraiser.

(e) Notwithstanding anything to the contrary in thisSection 4.8, if no registration statement covering the issuance of the IPO Securities to the Members in the IPO Exchange has been declared effective under the 1933 Act, then each Member that is not then an Accredited Investor (without regard to Rule 501(a)(4)) may be required, at the request and election of the Company, to (i) appoint a purchaser representative (as such term is defined in Rule 501 under the 1933 Act) reasonably acceptable to the Company or (ii) agree to accept cash in lieu of any IPO Securities such non-Accredited Investor Member would otherwise receive in an amount equal to the fair market value of such fractional IPO Securities as determined by the Qualified Appraiser.

ARTICLE 5.
MEMBERS AND THEIR RIGHTS, OBLIGATIONS, REPRESENTATIONS, AND CERTAIN AGREEMENTS

5.1 Units, Name and Address of Members. The name, address and number of Units owned by each of the Members of the Company as of the Effective Date are set forth on Exhibit A. Any change in the status of a Person as a Member, the name, address and number of Units owned by each Person who later becomes a Member, and any change in the number of Units or address of any Member of which the Company is given notice will be as set forth in the records of the Company and Exhibit A will be deemed amended appropriately, without further act or deed. The Managers are hereby authorized to substitute a new Exhibit A (indicating its effective date) to reflect such additional and/or different information. The records of the Company shall be prima facie evidence of the status of any Person as a Member.

5.2 Liability for Capital Contributions. The Members shall be required to make Capital Contributions to the Company to the extent required by Article 3 and Section 4.6(a).

5.3 Liability to Third Parties. It is the intention of the Members that, to the fullest extent permitted by law, no Member shall be liable for the debts, obligations, or liabilities of the Company, including under a judgment, decree, or order of a court. Accordingly, no Member shall be required to make a Capital Contribution to the Company in excess of the contributions for which it is liable under Article 3.

5.4 Withdrawal. No Member has the right or power to withdraw from the Company as a member without the approval of all the Members of the Company.

5.5 Removal. Neither the Company, the Managers, nor the Members has the right or power to expel a Member as a member of the Company.

5.6 Lack of Authority. No Member (other than as a Manager or as an officer) has the authority or power to act for or on behalf of the Company, to do any act that would be binding on the Company, or to incur any expenditure on behalf of the Company.

5.7 Representations and Warranties of Members. Each Member, by executing this Agreement or being admitted as a Member, hereby represents and warrants to the Company and each other Member the following:

(a) Authorization and Validity of Agreement. Such Member has full power and authority to execute and deliver this Agreement, to perform the obligations of such Member hereunder, and to consummate the transactions contemplated hereby. The execution, delivery, and performance of this Agreement by such Member, and the consummation by such Member of the transactions contemplated hereby, have been duly authorized and approved by such Member. This Agreement has been duly executed and delivered by such Member and is a valid and binding obligation of such Member, enforceable against such Member in accordance with its terms, except to the extent that its enforceability may be subject to applicable Bankruptcy Laws and to general equitable principles. The execution and delivery of this Agreement do not, and the consummation of the transactions contemplated hereby will not, violate any provision of any agreement, instrument, order, regulation, judgment, or decree to which such Member is subject or by which such Member or any asset of such Member is bound. Such Member is under no legal disability, contractual or otherwise, that prohibits such Member from entering into this Agreement and performing the obligations of such Member hereunder. Such Member is the sole party in interest in the Units of such Member under this Agreement and, as such, has all legal and equitable rights in such Units.

(b) Investment Intent. Such Member is acquiring its Membership Interest for investment and not with a view to or in connection with the distribution thereof within the meaning of the Securities Act or any state securities law, and such interest will not be Transferred by it in contravention of said Securities Act or any applicable state securities laws.

(c) Sophistication. Such Member has such knowledge and experience in financial and business matters that such Member is capable of evaluating the merits and risks of an investment in the Company and its Membership Interest. Such Member is an "Accredited Investor" as that term is defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended.

5.8 Power of Attorney. Each Member hereby appoints each Manager (and any Liquidating Manager) as that Member'sattorney-in-fact for the purpose of executing, swearing to, acknowledging, and delivering all certificates, documents, and other instruments as may be necessary and appropriate in the reasonable business judgment of the Manager (or Liquidating Manager) in furtherance of the necessary business of the Company or complying with applicable law, including filings of the type described in Section 2.6 and Section 2.7 and amendments to or substitutions of Exhibit A specifically contemplated herein, and any other amendments to this Agreement to reflect any admission or withdrawal of a Member in accordance with the provisions of this Agreement or any other matter approved in accordance with the provisions of this Agreement. This power of attorney may also be used as expressly set forth in other provisions of this Agreement. This power of attorney is irrevocable, shall survive the death, disability, incapacity, insolvency, or dissolution of such Member, and is coupled with an interest. On request by a Manager (or Liquidating Manager), a Member shall confirm its grant of this power of attorney or any use of it by the Manager (or Liquidating Manager) and shall execute, swear to, acknowledge, and deliver any such certificate, document, or other instrument.

5.9 Conflicts of Interest.

(a) Subject to the express provisions of this Section and this Agreement or any policy hereafter adopted by the Required Interest of the Members (which shall have prospective application only), each Member may engage in and possess interests in other business ventures of any and every type and description, independently or with others, including those in direct competition with the Company, with no obligation to offer to the Company or any Member the right to participate therein, except that no Member may engage in or possess an interest in other business ventures operating in the same, similar, or related businesses as the Company within the Project Area. Actions in compliance with the foregoing sentence shall not be deemed wrongful or improper and neither the Company nor any Member shall have any right to participate therein. Unless the terms of a transaction between the Company and a Member or an Affiliate of a Member are proven to be unfair to the Company, the Company may transact business with any Member or any Affiliate of a Member.

(b) In the event that a Member acquires any Sand Interest in the Project Area, such Member shall provide notice to the Company about such acquisition. The notice shall include a description of the interest and details of the terms, conditions, and purchase price of the acquisition. Within thirty (30) days of receipt of the notice the Company may notify the Member that it will exercise the right to purchase such interest on the same terms and for the same amount that the Member acquired such Sand Interest. The Member and the Company shall proceed to complete the purchase and transfer of the interest expeditiously after the Company exercises its right to purchase.

5.10 Voting; Quorum. Each Member shall have one vote for each Class A Unit, each Class D Unit, and each Class C Unit owned by such Member. A Required Interest of the Members shall constitute a quorum for the taking of action of the Members. Except as otherwise required by this Agreement, all actions of the Members shall be taken upon majority vote of a quorum, or by written consent as provided herein.

5.11 Annual and Special Meetings. The Company shall hold annual meetings of the Members at the time and place determined by the Managers. A special meeting of the Members may be called at any time by the Managers or by any Member entitled to a vote at such meeting. Only business within the purpose or purposes described in the notice of special meeting may be conducted at such special meeting.

5.12 Place of Meetings. Meetings of the Members may be held at any place within or without the State of Delaware designated by the Person or Persons calling such meeting as provided above. Meetings of the Members shall be held at the principal office of the Company unless another place is designated for meetings in the manner provided herein.

5.13 Notice. Except as otherwise provided by law, written or printed notice stating the place, day, and hour of each meeting of the Members and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered, not less than ten (10) nor more than sixty (60) days before the date of the meeting by or at the direction of the Managers or the Person or Persons calling the meeting, to each Member entitled to vote at such meeting.

5.14 Procedure; Minutes. At meetings of the Members, business shall be transacted in such order as the Person or Person(s) calling the meeting may determine. The Managers shall appoint at each meeting a natural person to preside at the meeting and a natural person to act as secretary of the meeting. The secretary of the meeting shall prepare minutes of the meeting, which shall be delivered to the Company for placement in the minute book of the Company.

5.15 Action Without Meeting. Any action that may be taken, or that is required by law or the Certificate of Formation or this Agreement to be taken, at any annual or special meeting of Members may be taken without a meeting, without prior notice, and without a vote, if a consent or consents in writing, setting forth the action so taken, shall have been signed by the Member(s) having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all Members entitled to vote thereon were present and voted. The consent may be in one or more counterparts. The signed consent shall be placed in the minute books of the Company and provided to each Member whether or not the Member signed the consent. For purposes of this Section, a telegram, telex, electronic mail, cablegram, or similar transmission by a Person or a photographic, photostatic, facsimile, or similar reproduction of a writing signed by a Person or any other method of communication permitted by the corresponding provisions of the DGCL shall be regarded as signed by that Person. The record date for the purpose of determining Members entitled to consent to any action pursuant to this Section shall be determined in accordance with the principles in the DGCL.

5.16 Action by Telephone Conference. Subject to the requirements of the LLC Act, the Certificate of Formation, or this Agreement for notice of meetings, Members may participate in and hold a meeting of Members by means of a conference telephone or similar communications equipment by means of which all Persons participating in the meeting can hear each other, and participation in such meeting shall constitute attendance and presence in person at such meeting, except where a Person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

ARTICLE 6.
BOARD OF MANAGERS

6.1 Management by Managers. Except for situations in which the approval of the Members is required by this Agreement or by nonwaivable provisions of applicable law, and subject to the provisions of Subsections 6.1(b) and 6.1(c), (a) the powers of the Company shall be exercised by or under the authority of, and the business and affairs of the Company shall be managed under the direction of, the Managers; and (b) the Managers may make all decisions and take all actions for the Company not otherwise provided for in this Agreement without seeking the approval or consent of the Members, including but not limited to the following:

(i) entering into, making, and performing contracts, agreements, and other undertakings binding the Company that may be necessary, appropriate, or advisable in furtherance of the purposes of the Company and making all decisions and waivers thereunder;

(ii) making any expenditure and incurring any obligation it considers necessary or desirable for the conduct of the activities of the Company;

(iii) doing and performing all acts as may be necessary or appropriate or desirable to the conduct of the Company's business;

(iv) selecting, removing, and changing the authority and responsibility of lawyers, accountants, and other advisers and consultants;

(v) acquiring and maintaining insurance covering Company assets;

(vi) controlling any matters affecting the rights and obligations of the Company, including the conduct of litigation and other incurring of legal expense, and settling claims and litigation;

(vii) determining distributions of Company cash and other property as provided in Section 4.1;

(viii) opening and maintaining bank and investment accounts and arrangements, drawing checks and other orders for the payment of money, and designating individuals with authority to sign or give instructions with respect to those accounts and arrangements;

(ix) preparing and distributing to the Members an annual report on the Company's financial performance;

(x) applying for and obtaining governmental approvals or certificates with respect to the Company operations or the ownership or use of its properties or assets;

(xi) amending or restating this Agreement to reflect the admission of a Member in accordance with the provisions of this Agreement;

(xii) acquiring, utilizing for Company purposes, and disposing of any asset of the Company;

(xiii) maintaining the assets of the Company in good order;

(xiv) selling, leasing, exchanging, or otherwise Transferring all or substantially all of the assets of the Company;

(xv) approving any conversion, merger, consolidation, share or interest exchange, or other transaction authorized by or subject to Section 18-209 of the LLC Act;

(xvi) forming and operating Subsidiaries of the Company to facilitate the business operations of the Company;

(xvii) subject to Section 3.5(b) with respect to (A) existing Members, and (B) Affiliates of the Atlas Member, issuing additional Units, adjusting the number of Units owned by the Members, or admitting additional Members to the Company;

(xviii) collecting sums due the Company;

(xix) to the extent that funds of the Company are available therefor, paying debts and obligations of the Company;

(xx) engaging in transactions between the Company and any Member or Manager acting in and for its own account; and

(xxi) executing, acknowledging, delivering, filing and recording instruments or documents affecting the foregoing.

(c) Notwithstanding the provisions of Subsection 6.1(a), the Managers may not cause the Company to do any of the following without obtaining the consent or approval of the Required Interest of the Members:

(i) amend or restate the Certificate of Formation (except to reflect changes in the Company's registered office and/or registered agent permitted by this Agreement or to reflect other changes of the information contained therein that are not inconsistent with this Agreement);

(ii) approve dissolution of the Company; or

(iii) commence bankruptcy, receivership or any other insolvency proceeding.

(d) Notwithstanding any other provision of this Agreement, the Managers may not cause the Company to do any of the following without obtaining the consent of the Permian Dunes Member:

(i) amend or restate this Agreement, the Certificate of Formation or any other documents affecting the relative rights or privileges of the Permian Dunes Member in any manner that can reasonably be determined to result in the diminution of the rights of the Permian Dunes Member or the dilution of the ownership of the Permian Dunes Member in addition to any dilution that may occur under the Agreement prior to such amendment;

(ii) undertake any Capital Event;

(iii) issue any new class of Units and admit any Member with rights in connection with such new class of Units that materially differ from those granted to the Permian Dunes Member; *provided* that the foregoing shall not preclude the issuance of new or additional Units (A) pursuant to the Warrant to Purchase Class D Units between BlackGold SPV I LP and the Company dated as of the date hereof (the "Class D Warrant"), or (B) to any Person receiving Class A Units or Class P Units with the rights existing pursuant to this Agreement as of the Effective Date.

(iv) issue any Class C Units to any Person other than the Permian Dunes Member; or

(v) issue any Units (or options or other rights to acquire Units) to any Person in connection with a loan to the Company, the consent to which shall not be unreasonably withheld, conditioned, or delayed; *provided* that the foregoing shall not preclude the issuance of new or additional Units pursuant to the Class D Warrant.

(e) Notwithstanding any other provision of this Agreement, the Managers may not cause the Company to do any of the following without obtaining the consent of the Class D Members who own more than 50% of the outstanding Class D Units:

(i) amend or restate this Agreement or the Certificate of Formation in any manner that is materially and disproportionately adverse to the rights of the Class D Members relative to the rights of the other Members, other than as a result of the issuance of additional Units pursuant to this Agreement; or

(ii) issue any Class D Units to any Person other than pursuant to the Class D Warrant.

6.2 Number; Term; Qualification.

(a) From and after the Effective Date, there shall be at least three (3) Managers, who initially shall be the three (3) Atlas designees appointed by the Atlas Member. As of the Effective Date, the initial Atlas designees shall be the Atlas Member, Lance Langford, and Ben M. Brigham ("Brigham"). In addition, and notwithstanding the foregoing, the Permian Dunes Member designee and Stephen C. Cole ("Cole") shall become the fourth and fifth Managers, respectively if, the Permian Dunes Member determines, in its sole discretion, to appoint a designee as a Manager and Cole, in Cole's sole discretion, elects to serve in such capacity, each by giving written notice to that effect to the Company and to Brigham, at which time the Permian Dunes Member designee and Cole, respectively, shall become the fourth or fifth Managers. The number of Managers may be changed if such action is approved by consent of the Required Interest of the Members; *provided* that if the number is reduced to eliminate the Permian Dunes Member designee or Cole, the consent of the Permian Dunes Member or Cole, as applicable shall be required for such amendment to be effective. Each Manager shall hold office until such Manager's death, dissolution, resignation, disability or removal in accordance with this Agreement unless, at the time such Manager is designated by the Champion Member, the Permian Dunes Member or the Atlas Member, as applicable, a shorter term is expressly established by the Champion Member, the Permian Dunes Member or Atlas Member, as applicable, designating such Manager, in which case such Manager shall hold office for the term so specified and until that Manager's successor is elected and qualified or, if earlier, until such Manager's death, dissolution, resignation, disability or removal in accordance with this Agreement. No Manager need be a Member, a resident of the State of Delaware, or a citizen of the United States.

(b) If an Atlas Designee resigns, dissolves, becomes disabled (as determined by the Atlas Member), dies or is removed, the Atlas Member shall designate a replacement Manager. The Atlas Member may remove and replace any Atlas Designee at any time with or without cause by written notice to the Company.

(c) Subject to Cole's election to become a Manager and giving notice to the Company and Brigham as required by Section 6.2(a), Cole shall be the Champion Designee appointed by the Champion Member. If the Champion Designee resigns, dissolves, becomes disabled (as determined by the Champion Member), dies or is removed, the Champion Member shall designate a replacement Manager. The Champion Member may remove and replace the Champion Designee at any time with or without cause by written notice to the Company.

(d) Subject to the Permian Dunes Member's election to appoint a designee to be a Manager and giving notice to the Company and Brigham as required by Section 6.2(a), if the Permian Dunes Member designee resigns, dissolves, becomes disabled (as determined by the Permian Dunes Member), dies or is removed, the Permian Dunes Member shall designate a replacement Manager. The Permian Dunes Member may remove and replace any Permian Dunes Member designee at any time with or without cause by written notice to the Company.

6.3 Changes in Number. If the number of Managers is increased as permitted by Section 6.2, each vacancy created by such increase shall be filled with the individual appointed and elected by the Required Interest of the Members.

6.4 Removal. Any Manager may be removed at any time, with or without cause, in accordance with Section 6.2(b) or 6.2(a), as applicable.

6.5 Resignation. Any Manager may resign at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time is specified, at the time of its receipt by the remaining Managers, if any, or the Members. The acceptance of a resignation shall not be necessary to make it effective, unless expressly so provided in the resignation.

6.6 Vacancies. Any vacancy created by the resignation, dissolution, disability, death or removal of a Manager shall be filled in accordance with Section 6.2(b) or Section 6.2(c), as applicable.

6.7 Regular Meetings. Regular meetings of the Managers may be held without notice at such times and places as may be designated from time to time by resolution of the Managers. Notice of the regular meetings during a calendar year shall not be required after the initial notice of the schedule of meetings for that year.

6.8 Special Meetings; Notice. Special meetings of the Managers may be called by any Manager on at least five (5) days' notice to the other Managers. Such notice need not state the purpose or purposes of, nor is the business to be transacted at, such meeting, except as may otherwise required by law or provided for by the Certificate of Formation or this Agreement.

6.9 Place of Meetings. The Managers may hold their meetings in such place or places within or without the State of Delaware as the Managers may from time to time determine.

6.10 Relative Voting Power; Quorum; Majority Vote. Each Manager shall have one vote. A majority of the Managers then in office shall constitute a quorum for the taking of action by the Managers. All actions of the Managers shall be taken upon a majority vote of a quorum, or by written consent as provided herein.

6.11 Procedure; Minutes. At meetings of the Managers, business shall be transacted in such order as the Managers may determine from time to time. The Managers shall appoint at each meeting a natural person to preside at the meeting and a natural person to act as secretary of the meeting. The secretary of the meeting shall prepare minutes of the meeting, which shall be delivered to the Company for placement in the minute books of the Company.

6.12 Action Without Meeting. Any action that may be taken, or that is required by law, the Certificate of Formation, or this Agreement to be taken, at any annual or special meeting of the Managers may be taken without a meeting, without prior notice, and without a vote, if a consent in writing, setting forth the action so taken, shall have been signed by Managers representing the requisite number of votes that would be required to take the applicable action at a meeting of the Managers. The consent may be in one or more counterparts. The signed consent shall be placed in the minute book of the Company and provided to each Manager whether or not the Manager signed the consent. For purposes of this Section, a telegram, telex, electronic mail, cablegram, or similar transmission by a person or a photographic, photostatic, facsimile, or similar reproduction of a writing signed by a person or any other method of communication permitted by the corresponding provisions of the DGCL shall be regarded as signed by that person.

6.13 Action by Telephone Conference. Subject to the requirements of the LLC Act, the Certificate of Formation, or this Agreement for notice of meetings, the Managers may participate in and hold a meeting by means of a conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in such meeting shall constitute attendance and presence in person at such meeting, except where a person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

6.14 Compensation. The Managers shall serve without compensation unless otherwise determined by the Required Interest of the Members and except as otherwise provided herein. The Managers shall be entitled to be reimbursed for out-of-pocket costs and expenses incurred in the course of their services hereunder.

6.15 Conflicts of Interest.

(a) Subject to the express provisions of this Section and this Agreement or any policy hereafter adopted by the Required Interest of the Members (which shall have prospective application only), each Manager may engage in and possess interests in other business ventures of any and every type and description, independently or with others, including those in direct competition with the Company, with no obligation to offer to the Company or any Member the right to participate therein., except that no Manager may engage in or possess an interest in other business ventures operating in the same, similar, or related businesses as the Company within the Project Area. Actions in compliance with the foregoing sentence shall not be deemed wrongful or improper and neither the Company nor any Member shall have any right to participate therein. Unless the terms of a transaction between the Company and a Manager or an Affiliate of a Manager are proven to be unfair to the Company, the Company may transact business with any Manager or any Affiliate of a Manager.

(b) In the event that a Manager acquires any Sand Interest in the Project Area, such Manager shall provide notice to the Company about such acquisition. The notice shall include a description of the interest and details of the terms, conditions, and purchase price of the acquisition. Within thirty (30) days of receipt of the notice, the Company may notify the Manager that it will exercise the right to purchase such interest on the same terms and for the same amount that the Manager acquired such Sand Interest. The Manager and the Company shall proceed to complete the purchase and transfer of the interest expeditiously after the Company exercises its right to purchase.

6.16 Liability to Third Parties. To the fullest extent permitted by law, no Manager shall be liable for the debts, obligations, or liabilities of the Company, including under a judgment, decree, or order of a court.

6.17 Standard of Conduct. The Managers shall be liable for acts, errors, or omissions in performing their duties with respect to the Company ONLY if such performance is not authorized by this Agreement and constitutes bad faith, gross negligence, or willful misconduct. THE MANAGERS ARE NOT LIABLE FOR ERRORS OR OMISSIONS IN PERFORMING THEIR DUTIES WITH RESPECT TO THE COMPANY FOR ANY OTHER REASON, INCLUDING THEIR SOLE, PARTIAL, OR CONCURRENT NEGLIGENCE. Furthermore, the Managers are not liable for any action taken by them in reliance on the statements, valuations, information, opinions that were prepared or presented by legal counsel, public accountants, investment bankers or other persons as to matters the Managers believed were within the person’s professional or expert competence.

6.18 Affiliates. Except as otherwise provided herein, any Manager shall be entitled to deal with its respective Affiliates in the performance of its duties and obligations under this Agreement.

ARTICLE 7.
OFFICERS

7.1 Election: Qualifications. The Managers may, at any time and from time to time, designate one or more natural persons to be officers of the Company and may assign titles to particular officers. No officer need be a resident of the State of Delaware, a Member, or a Manager. Any number of offices may be held by the same person.

7.2 Authority. Any officers designated by the Managers shall have such authority and perform such duties as the Managers may, at any time and from time to time, delegate to them. Unless the Managers decide otherwise, if the title is one commonly used for officers of a business corporation formed under the DGCL, the assignment of such title shall constitute the delegation to such officer of the authority and duties that are normally associated with that office, subject to any specific delegation of authority and duties made to such officer by the Managers pursuant to this Section 7.2.

7.3 Term. Each officer shall hold office at the pleasure of the Managers or until such officer's earlier death, resignation, or removal from office.

7.4 Vacancies. Any vacancy occurring in any office of the Company may be filled by the Managers.

7.5 Resignation. Any officer may resign as such at any time. Such resignation shall be made in writing and shall take effect at the time specified therein or, if no time is specified, at the time of its receipt by the Managers. The acceptance of a resignation shall not be necessary to make it effective, unless expressly so provided in the resignation.

7.6 Removal. Any officer designated by the Managers may be removed by the Managers with or without cause. Designation of an officer or agent shall not of itself create contract rights or rights to employment.

7.7 Compensation. The salaries or other compensation, if any, of the officers and agents of the Company shall be fixed at any time and from time to time by the Managers.

7.8 Conflicts of Interest. The Company may transact business with any officer or any Affiliate of any officer so long as the terms of those transactions are not unfair to the Company. This provision shall not be construed to relieve an officer of the responsibility to act in the best interests of the Company.

7.9 Liability to Third Parties. To the fullest extent permitted by law, no officer of the Company shall be liable for the debts, obligations, or liabilities of the Company, including under a judgment, decree, or order of a court.

ARTICLE 8.
INDEMNIFICATION

8.1 RIGHT TO INDEMNIFICATION. EACH COVERED PERSON WHO WAS, IS, OR IS THREATENED TO BE MADE A NAMED DEFENDANT OR RESPONDENT IN A PROCEEDING BY REASON OF THE FACT THAT SUCH PERSON (OR ANOTHER PERSON OF WHICH SUCH FIRST PERSON IS THE LEGAL REPRESENTATIVE) IS OR WAS A COVERED PERSON SHALL BE INDEMNIFIED BY THE COMPANY TO THE FULLEST EXTENT PERMITTED BY THE CONCEPTS CONTAINED IN THE DGCL (with the terms therein to be interpreted in the context of a limited liability company rather than a corporation so that, for instance, each reference therein to (a) a corporation to be deemed a reference to a limited liability company; (b) a share to be deemed a reference to a Membership Interest, (c) a stockholder to be deemed a reference to a Member, (d) a director to be deemed a reference to a Manager, (e) certificate of incorporation to be deemed a reference to certificate of formation, (f) by-laws to be deemed a reference to a limited liability company agreement, and (g) a committee of independent directors to be deemed a reference to arbitration); *provided*, *however*, no such Person shall be indemnified with respect to any action that arises as a result of an act or omission by such Person that (A) constitutes bad faith, active and deliberate fraud, dishonesty, willful neglect, willful misconduct, or gross negligence, (B) is outside the scope of authority of the Person under this Agreement, (C) results in such Person or any of such Person's Affiliates actually and knowingly receiving an improper benefit in money, property, or services, (D) is criminal if such Person had reasonable cause to believe that such act or omission was criminal, or (E) is a material breach of any of the obligations of such Person under this Agreement (other than the obligations to make a Capital Contribution); *provided*, *further*, however, that no Covered Person nor any of its Affiliates will lose the right to be indemnified under the foregoing clause with respect to any act or omission on its part that was based upon the advice of counsel, or other expert, professional, or other Person on which it is commercially reasonable to rely if the Person reasonably believed it was entitled to rely on such advice. **IT IS EXPRESSLY ACKNOWLEDGED THAT THE INDEMNIFICATION PROVIDED IN THIS ARTICLE 8 COULD INVOLVE INDEMNIFICATION FOR NEGLIGENCE AND UNDER THEORIES OF STRICT LIABILITY.**

8.2 Advance Payment. The right to indemnification conferred in this Article 8 shall include the right to be paid or reimbursed by the Company the reasonable expenses incurred by a Person of the type entitled to be indemnified under Section 8.1 who was, is, or is threatened to be made a named defendant or respondent in a Proceeding in advance of the final disposition of the Proceeding and without any determination as to the Person's ultimate entitlement to indemnification; *provided*, *however*, that the payment of such expenses incurred by any such Person in advance of the final disposition of a Proceeding shall be made only upon delivery to the Company of a written affirmation by such Person of its good faith belief that such Person has met the standard of conduct necessary for indemnification under this Article 8 and a written undertaking, by or on behalf of such Person, to repay all amounts so advanced if it shall ultimately be determined that such Person is not entitled to be indemnified under this Article 8 or otherwise.

If a claim for indemnification or advancement of expenses hereunder is not paid in full by the Company within ninety (90) days after a written claim has been received by the Company, the claimant may at any time thereafter bring suit against the Company to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be entitled to be paid also the expenses of prosecuting such claim.

8.3 Defense to Payment. It shall be a defense to any such action that such indemnification or advancement of costs of defense under this Article 8 is not permitted under the LLC Act, but the burden of proving such defense shall be on the Company. Neither (a) the failure of the Company and the Managers, arbitrator(s), special legal counsel, and Members to have made its determination prior to the commencement of such action that indemnification of, or advancement of costs of defense to, the claimant is permissible in the circumstances nor (b) an actual determination by the Company (acting through its Managers or any committee thereof, arbitrator(s), special legal counsel, or Members) that such indemnification or advancement is not permissible shall be a defense to the action or create a presumption that such indemnification or advancement is not permissible under this Article 8.

8.4 Rights Continue After Death. In the event of the death of any Person having a right of indemnification or advancement of costs of defense under the provisions of this Article 8, such right shall inure to the benefit of such Person's heirs, executors, administrators, and personal representatives.

8.5 Indemnification of Officers, Employees, and Agents. The Company, by adoption of a resolution of the Managers, shall indemnify and advance expenses to an officer, employee, or agent of the Company to the same extent and subject to the same conditions under which it may indemnify and advance expenses to Managers under this Article 8; and the Company may indemnify and advance expenses to Persons who are not or were not Managers, officers, employees, or agents of the Company but who are or were serving at the request of the Company as a manager, director, officer, partner, venturer, proprietor, trustee, employee, agent, or similar functionary of another foreign or domestic Person against any liability asserted against such Person and incurred by such Person in such a capacity or arising out of such Person's status as such to the same extent that it may indemnify and advance expenses to Managers under this Article 8.

8.6 Appearance as a Witness. Notwithstanding any other provision of this Article 8, the Company may pay or reimburse expenses incurred by a Manager or an officer in connection with such Manager's or officer's appearance (due to the Manager's or officer's status as such) as a witness or other participation in a Proceeding at a time when such Manager or officer, as the case may be, is not a named defendant or respondent in the Proceeding.

8.7 Nonexclusivity of Rights. The right to indemnification and the advancement and payment of expenses conferred in this Article 8 shall not be exclusive of any other right which a Manager or other Person indemnified pursuant to this Article 8 may have or hereafter acquire under any law (common or statutory), provision of the Certificate of Formation or this Agreement, vote of Members, vote of the Managers, or otherwise.

8.8 Insurance. The Company may purchase and maintain insurance, at its expense, to protect itself and any Person who is or was serving as a Manager, officer, employee, or agent of the Company or is or was serving at the request of the Company as a manager, director, officer, partner, venturer, proprietor, trustee, employee, agent, or similar functionary of another foreign or domestic Person against any expense, liability, or loss, whether or not the Company would have the power to indemnify such Person against such expense, liability, or loss under this Article 8.

8.9 Member Notification. To the extent required by law, any indemnification of or advancement of expenses to a Manager in accordance with this Article 8 shall be reported in writing to the Members with or before the notice or waiver of notice of the next Members' meeting or with or before the next submission to Members of a consent to action without a meeting and, in any case, within the twelve-month period immediately following the date of the indemnification or advance.

8.10 Savings Clause. If this Article 8 or any portion shall be invalidated on any ground by any court of competent jurisdiction, then the Company shall nevertheless indemnify and hold harmless each Manager or any other Person indemnified pursuant to this Article 8 as to costs, charges, and expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement with respect to any action, suit, or Proceeding, whether civil, criminal, administrative, or investigative to the full extent permitted by any applicable portion of this Article 8 that shall not have been invalidated and to the fullest extent permitted by applicable law.

8.11 Nature of Rights. Each right under this Article 8 shall be a contract right and as such shall run to the benefit of any Manager who is elected and accepts the position of Manager of the Company or elects to continue to serve as a Manager of the Company while this Article 8 is in effect. Any repeal or amendment of this Article 8 shall be prospective only and shall not limit the rights of any such Manager or the obligations of the Company with respect to any claim arising from or related to the services of such Manager in any of the foregoing capacities prior to any such repeal or amendment of this Article 8.

8.12 Waiver of Members' Fiduciary Duties.

(a) No Member, in its capacity as a Member, shall have any fiduciary or other duty to the Company, any other Member, any Manager or any other Person that is a party to or is otherwise bound by this Agreement other than the implied contractual covenant of good faith and fair dealing and other than such Member's express obligations under this Agreement, as applicable.

(b) NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, TO THE FULLEST EXTENT PERMITTED BY LAW, NO MEMBER (IN HIS, HER OR ITS CAPACITY AS A MEMBER) OR MANAGER (IN HIS, HER OR ITS CAPACITY AS A MANAGER) SHALL BE LIABLE TO THE COMPANY, TO ANY MEMBER OR TO ANY OTHER PERSON MAKING CLAIMS ON BEHALF OF THE FOREGOING FOR CONSEQUENTIAL, EXEMPLARY, PUNITIVE, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES, INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF USE OR REVENUE OR LOSSES BY REASON OF COST OF CAPITAL, ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE BUSINESS OF THE COMPANY OR ANY OF ITS CONTROLLED AFFILIATES, REGARDLESS OF WHETHER SUCH CLAIMS ARE BASED ON CONTRACT, TORT

(INCLUDING NEGLIGENCE), STRICT LIABILITY, VIOLATION OF ANY APPLICABLE DECEPTIVE TRADE PRACTICES ACT OR SIMILAR LAW OR ANY OTHER LEGAL OR EQUITABLE DUTY OR PRINCIPLE, AND THE COMPANY AND EACH MEMBER HEREBY RELEASE EACH OTHER MEMBER (IN HIS, HER OR ITS CAPACITY AS A MEMBER) AND MANAGER (IN HIS, HER OR ITS CAPACITY AS A MANAGER) FOR ANY SUCH DAMAGES.

ARTICLE 9.
TAXES

9.1 Preparation of Tax Returns. Except as provided in Section 9.2, the Managers shall arrange for the preparation of all returns of Company income, gain, loss, deduction, credit, and other items necessary for federal, state, and local income tax purposes and shall use commercially reasonable efforts to cause the same to be filed in a timely manner. The Managers shall use commercially reasonable efforts to furnish to the Members a copy of each such return, together with any tax information reasonably required for federal and state income tax reporting purposes. Each Member shall furnish to the Managers all pertinent information in its possession relating to Company operations that is necessary to enable the Company's income tax returns to be prepared and filed. The Managers shall use commercially reasonable efforts to furnish to the Members, if required, within seventy-five (75) days after the end of each calendar year quarter of the Company, the tax information reasonably required for the Members to determine quarterly tax estimated payments.

9.2 Texas Franchise Tax Reporting and Liability. The Managers shall arrange for the preparation and filing of a separate Texas franchise tax return on behalf of the Company for each tax period of the Company (each a "Separate Return") and pay the amount of any tax liability reflected thereon as a Company expense. Notwithstanding the preceding sentence, if the Company is required to be included as a member of a combined group for Texas franchise tax purposes (the "Combined Group") for any applicable tax period ("Combined Report Year"), the Company shall be responsible for paying and shall indemnify any other member of the Combined Group (the "Paying Member") for any Texas franchise taxes for which the Company would have been liable for that year, computed as though the Company had filed a Separate Return for such year (such amount, the "Separate Return Tax"). The intent of this subsection is that the Company should make the Paying Member whole, without more, by reimbursing the Paying Member only to the extent of the Company's Separate Return Tax and any ambiguity in the interpretation hereof shall be resolved, with a view to effectuating such intent.

9.3 Tax Elections. The Managers shall determine whether to make any available tax election. Neither the Company, the Managers, nor any Member may make an election for the Company to be excluded from the application of the provisions of subchapter K of chapter 1 of subtitle A of the Code or any similar provisions of applicable state law, and no provision of this Agreement (including Section 2.10) shall be construed to sanction or approve such an election.

9.4 Tax Matters Member. The Atlas Member shall act as the tax matters partner of the Company (the "Tax Matters Partner") pursuant to, and for purposes of, Section 6231(a)(7) of the Code (prior to amendment by the 2015 Act), and, subject to this Section 9.4, shall exercise all rights, obligations and duties of a tax matters partner under the Code.

(a) The Atlas Member shall act as the partnership representative of the Company (the "Partnership Representative") pursuant to Section 6223(a) of the Code (as amended by the 2015 Act) for any Post-TEFRA Period. The Atlas Member is authorized to take (or cause the Company to take) such other actions as may be necessary pursuant to Treasury Regulations or other guidance to cause The Atlas Member to be designated as the "partnership representative" and each Member agrees to consent to such designation to the extent requested by The Atlas Member.

(b) Each Person (for purposes of this Section 9.4 called a "Pass Thru Partner") that holds or controls an interest as a Member on behalf of or for the benefit of another person or persons, or which a Pass Thru Partner is beneficially owned (directly or indirectly) by another person or persons shall, within thirty (30) days following receipt from the Tax Matters Partner of any notice, demand, request for information or similar document, convey such notice or other document in writing to all holders of beneficial interests in the Company holding such interests through such Pass Thru Partner. In the event the Company shall be the subject of an income tax audit by any Federal (for a Post-TEFRA Period), state or local authority, to the extent the Company is treated as an entity for purposes of such audit, including administrative settlement and judicial review, the Tax Matters Partner shall be authorized to act for, and its decision shall be final and binding upon, the Company and each Member thereof All expenses incurred in connection with any such audit, investigation, settlement or review shall be borne by the Company.

(c) The Partnership Representative shall have the right to make on behalf of the Company any and all elections and take any and all actions that are available to be made or taken by the Tax Matters Partner under the Code or by the Partnership Representative or the Company under the 2015 Act (including an election under Section 6226 of the Code, as amended by the 2015 Act and as the same may subsequently be amended), and the Members shall take such actions requested by the Partnership Representative consistent with any such elections made and actions taken by the Partnership Representative, including filing amended tax returns and paying any tax due in accordance with Section 6225(c)(2) of the Code as amended by the 2015 Act, it being understood that no such amended tax return shall be filed in accordance with such section with respect to the Company without the advance written consent of the Partnership Representative in its sole discretion. The Partnership Representative shall have the authority to amend this Agreement to make any changes in good faith consultation with the Company's tax accountants and tax counsel as are necessary or appropriate: (x) to reduce any Company level assessment under Section 6226 of the Code, as set forth in the 2015 Act, (y) to determine any apportionment of any tax, or (z) to comply with the 2015 Act and administrative, judicial or legislative interpretations thereof or changes thereto.

(d) Each Member shall provide to the Partnership Representative such information (or, if applicable, certify as to filing of initial or amended tax returns), as is reasonably requested by the Partnership Representative to enable the Partnership Representative (i) to reduce any Company level assessment under Code Section 6226 as amended by the 2015 Act and as the same may subsequently be amended, (ii) to determine the allocation of any item of income, gain, loss, deduction, or credit of any such Company level assessment among the Members, in good faith consultation with the Company's tax accountants and tax counsel, (iii) to elect out of the 2015 Act or (iv) to comply with or be eligible to invoke any aspect of the 2015 Act in any other respect.

(e) In the event the Company incurs any liability for taxes, interest or penalties pursuant to the 2015 Act:

(i) The Partnership Representative may cause the Members (including any former Member) to whom such liability relates, as determined by the Partnership Representative, in its sole good faith discretion, to pay, and each such Member hereby agrees to pay, such amount to the Company, and such amount shall not be treated as a Capital Contribution;

(ii) Any amount not paid by a Member (or former Member) at the time requested by Partnership Representative shall accrue interest at the rate of eight percent (8%) per annum, compounded quarterly, until paid, and such Member (or former Member) shall also be liable to the Company for any damages resulting from a delay in making such payment beyond the date such payment is requested by Partnership Representative, and for this purpose the fact that the Company could have paid this amount with other funds shall not be taken into account in determining such damages;

(iii) Without reduction in a Member's (or former Member's) obligation underclauses (i) and (ii) of this Section 9.4(e), any amount paid by the Company that is attributable to a Member (or former Member), as determined by the Partnership Representative in its reasonable good faith discretion, and that is not paid by such Member pursuant to clauses (i) and (ii) of this Section 9.4(e) shall be treated for purposes of this Agreement as (y) a distribution to such Member (or former Member), and (z) a reduction to such Member's Capital Account balance; and

(iv) The Company may deduct from, and set off against, any distribution or other amount otherwise due or payable to a Member (or former Member) by the Company pursuant to this Agreement or otherwise, the payment obligations of such Member (or former Member) under clauses (i) and (ii) of this Section 9.4(e).

ARTICLE 10.
BOOKS, RECORDS, REPORTS, AND BANK ACCOUNTS

10.1 Maintenance of Books. The Company will keep or cause to be kept appropriate books and records of accounts with respect to the Company's business and minutes of the proceedings of its Members and its Managers at the principal office of the Company or other office as the Managers may designate for that purpose.

(a) The Company shall furnish to each Member, within one hundred twenty (120) days after the end of each Fiscal Year, a consolidated balance sheet of the Company and its Subsidiaries, if any, as of the end of such Fiscal Year and the related consolidated statements of income, Members' equity and cash flows for the Fiscal Year then ended, prepared in accordance with GAAP.

(b) The Company shall furnish to each Member, within seventy-five (75) days after the end of each of the first three (3) quarters of each Fiscal Year, a consolidated balance sheet of the Company and its Subsidiaries, if any, as of the end of such quarter and the related consolidated statements of income, Members' equity and cash flows for the fiscal quarter then ended, prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP).

10.2 Accounts. The Managers shall establish and maintain one or more separate bank and investment accounts and arrangements for Company funds in the Company name with financial institutions and firms that the Managers determine. The Managers may not commingle the Company's funds with the funds of any Member.

10.3 Investments. Company funds may be invested in a manner that is approved by the Managers.

10.4 Access to Books and Records. Any Member shall have the right to obtain from the Managers upon ten (10) Business Days' prior notice to the Managers, for any proper purpose stated in such notice and related to the Member's Membership Interest, access during the Company's normal business hours to the books and records of the Company, and such books and records may be copied at the expense of the requesting Member.

10.5 Confidentiality. The Company may impose reasonable restrictions on a Member's access to the Company's books and records to the extent necessary to protect the confidentiality of proprietary information of the Company, including a requirement that a Member seeking access to proprietary information enter into a confidentiality agreement with the Company on terms that are reasonable and customary.

ARTICLE 11.
RESTRICTIONS ON CERTAIN TRANSFERS

11.1 General Prohibition on Transfers.

(a) Except for Transfers made pursuant to the provisions of this Article 11, no Person may voluntarily Transfer a Membership Interest without the prior approval of the Managers and the Required Interest of the Members. Any Transfer or purported Transfer of a Membership Interest not made in accordance with this Article 11 is null and void.

(b) Subject always to Section 11.3 and Section 11.4, a Member may Transfer all or a portion of his or its Units (i) to any Affiliate, (ii) to any Person approved in writing by the Managers, (iii) to the Company, (iv) to a member of the Transferring Member's Family Group, (v) by a pledge of the Units to or for the benefit of any lender, or (vi) pursuant to a Pre-Approved Transfer, in which event Harold J. Rasmussen shall, following such Pre-Approved Transfer, act as the agent for the Transferees for all purposes under this Agreement, including receiving notice, voting, and providing consent; *provided*, *that* any Transfer permitted by this Section 11.1(b) shall not release the Member from its obligations to the Company unless such obligations are assumed by the transferee in writing to the satisfaction of the Managers.

11.2 Matters Regarding Transfers of Units.

(a) Tag-Along Rights. A Member (the "Offeror") who proposes to Transfer all or a part of its Units (the Units or part thereof proposed to be Transferred being called the "Offered Units") may not do so without first giving the Company and the other Members (the "Offeree Members") notice (the "Offer Notice") of the proposed Transfer within five (5) days of receiving a bona fide offer from a third party to purchase Units from such Member, which notice must include the identity of the Person to whom the Transfer is proposed to be made and the terms and conditions of the proposed Transfer, including a copy of any agreement, letter of intent, offer or other writing that relates thereto. Each Offeree Member shall have the right to cause the purchaser to acquire a portion of such Offeree Member's Units equal to its Proportionate Percentage of the Units being purchased. Each Offeree Member that so elects to participate in any such sale (such Offeree Members and the Offeror being collectively referred to as the "Selling Members") shall do so by providing written notice thereof (a "Tag-Along Notice") to the Offeror and each other Offeree Member within fifteen (15) days after the date of the Offer Notice, which Tag-Along Notice shall specify the maximum Units that such Offeree Member wishes to sell (with respect to each Selling Member, its "Maximum Tag-Along Number," it being understood that the Maximum Tag-Along Number of the Offeror is the number of Offered Units). The right to sell Units will be assigned among the Selling Members, with each Selling Member to be assigned the lesser of (i) such Selling Member's Proportionate Percentage (based on the Units owned by such Selling Member relative to the aggregate number of Units owned by all Selling Members) and (ii) such Selling Member's Maximum Tag-Along Number. If, after such assignment, the number of Units assigned is less than the number of Offered Units, a similar assignment shall be made among the Selling Members who have not yet been assigned their Maximum Tag-Along Number. Such procedure shall be continued until Units equal to the number of Offered Units have been assigned, and each Selling Member will be deemed to have offered to the purchaser the Units that have been so assigned to such Selling Member. Any sale pursuant to this Section 11.2(a) shall be on the same terms and conditions as those set forth in the Offer Notice; *provided* that the purchase price shall be allocated among the Selling Members in the same proportion as the proceeds, if any, such Members would have received if all of the assets of the Company were sold for the Company Value. If the purchaser refuses to purchase Units from the Offeree Members who exercise their tag along rights herein, then the Offeror shall purchase the assigned Units from the Selling Members (other than the Offeror) in conjunction with the sale of the Offered Units to the purchaser with the closing to occur simultaneously.

(b) Option to Purchase Upon Operation of Law. In the event a Transfer of Units is effected (and is not void as otherwise provided in this Agreement) by operation of law, including, but not limited to, any bankruptcy proceedings, foreclosure proceedings, reorganization, or any appointment of a receiver of the assets of such Member ("Transferring Member"), the Transferring Member will send to the Company and the other Members, within five (5) days after such Transfer, notice of such Transfer ("Transfer Notice") which includes the name and address of the Transferee of such Units. Upon a Transfer pursuant to this Section 11.2(b), the Company has the right and option, but not the obligation, to purchase all or any lesser portion of the Transferred Units. Such right, if

exercised, must be exercised by delivery of a written notice to the Transferring Member and the other Members within sixty (60) days after the Transfer Notice is received by the Company and the other Members. The Company may freely assign its option to purchase under this Section 11.2(b) to any Member. If the Company or its assignee fails to purchase all of the Units Transferred to the Transferee prior to the expiration of the option period, then the unpurchased Units transferred to the Transferee may be retained by the Transferee, subject to the terms and conditions of this Agreement; *provided*, *however*, that such Transferee may become a "Member", as that term is used and defined herein, only upon the consent of the Members, and such Transferee shall execute such documents as are reasonably requested by the Company to acknowledge the Transferee's obligation to be bound by the terms of this Agreement.

(c) Determination of Purchase Price. The purchase price ("Purchase Price") that the Company or any Member, as the case may be, must pay for the Units that such party purchases under Section 11.2(b) will be determined as of the last day of the month immediately preceding (i) the date of the Transfer described in Section 11.2(b) (the "Determination Date"). The Purchase Price under Section 11.2(b) shall be equal to the Fair Value of the Units being purchased. All periods for exercise of the options set forth in this Agreement will not run until any necessary appraisal (as provided in the definition of "Fair Value") has been completed.

(d) Payment of Purchase Price. The Purchase Price for any Units purchased under Section 11.2(b), may be paid by paying at least twenty percent (20%) of the total Purchase Price in immediately available funds at closing and payment of the remaining balance in equal quarterly installments over a period not exceeding ninety (90) days. All deferred obligations of the purchasers of the Units hereunder must be evidenced by a written promissory note bearing interest at the Prime Rate then in effect, which note shall be secured by the Units purchased utilizing such note.

11.3 Rights of Transferee; No Transfer of Status Rights. A Person who alleges to be a Transferee of a Membership Interest that was not Transferred in accordance with this Agreement has no rights of a Transferee, including the right to require any information or account of the Company's transactions, to inspect the Company's books, or to share in profits and losses, to receive distributions, and to receive allocations of income, gain, losses, deductions, credit, and similar items in respect of such Membership Interest. In such instance, the Company is entitled to treat the alleged transferor of a Membership Interest as the absolute owner thereof in all respects (including with respect to the exercise of the Status Rights if it is then admitted as a Member with respect to such Membership Interest) and incurs no liability to any alleged Transferee for distributions to the Person owning such Membership Interest of record, for allocations of profit or loss, deductions, or credits to the Person owning such Membership Interest of record, or for transmittal of reports and notices required to be given to holders of Membership Interests to the Person owning such Membership Interest of record. Upon the Transfer of any or all of its Membership Interest, a Member shall continue to be a Member with respect to the Transferred Membership Interest or portion thereof and shall maintain the Status Rights associated with such Membership Interest unless and until the owner of such Membership Interest or portion thereof is admitted as a substitute Member in accordance with the provisions of Section 11.4. Unless and until the owner of a Membership Interest or any portion thereof is substituted as a Member in

respect of such Membership Interest or portion thereof, ownership of a Membership Interest or any portion thereof only entitles the owner to share in profits and losses, to receive distributions, and to receive allocations of income, gain, losses, deductions, credit, and similar items in respect of such Membership Interest or portion thereof Only the Person admitted as a Member in respect of a Membership Interest or any portion thereof has the power to exercise any rights or powers of a Member, including the Status Rights.

11.4 Substituted Members. No Transferee of a Membership Interest may become a substituted Member unless and until (a) with respect to any Transfer by a Person, the Person last admitted as a Member in respect of such Membership Interest has given the Transferee the right to such substitution; (b) (unless the Transferee is another Member) the Managers consent to such substitution; (c) the Transferee agrees in writing to become a Member bound by all of the terms and conditions of this Agreement; (d) the Transferee pays all reasonable expenses of the Company incurred in connection with the substitution and assumes all obligations of the Member for which it is to be substituted under this Agreement on terms satisfactory to the Managers; (e) the Transferee and the Member who is admitted in respect of such Transferred Membership Interest execute and deliver such instruments and agreements as counsel for the Company deems reasonably necessary or desirable to effect the substitution; (f) the Transferee delivers its written representation and warranty, on terms satisfactory to the Managers, that the representations and warranties in Section 5.7 are true and correct with respect to it; and (g) the Transferee provides evidence to the Managers of compliance with all other requirements of the LLC Act and all state and federal securities laws, rules, and regulations. Upon admission of a substitute Member, that substitute Member shall automatically be vested with the Status Rights related to the Membership Interest in respect of which such Member is admitted and Exhibit A shall be, and shall be deemed to be, automatically amended to reflect such substitution, including any change in the identity and/or address of any or all of the Members resulting from such admission. Each Manager is hereby authorized to execute any amendments to this Agreement and to substitute a new Exhibit A (indicating the effective date) to reflect such substitution and such changes.

11.5 Drag-Along Rights.

(a) If (i) one or more Persons (whether one or more, the "Drag-Along Transaction Proponents") offer to acquire more than 50% of the outstanding Units whether by Transfer, merger or otherwise (other than from an Affiliate of such offering Person or Persons) (a "Drag-Along Transaction") and (ii) the Members who are, in each case, neither Drag-Along Transaction Proponents nor Affiliates of Drag-Along Transaction Proponents (the "Dragging Members") desire to accept such offer, the Dragging Members shall give each of the Members who is not a Dragging Member (each, a "Dragged Member") notice that contains (A) the name and address of the Drag-Along Transaction Proponents, (B) a summary of the terms of the proposed Drag-Along Transaction, and (C) a statement that indicates that the Dragged Members are obligated to comply with the provisions of this Section 11.5.

(b) To the extent requested by the Dragging Members, each of the Dragged Members will be obligated to participate in the Drag-Along Transaction; *provided*, *however*, that no Dragged Member shall be required to make any representations or warranties, or provide indemnification, to any Person (other than representations and related indemnification regarding the due authorization of such Dragged Member to enter into and to perform the agreement of sale, the validity and enforceability of the agreement against such Dragged Member, good title of such Dragged Member to any Units Transferred by it, and the absence of liens or encumbrances on any Units so Transferred by such Dragged Member (other than those arising under this Agreement, restrictions on Transfer that arise under applicable federal and state securities law, and any claims and encumbrances the Drag-Along Transaction Proponents expressly permit to exist with respect to the Units of the Dragging Members)), and each Dragged Member's liability for breach thereof will be several, and not joint, will be proportionate to the proceeds received or receivable by it in the Drag-Along Transaction (unless the obligation arises from a representation, warranty, or covenant unique to such Dragged Member (e.g., title to its Units)), and will be limited to any proceeds received or receivable by it in such Drag-Along Transaction.

(c) The purchase price to be paid by the Drag-Along Transaction Proponents shall be allocated among the Members in the same proportion as the proceeds, if any, such Members would have received if all of the assets of the Company were sold for the consideration offered by the Drag-Along Transaction Proponents and the Company were then liquidated in accordance with this Agreement.

(d) Each Unit holder will consent to, raise no objections with respect to, and exercise no statutory or other appraisal right in connection with a Drag-Along Transaction. Each Unit holder shall bear its pro-rata share (based upon the percentage of proceeds received or receivable by it in the Drag-Along Transaction) of the costs arising from the Drag-Along Transaction to the extent such costs are incurred for the benefit of all holders Units involved in the Drag-Along Transaction and are not otherwise paid by the Company or the acquiring party, with the understanding that the Company shall pay such costs unless prohibited from doing so by the terms of the Drag-Along Transaction. Costs incurred by Unit holders (or their Transferees) on their own behalf shall not be considered costs of the Drag-Along Transaction hereunder.

(e) Notwithstanding any other provision of this Section 11.5, the Permian Dunes Member shall not be required to participate in any Drag-Along Transaction unless it is part of a Capital Event that has been consented to by the Permian Dunes Member.

11.6 Option to Purchase Upon a Termination Event. If a Termination Event occurs, the Company will automatically have the right, but not the obligation, to purchase all or any portion of the Class P Units of the Terminated Participant at the Fair Value of such Class P Units on the Termination Date. To exercise such right to purchase the Terminated Participant's Class P Units, the Company must give written notice of the Company's desire to purchase all or a portion of such Class P Units to the Terminated Participant and the Members before the first anniversary of the Termination Date. In the event the Company exercises its right to purchase all or a portion of the Class P Units, such transaction shall be closed within the later of thirty (30) days after such exercise, or thirty (30) days after the Fair Value of such Class P Units has been determined. The Company may freely assign its option to purchase under this Section 11.6 to any Member. For purposes of clarification, if any of the Class P Units held by the Terminated Participant is cancelled pursuant to the Long Term Incentive Plan, the Company will not be required to pay a purchase price in connection with the cancellation of such Class P Units.

ARTICLE 12.
DISSOLUTION

12.1 Dissolution. The Company shall dissolve and its affairs shall be wound up on the first to occur of the following:

(a) the written consent of the Managers with consent of the Required Interest of the Members; and

(b) entry of a decree of judicial dissolution of the Company under Section 18-802 of the LLC Act.

The retirement, resignation, expulsion, or bankruptcy of a Member, or the occurrence of any other event that terminates the continued membership of a Member in the Company (including by reason of a Transfer by a Member of its Membership Interest and the admission of a substitute Member in place of such first Member), shall not cause a dissolution of the Company.

ARTICLE 13.
LIQUIDATION AND TERMINATION

13.1 Mechanics.

(a) Winding Up. As expeditiously as possible following the dissolution of the Company, the Liquidating Manager shall proceed diligently to wind up the affairs of the Company and make final distributions as provided herein and in the LLC Act. A reasonable time will be allowed for the orderly liquidation of the Company's assets under this Article 13 in order to minimize the risk of loss that might be attendant upon liquidation. In connection with the winding up, the Liquidating Manager will sell or otherwise dispose of the Company's assets (including to a Member or its Affiliates) and may do so without obtaining any consent of the Members to the extent the sale of the assets of the Company or any part thereof is the only reasonably available alternative for the Company to pay, satisfy, or discharge the debts, liabilities, and obligations of the Company, including those to the Members. Any resulting gain or loss from each sale shall be computed and allocated to the Capital Accounts of the Members.

(b) Powers. Until final distribution, the Liquidating Manager shall continue to operate the Company's assets and properties with all of the power and authority of the Managers.

(c) Costs of Liquidation. The costs of winding up and liquidation shall be borne as a Company expense.

(d) Accounting. As promptly as possible after dissolution and again after final liquidation, the Liquidating Manager shall cause a proper accounting to be made of the Company's assets, liabilities, and operations through the date the dissolution occurred or the final liquidation is completed, as applicable. In preparing such accounting, the following rules shall be observed:

(i) the assets of the Company shall be valued at their fair market value; and

(ii) all liabilities of the Company, if any, and a reasonable reserve for contingent liabilities, shall be included in the balance sheet.

(e) Notices. The Liquidating Manager shall cause any notices required by the LLC Act to be given in connection with the dissolution, winding up, and termination to be given in accordance with the LLC Act.

(f) Payment of Debts. The Liquidating Manager shall pay, satisfy, and discharge from the Company funds all of the debts, liabilities, and obligations of the Company (including all expenses incurred in liquidation) or otherwise make adequate provision for payment, satisfaction, and discharge thereof, including the establishment of one or more cash reserve funds for contingent liabilities in such amounts and for such periods as the Liquidating Manager may reasonably determine. At the expiration of the applicable period for which a cash reserve fund was established by the Liquidating Manager or otherwise at the direction of the Liquidating Manager, the balance of each cash reserve fund will be distributed to the Members in the manner provided below.

(g) Allocations. The fair market value of all remaining assets of the Company shall be determined and the Capital Accounts of the Members shall be adjusted to reflect the manner in which the unrealized income, gain, loss, and deduction inherent in assets that has not been reflected in the Capital Accounts previously would be allocated among the Members if there were a taxable disposition of that asset for the fair market value of that asset on the date of distribution.

(h) Distributions. All assets of the Company remaining after the payment of debts, liabilities, and obligations of the Company and the establishment of cash reserve funds in accordance with this Agreement shall be distributed among the Members in accordance with the provisions of Section 4.1(a). If at any time (whether before or after termination of the Company) any of the funds placed in reserve(s) under this Article are released, the funds will be distributed in accordance with Section 4.1(a).

13.2 In-Kind Distributions. No distributions of any assets other than cash shall be permitted unless consented to by the Members who are to receive a majority of such non-cash distributions. All distributions in kind to the Members shall be made subject to the liability of each distributee for costs, expenses, and liabilities theretofore incurred or for which the Company has committed prior to the date of termination and those costs, expenses, and liabilities shall be allocated to the distributee pursuant to Section 13.1.

13.3 Insufficient Assets. Members shall look solely to the assets of the Company for the return of their Capital Contributions and, if the funds remaining after the payment or discharge of the debts and liabilities of the Company are insufficient to return such Capital Contributions, no Member shall have any recourse against any other Member solely on the basis of such situation.

13.4 Deficit Capital Accounts. Except as otherwise expressly provided in this Agreement, at no time during the term of the Company or upon dissolution and liquidation thereof shall a Member with a negative balance in its Capital Account have any obligation to the Company or the other Members to restore such negative balance, or to make any contribution to the capital of the Company on account thereof, and such negative balance shall not be considered an asset of the Company or of any Member.

13.5 Termination of Interest. The distribution of cash and/or property to a Member in accordance with the provisions of Section 13.1 constitutes a complete return to the Member of its Capital Contributions and a complete distribution to the Member of its Membership Interest and all the Company's property and constitutes a compromise to which all Members have consented. To the extent that a Member returns funds to the Company, it has no claim against any other Member for those funds.

13.6 Allocations in Year of Liquidation. It is the intent of the Members that the allocations set forth in Article 4 will cause the positive balance of the Capital Account of each of the Members to equal the distributions required under this Article 13 to such Member. Accordingly, if after giving hypothetical effect to the allocations set forth in Article 4 and all adjustments attributable to contributions and distributions of money and property effected prior to the distributions under Section 13.1, the positive Capital Account of each of the Members is not equal to the distributions to be made to each Member under this Article 13, Net Profit (or items thereof), Net Loss (or items thereof), and Gross Income (or items thereof) will be allocated among the Members so that the positive balance in each Member's Capital Account, prior to the distributions under this Article 13, equals the amount of distributions to be received by the Member under Section 13.1 in the order of priority set forth therein.

13.7 Termination of Company. Promptly after all of the Company's assets have been converted into cash, all promissory notes or other evidences of indebtedness derived by the Company from the conversion of its assets have been collected or otherwise converted into cash, and all the cash, together with any other cash held by the Company (including cash reserves established under this Article 13), has been applied and distributed in accordance with the provisions of this Article 13, the Liquidating Manager (or the other Person or Persons as the LLC Act may require or permit) will cause a Certificate of Cancellation to be filed with the Secretary of State of the State of Delaware, cancel any other filings made under Section 2.6, and take such other actions as may be necessary to terminate the Company.

ARTICLE 14.
GENERAL PROVISIONS

14.1 No Restrictions on the Company or Managers. Except as otherwise provided for in this Agreement or as expressly agreed by the Company, a Required Interest of the Members and the Managers in writing, nothing in this Agreement and/or any other agreement or relationship between a Member, on the one hand, and the Company and/or the Managers, on the other hand, will create or be construed or interpreted to create or imply any restriction on the ability of the Managers to take any and all action that they deem appropriate with respect to the Membership Interests, including selling or not selling Membership Interests, acquiring or not acquiring additional Membership Interests, or acquiring or not acquiring Membership Interests from any

Member. Except as otherwise provided for in this Agreement or as expressly agreed by the Company, a Required Interest of the Members and the Managers in writing, nothing in this Agreement and/or any other agreement or relationship between a Member, on the one hand, and the Company and/or the Managers, on the other hand, will create or be interpreted to create or imply any requirement that the Managers take any action, including making capital contributions or loans to the Company.

14.2 Offset. If a Person (including any Member) has any outstanding obligation to pay money to the Company at a time that the Company or any Member is required to make any payment or distribution to the obligated Person, the Company may deduct the amount of the liability from its payment or distribution to the obligated Person and any Member may fulfill its requirement to make a payment to the obligated Person by paying the amount of the obligated Person's liability to the Company instead of to the Person.

14.3 Notices. Except as expressly set forth to the contrary in this Agreement, all notices, requests, demands, and other communications hereunder must be in writing and must be personally delivered or delivered by facsimile, U.S. mail, certified mail, return receipt requested, postage prepaid, or courier service, if to a Member, to the address for such Member set forth on Exhibit A or, if to the Company or to a Manager, at the address for the Company or such Manager, as applicable. Each such notice, request, demand, or other communication will be deemed to have been given and received (whether actually received or not) on the date of actual delivery thereof if personally delivered, three days after deposit in the U.S. mail sent certified mail, return receipt requested, postage prepaid, or on the day specified to the courier service for delivery (if the day is one on which the courier service will give normal assurances that the specified delivery will be made). Any notice, request, demand, or other communication given otherwise than in accordance with this Section 14.3 will be deemed to have been given and received on the date actually received. Rejection or other refusal to accept or inability to deliver because of changed address of which no notice was given shall be deemed to be actual receipt of the notice, request, demand, or other communication. Any party may change its address for purposes of this Section 14.3 by giving written notice of the change to all other parties in the manner hereinabove provided; *provided*, *however*, that any notice given to the prior address of such party will be deemed validly given if given no more than five (5) Business Days after such change notice is given.

14.4 Entire Agreement. This Agreement, including the Exhibits hereto, constitutes the entire agreement of the Members and their respective Affiliates relating to the Company and supersedes all prior contracts or agreements with respect to the internal affairs of the Company, whether oral or written.

14.5 Effect of Waiver or Consent. A waiver or consent, express or implied, of or to any breach or default by any Person in the performance by that Person of its obligations with respect to the Company is not a consent or waiver to or of any other breach or default in the performance by that Person of the same or any other obligations of that Person with respect to the Company. Failure on the part of a Person to complain of any act of any Person or to declare any Person in default with respect to the Company, irrespective of how long that failure continues, does not constitute a waiver by that Person of its rights with respect to that default until the applicable statute-of-limitations period has run.

14.6 Amendment or Modification. Except to the extent this Agreement otherwise provides for a change to be effected without the approval required in this Section 14.6, this Agreement may be amended or modified at any time and from time to time only by a written instrument approved by the Managers and the Required Interest of the Members; *provided*, *however*, that an amendment or modification made solely to reflect the admission or withdrawal of a Member need not be approved by any Members if the requirements set forth in this Agreement with respect to such admission or withdrawal are otherwise satisfied; and *provided*, *further* that the consent of the Champion Member shall be required to amendSection 3.5, Section 4.1, or the percentage of profits to which the Participants are entitled under the Long Term Incentive Plan if such amendment adversely affects a Class A Member.

14.7 Binding Effect; No Third Party Beneficiary. Each and every covenant, term, provision, and agreement herein contained will be binding upon each of the Members and their respective heirs, legal representatives, successors, and assigns and will inure to the benefit of each of the Members. Unless and until properly admitted as a Member, no Transferee will have any rights of a Member beyond those provided by the LLC Act to assignees or otherwise expressly provided herein to assignees. The provisions of this Agreement, including those relating to Capital Contributions, are for the exclusive benefit of the Company. No third party shall have the right to enforce any of the provisions of this Agreement, except for Article 8.

14.8 Governing Law. THIS AGREEMENT IS GOVERNED BY AND SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAW OF THE STATE OF DELAWARE, EXCLUDING ANY CONFLICT-OF-LAWS RULE OR PRINCIPLE THAT MIGHT REFER THE GOVERNANCE OR THE CONSTRUCTION OF THIS AGREEMENT TO THE LAW OF ANOTHER JURISDICTION. In the event of a direct conflict between the provisions of this Agreement and (a) any provision of the Certificate of Formation or (b) any mandatory provision of the LLC Act, the applicable provision of the Certificate of Formation or the LLC Act shall control.

14.9 Arbitration. Any controversy or claim arising among the Members and the Managers out of or relating to this Agreement, or the breach thereof, shall be determined by final and binding arbitration administered by the American Arbitration Association ("AAA") under its Commercial Arbitration Rules and Mediation Procedures ("Commercial Rules"), which arbitration shall be held in Houston, Texas.

(a) There shall be three arbitrators. The parties agree that one arbitrator shall be appointed by each party within twenty (20) days of receipt by respondent of the Request for Arbitration (as such term is defined in the Commercial Rules), or in default thereof appointed by the AAA, in accordance with its Commercial Rules, and the third presiding arbitrator shall be appointed by agreement of the two party-appointed arbitrators within fourteen (14) days of the appointment of the second arbitrator or, in default of such agreement, by the AAA.

(b) The award rendered by the arbitrators shall be final,non-reviewable, non-appealable and binding on the parties and may be entered and enforced in any court having jurisdiction, and any court where a party or its assets is located (to whose jurisdiction the parties consent for the purposes of enforcing the award). The arbitrators will have no authority to award punitive or consequential damages.

(c) Except as may be required by law, neither a party nor the arbitrators may disclose the existence, content or results of any arbitration without the prior written consent of both parties, unless to protect or pursue a legal right.

14.10 Further Assurances. In connection with this Agreement and the transactions contemplated hereby, each Member and each other Person who owns a Membership Interest shall execute and deliver any additional documents and instruments and perform any additional acts that the Managers may deem necessary or appropriate to effectuate and perform the provisions of this Agreement and those transactions.

14.11 Waiver of Certain Rights. Each Member irrevocably waives any right it may have to maintain any action for dissolution of the Company or for partition of the property of the Company.

14.12 Notice to Members of Provisions of this Agreement. By executing this Agreement, each Member acknowledges that it has actual notice of (a) all of the provisions of this Agreement, including the restrictions on the transfer of Membership Interests set forth in Article 11, and (b) all of the provisions of the Certificate of Formation. Each Member and each Transferee of a Membership Interest upon receipt thereof hereby agrees that this Agreement constitutes adequate notice of all such provisions, including any notice requirement under Chapter 8 of the Uniform Commercial Code, and each Member hereby waives any requirement that any further notice thereunder be given.

14.13 Counterparts. This Agreement may be executed in any number of counterparts and shall be effective when each party hereto has executed at least one counterpart, with the same effect as if all signing parties had signed the same document. All counterparts will be construed together and evidence only one agreement.

14.14 Execution by Facsimile. The manual signature of any party hereto that is transmitted to any other party by facsimile or other electronic means shall be deemed for all purposes to be an original signature.

14.15 Invalid Provisions. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws effective during the term of this Agreement, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a part of this Agreement, and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of each such illegal, invalid, or unenforceable provision, there shall be added automatically as a part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

14.16 Attorneys' Fees. If any action is brought to enforce or interpret the terms of this Agreement (including through arbitration), the prevailing party will be entitled to its reasonable legal fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.

14.17 Non-Waiver; Rights are Cumulative. Neither a failure of a party to this Agreement to exercise any power reserved to it in this Agreement or any ancillary agreement or to insist upon compliance by any other party hereto with any obligation or condition in this Agreement or any ancillary agreement nor any custom or practice of the parties at variance with the terms hereof or any ancillary agreement shall constitute a waiver of such first party's rights to demand exact compliance with the terms of this Agreement or such ancillary agreement. Waiver by a party to this Agreement of any particular default shall not affect or impair such party's right with respect to any subsequent default of the same or of a different nature; nor shall any delay, forbearance, or omission of such party to exercise any power or right arising out of any breach or default by any other party hereto of any of the terms, provisions, or covenants of this Agreement or under any ancillary agreement affect or impair such first party's rights; nor shall such delay, forbearance, or omission constitute a waiver by such first party of any rights hereunder or under any ancillary agreement or rights to declare any subsequent breach or default.

14.18 No Strict Construction. This Agreement is the result of substantial negotiations among the parties and their counsel and has been prepared by their joint efforts. Accordingly, the fact that counsel to one party or another may have drafted this Agreement or any portion hereof is immaterial and this Agreement will not be strictly construed against any party.

14.19 Representation by Winston & Strawn LLP. The Members consent to Atlas Member's retention of Winston & Strawn LLP to represent the Atlas Member. The Members other than the Atlas Member further acknowledge and consent that Winston & Strawn LLP has represented the Atlas Member in connection with the negotiation of this Agreement and represents only the Atlas Member, and not any other Member, in connection with the negotiation of this Agreement. The Members other than the Atlas Member acknowledge and consent that if Winston & Strawn LLP receives information from or about them that it believes the Atlas Member should have in order to make decisions regarding the negotiation of this Agreement, Winston & Strawn LLP will have the right to share that information with the Atlas Member. In representing the Atlas Member, Winston & Strawn LLP will follow the directions of the Atlas Member and will not be responsible for looking out for the interests of any other Member or notifying the Members other than the Atlas Member of any decisions that might negatively affect the interests of such Members. The Members other than the Atlas Member further acknowledge that they are represented by separate counsel with regard to their individual Units or, if not, have chosen to forego such representation without reliance on Winston & Strawn LLP.

14.20 Limits on Claims. **Pursuant to the Texas Securities Act, Art.581-1 et seq. (the "Texas Securities Act"), the liability under the Texas Securities Act of a lawyer, accountant, consultant, the firm of any of the foregoing, and any other Person engaged to provide services relating to an offering of securities of the Company (such Persons, "Service Providers") is limited to a maximum of three times the fee paid by the Company or seller of the Company's securities to the Service Provider for the services related to the offering of the Company's securities, unless the trier of fact finds that such Service Provider engaged in intentional wrongdoing in providing the services. By signing below, each Member hereby acknowledges the disclosure provided in this paragraph.**

IN WITNESS WHEREOF, the undersigned Members hereby approve and adopt this Agreement and have executed this Agreement effective as of the date first written above.

MEMBERS:

ATLAS SAND MANAGEMENT COMPANY, LLC

By: /s/ Ben M. Brigham
Name: Ben M. Brigham
Title: Manager

CHAMPION LONE STAR, LLC

By: /s/ Stephen C. Cole
Name: Stephen C. Cole
Title: President

CAMCOLE CONSULTANTS, LLC

By: /s/ Cameron T. Cole
Name: Cameron T. Cole
Title: Cameron T. Cole

/s/ Christopher P. Liles
Christopher P. Liles

/s/ Michael Jobe
Michael Jobe

KERMIT ROYALTY, LLC

By: /s/ David A. Hobby
Name: David A. Hobby
Title: President

/s/ Harold J. Rasmussen
Harold J. Rasmussen

PERMIAN DUNES HOLDING COMPANY, LLC

By: /s/ Douglas Rogers
Name: Douglas Rogers
Title: Secretary

[Signature Page to Third Amended and Restated Limited Liability Company Agreement of Atlas Sand Company, LLC]

EXHIBIT A

MEMBER INFORMATION

[INTENTIONALLY OMITTED.]

EXHIBIT B

PROJECT AREA

[INTENTIONALLY OMITTED.]

EXHIBIT C

LONG TERM INCENTIVE PLAN

[INTENTIONALLY OMITTED.]

Exhibit 10.9

FIRST AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

ATLAS SAND MANAGEMENT COMPANY, LLC

A Texas Limited Liability Company

Dated as of September 15, 2017

TABLE OF CONTENT'S

THE SECURITIES REPRESENTED HEREBY:

(1) HAVE NOT BEEN REGISTERED OR QUALIFIED UNDER THE U.S. FEDERAL SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER ANY STATE SECURITIES LAWS AND ARE "RESTRICTED SECURITIES" AS DEFINED IN RULE 144 PROMULGATED UNDER THE SECURITIES ACT;

(2) HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO OR IN CONNECTION WITH THE DISTRIBUTION THEREOF; AND

(3) MAY NOT BE TRANSFERRED EXCEPT UPON DELIVERY TO THE COMPANY OF AN EFFECTIVE FEDERAL REGISTRATION STATEMENT AND STATE QUALIFICATION RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE MANAGER THAT SUCH REGISTRATION AND STATE QUALIFICATION ARE NOT REQUIRED FOR SUCH TRANSFER AND/OR THE SUBMISSION TO THE COMPANY OF SUCH OTHER EVIDENCE AS MAY BE REASONABLY SATISFACTORY TO THE MANAGER TO THE EFFECT THAT SUCH TRANSFER WILL NOT BE IN VIOLATION OF THE SECURITIES ACT, APPLICABLE STATE SECURITIES LAWS, AND/OR ANY RULE OR REGULATION PROMULGATED THEREUNDER.

* * * * *

FIRST AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

ATLAS SAND MANAGEMENT COMPANY, LLC

A Texas Limited Liability Company

PREAMBLE

THIS FIRST AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT, dated to be effective as of September 15, 2017 (the "Effective Date"), is hereby duly adopted as the First Amended and Restated Limited Liability Company Agreement of Atlas Sand Management Company, LLC, a Texas limited liability company, by and between Ben M. Brigham, an individual resident of Texas (the "Founding Member"), and the Company, who agree to be bound hereby.

A. The Certificate of Formation of the Company (the "Certificate"), was filed in the office of the Secretary of State of the State of Texas on June 1, 2017, and the Secretary of State of the State of Texas issued a Certificate of Filing on the same date.

B. The Manager and Founding Member entered into that certain Company Agreement of Atlas Sand Management Company, LLC, effective as of June 1, 2017 (the "Original Agreement").

C. The Manager and Founding Member have determined that it is in the best interest of the Company to amend and restate the Original Agreement to create various classes of Units and facilitate admitting additional Members.

D. The Manager and sole Member hereby agree that this Agreement shall replace and supersede the Original Agreement in all respects, and that from and after the Effective Date, membership in and management of the Company shall be governed by the terms set forth herein.

ARTICLE 1.
DEFINITIONS

1.1 Definitions. As used in this Agreement, the following terms have the following meanings:

"AAA" has the meaning given to such term in Section 13.9.

"Additional Capital Contribution" has the meaning given such term in Section 3.4(a).

"Adjusted Capital Account Deficit" means, with respect to any Member, the deficit balance, if any, in the Member's Capital Account maintained for such Member, after giving effect to the following adjustments:

(a) The Capital Account will be increased by any amounts that the Member is obligated to restore to the Company or is deemed to be obligated to restore pursuant to Sections 1.704-2(g)(1) and 1.704-2(i)(5) of the Regulations.

(b) The Capital Account will be decreased by the items described in Sections 1.704-1(b)(2)(ii)(d)(4), (5), and (6) of the Regulations.

The foregoing definition of "Adjusted Capital Account Deficit" and the application of the term in the manner provided in this Agreement are intended to comply with the provisions of Section 1.704-11(b)(2)(ii)(d) of the Regulations and shall be interpreted consistently therewith.

"Adjustment Period" means any period of time t:hat begins on the Effective Date or the day following the end of the immediately preceding Adjustment Period (with respect to each subsequent Adjustment Period) and ends on the first to occur of: (a) the last day of a Fiscal Year, (b) the day immediately preceding the date of the "liquidation" of a Members interest in the Company (within the meaning of Section 1.704-1 (b)(2)(ii)(g) of the Regulations), or (c) the date on which the Company is terminated under Section 12.5.

"Affiliate" means, as to any Person, any other Person that directly or indirectly, through one or more intermediaries controls, is controlled by, or is under common control with such specified Person. For the purposes of this Agreement, "control," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the owner-ship of voting securities, by contract, or otherwise; and the terms "*affiliated*," "*controlling*," and "*controlled*" have meanings correlative to the foregoing.

"Agreement" means this First Amended and Restated Limited Liability Company Agreement, including the Exhibits attached hereto, as amended in accordance with the terms hereto and in effect from time to time.

"Atlas Sand Company" means Atlas Sand Company, LLC, a Delaware limited liability company.

"Bankruptcy Laws" means the Federal Bankruptcy Code or any other present or future applicable federal, state, or other statute or law relating to bankruptcy, insolvency, reorganization, moratorium, or similar relief for debtor's;.

"Base Rate" means a rate per annum that from day to day is equal to the Prime Rate plus 2%; provided, however, if the obligation on which the Base Rate accrues is a loan or other obligation that is subject to usury laws, then in no event shall the Base Rate ever exceed the maximum rate, if any, permitted by applicable usury laws.

"Business Day" means any day other than a Saturday, a Sunday, or a holiday on which national banking associations in the State of Texas are closed.

"Capital Account" means, with respect to any Member, the capital account maintained for such Member in accordance with the rules of Section 1.704-l(b)(2)(iv) of the Regulations. Subject to Section 1.704-l(b)(2)(iv) of the Regulations:

(a) To each Member's Capital Account there shall be credited such Member's Capital Contribution (net of liabilities that the Company is considered to assume or to take subject to under Code Section 752) and such Member's distributive share of Net Profit and any items in the nature of income or gain that are specially allocated pursuant to Section 4.3 or Section 4.4.

(b) To each Member's Capital Account there shall be debited the amount of cash and the Gross Asset Value of any property distributed to such Member pursuant to any provision of this Agreement (net of liabilities that such Member is considered to assume or to take subject to under Code Section 752) and such Member's distributive share of Net Loss and any items in the nature of expenses or losses that are specially allocated pursuant to Section 4.3 or Section 4.4.

(c) In the event all or a portion of a Membership Interest is Transferred in accordance with the terms of this Agreement, the Transferee shall succeed to the Capital Account of the transferor to the extent it relates to the Transferred Membership Interest.

The provisions of this Agreement relating to the maintenance of Capital Accounts are intended to comply with Section 1.704-l(b) of the Regulations, and they shall be interpreted and applied in a manner consistent with such Regulations.

"Capital Contribution" means with respect to any Member, the amount of money and the initial Gross Asset Value of any property (other than money) contributed to the Company by such Member (or its predecessors in interest) with respect to the interest in the Company held by such Member, as reduced by any indebtedness either assumed by the Company or to which such property is subject when contributed. Such term does not include any loan made by a Member to the Company or any Subsidiary, but does include any Additional Capital Contributions made by a Member to the Company.

"Capital Ratio" means the ratio of Capital Contributions of Class A Members and Class B Members, respectively, as a percentage of the cumulative Capital Contributions of Class A Members and Class B Members; provided that for purposes of calculating the Capital Ratio, the Capital Contributions of the Class A Members shall be calculated utilizing the actual Capital Contributions of Class A Members plus $40,000,000.

"Certificate of Formation" means, at any date, the Certificate of Formation of the Company, as filed with the Secretary of State of the State of Texas, as the same may be amended or restated and in effect at such date pursuant to the TBOC and this Agreement.

"Class A Member" means any Member that holds Class A Units.

"Class A Units" means those Units established and designated on Exhibit A as Class A Units.

"Class B Member" means any Member that holds Class B Units.

"Class B Units" means those Units established and designated on Exhibit A as Class B Units.

"Class P Units" means those interests to be distributed to the Participants pursuant to the Long Term Incentive Plan. Class P Units may be issued in separate series designated as such, as determined by the Manager. Unless expressly set forth in this Agreement, references to Class P Units shall be deemed to include any and all series of Class P Units.

"Code" means, at any time, the Internal Revenue Code of 1986, as amended, or, from and after the date any successor statute becomes, by its terms, applicable to the Company, such Successor statute, in each case as amended at such time by amendments that are, at that time, applicable to the Company. All references to sections of the Code include any corresponding provision /^provisions of any such successor statute.

"Combined Group" has the meaning given such term in Section 9.2.

"Combined Report Year" has the meaning given such term in Section 9.2.

"Commercial Rules" has the meaning given to such term in Section 13.9.

"Company" means Atlas Sand Management Company, LLC, a Texas limited liability company.

"Company Minimum Gain" has the same meaning as "partnership minimum gain" as set forth in Section 1.704-2(b)(2) of the Regulations, and the amount of Company Minimum Gain, as well as any net increase or decrease in Company Minimum Gain, for an Adjustment Period shall be determined in accordance with the rules of Section 1.704-2(d) of the Regulations.

"Company Nonrecourse Deductions" means any loss, deduction, or Code Section 705(a)(2)(B) expenditure, or item thereof, that is attributable to nonrecourse liabilities of the Company as defined in Section 1.752-l(a)(2) of the Regulations.

"Covered Person" means (a) each current and former (i) Member and each of its Affiliates (excluding, for purposes of this definition, the Company and its Subsidiaries), and its and their respective officers, directors, partners, stockholders, managers, members and employees, (ii) Manager (solely in such Person's capacity as a Manager), and (iii) Officer (solely in such Person's capacity as an Officer) and (b) each Person not identified in clause (a) of this definition who is a current or former manager, director or officer of any Subsidiaiy of the Company or who served in such a capacity (in each case, solely in such Person's capacity as such) for any other entity or enterprise at the request of the Company, in each case of clause (a) or (b) of this definition, whether or not such Person continues to have the applicable status and whom the Manager expressly designates as a Covered Person in a written resolution.

"Determination Date" has the meaning given such term in Section 11.2(b).

"Distributable Cash" means all cash funds of the Company on hand at any time after payment of all Operating Expenses, payable as of such time reduced by the amount of the Working Capital Reserve, if any, at such time.

"Effective Date" has the meaning given it in the preamble of this Agreement.

"Fair Value" means, with respect to any Units, the fair value of such Units, as agreed upon by the Company and the holder of such Units, or if they are unable to agree, as determined by an independent appraiser selected by the Manager, the cost of such appraisal to be split between the Company and the holder of the Units that are being valued.

"Family Group" shall mean, with respect to (i) any Member that is a natural person, such Member, such Member's spouse, siblings, ancestors and descendants (whether natural, by marriage or adopted) and any trust or other estate planning vehicle solely for the benefit of such Member and/or such Member's spouse, siblings, ancestors and/or descendants (whether natural, by marriage or adopted), and with respect to (ii) any Member that is an entity, any Person controlling such Member Entity and such Person's spouse, siblings, ancestors and descendants (whether natural, by marriage or adopted) and any trust or other estate planning vehicle solely for the benefit of such Person's spouse, siblings, ancestors and/or descendants (whether natural, by marriage or adopted).

"Fifth Hurdle Threshold" means when each Class B Member has achieved an IRR of 50%*and* a ROI of 5.0 to 1.0.

"First Hurdle Threshold" means when each Class A Member and each Class B Member has achieved a ROI of 1.0 to 1.0.

"Fiscal Year" means the taxable year of the Company, which shall be the calendar year or such other period determined by the Manager in accordance with the Code.

"Founding Member" has the meaning given to such term in the preamble of this Agreement.

"Fourth Hurdle Threshold" means when each Class B Member has achieved an IRR of 40%*and* a ROI of 4.0 to 1.0.

"Funding Notice" has the meaning given such term in Section 3.4(b).

"Gross Asset Value" means, with respect to any asset, the asset's adjusted basis for federal income tax purposes, except as follows:

(a) The initial Gross Asset Value of any asset contributed (or deemed to have been contributed) by a Member to the Company in connection with the execution and delivery of this Agreement and the initial Gross Asset Value of any other asset contributed (or deemed to have been contributed) by a Member to the Company shall be the gross fair market value of such asset, as determined by the Manager.

(b) The Gross Asset Values of all Company assets shall be adjusted to equal their respective gross fair market values, as determined by the Manager, as of the following times: (i) the acquisition of an additional Membership Interest by any new or existing Member in exchange for more than a *de minimis* Capital Contribution; (ii) the distribution by the Company to a Member of more than a*de minimis* amount of property as consideration for a Membership Interest; (iii) the liquidation of the Company within the meaning of Section 1.704-1(b)(2)(ii)(g) of the Regulations; or (iv) a grant of an interest in the Company as consideration for the provision of Services to or for the benefit of the Company by a new or existing Member; *provided*, *however*, that the adjustments toclauses (b) and (b) above will only be made if the Manager reasonably determines that such adjustments are necessary or appropriate to reflect the relative economic interests of the Members in the Company.

(c) The Gross Asset Value of any Company asset distributed to any Member shall be adjusted to equal the gross fair market value of such asset, as determined by the Manager, on the date of the distribution.

(d) The Gross Asset Value of Company assets shall be increased (or decreased) to reflect any adjustments to the adjusted basis of such assets pursuant to Code Section 732(d), Code Section 734(b), or Code Section 743(b), but only to the extent that (i) such adjustments are taken into account in determining Capital Accounts pursuant to clause (f) of the definition of "Net Profit" or "Net Loss" in this Section 1.1 and (ii) an adjustment pursuant to clause (b) immediately above is not required in connection with the transaction.

"Gross Income" means, for each Adjustment Period, an amount equal to the Company's gross income as determined for federal income tax purposes for the Adjustment Period but computed with the adjustments in paragraphs (a) through (f) of the definition of "Net Profit" or "Net Loss" in this Section 1.1.

"Incentive Liquidation Value" means, as of the date of determination and with respect to the relevant new Class P Units to be issued, the aggregate amount that would be distributed to the Participants pursuant to Section 4.1 if, immediately prior to the issuance of the relevant new Class P Units, the Company sold all of its assets for fair market value and immediately liquidated, the Company's debts and liabilities were satisfied and the proceeds of the liquidation were distributed pursuant to Article 12.

"IRR" means that interest rate which, when used as a discount rate, causes the net present value of the cumulative distributions of Distributable Cash made to a Class B Member to equal the net present value of the Capital Contributions made by such Class B Member. For purposes of this definition, (i) net present value shall be determined using quarterly compounding periods, and (ii) all Capital Contributions and distributions of Distributable Cash shall be taken into account as of the last day of the month in which such Capital Contributions and distributions are made. "IRR" shall be calculated using the following formula:

(1/(1+IRR hurdle rate/4)^(Period/3)

"Long Term Incentive Plan" means that certain incentive plan set forth onExhibit B.

"Manager" means, Ben M. Brigham, or in the event of his death or disability, a Person who is then the Manager with the authority to exercise or direct the exercise of the powers of the Company and manage the business and affairs of the Company except to the extent the TBOC, the Certificate of Formation, or this Agreement restricts the powers, rights, and duties of a Manager.

"Member" means any Person admitted pursuant to this Agreement in the capacity of a Member, each for only so long as such Person remains as a member in accordance with the Certificate of Formation, this Agreement and the TBOC. If a Member Transfers its Membership Interest to a Person other than the Company, such transferring Member shall remain a Member in respect of such Membership Interest until a Transferee of a Membership Interest is admitted as a Member in respect of such Membership Interest in accordance with the Certificate of Formation, this Agreement, and the TBOC, if ever.

"Member Nonrecourse Debt" means any nonrecourse debt of the Company for which any Member bears the economic risk of loss as determined under Sections 1.704-2(b)(4) and 1.752-2 of the Regulations.

"Member Nonrecourse Debt Minimum Gain" has the same meaning as "partnership nonrecourse debt minimum gain" as set forth in Section 1.704-2(i)(2) of the Regulations and as determined under Section 1.704-2(i)(3) of the Regulations.

"Member Nonrecourse Deductions" means any loss, deduction, or Code Section 705(a)(2)(B) expenditure, or item thereof, that is attributable to a Member Nonrecourse Debt as Section 1.704-2(i)(2) of the Regulations.

"Membership Interest" means, with respect to any Member, the Member's share of profits and losses of the Company and the Member's right to receive distributions of the Company's assets arising as the result of the ownership of one or more Units. Except as expressly set forth in this Agreement or the Certificate of Formation, the rights of a Transferee who has not been admitted as a Member will be no greater than the rights mandated by the TBOC and, to the extent the rights mandated by the TBOC may be denied, they are hereby expressly denied. A Membership Interest does not include the Status Rights unless the Person holding such Membership Interest has been admitted as a Member of the Company.

"Net Profit" or "Net Loss" means, for each Adjustment Period, the Company s taxable income or taxable loss for such Adjustment Period, as determined in accordance with Section 703(a) of the Code and Section 1.703-1 of the Regulations (and for this purpose all items of income, gain, loss, or deduction required to be stated separately pursuant to Section 703(a)(1) of the Code will be included in taxable income or taxable loss), but with the following adjustments:

(a) Any tax-exempt income, as described in Section 705(a)(1)(B) of the Code, realized by the Company during the Adjustment Period will be taken into account in computing the taxable income or taxable loss as if it were taxable income;

(b) Any expenditures of the Company described in Section 705(a)(2)(B) of the Code for the Adjustment Period, including any items treated under Section 1.704-1(b)(2)(iv)(i) of the Regulations as items described in Section 705(a)(2)(B) of the Code, will be taken into account in computing the taxable income or taxable loss as if they were deductible items;

(c) In the event the Gross Asset Value of any Company asset is adjusted pursuant toclause (b) or (c) of the definition of "Gross Asset Value" in this Section 1.1, the amount of such adjustment shall be taken into account as gain or loss from the disposition of such asset for purposes of computing Net Profit or Net Loss;

(d) Gain or loss resulting from any disposition of any Company asset with respect to which gain or loss is recognized for federal income tax purposes shall be computed by reference to the Gross Asset Value of the asset disposed of, notwithstanding that the adjusted tax basis of such asset differs from its Gross Asset Value;

(e) The depreciation, amortization, and other cost recovery deductions taken into account in computing such taxable income or loss shall be taken into account for such Adjustment Period in accordance with Section 1.704-1(b)(2)(iv)(g) of the Regulations; and

(f) Notwithstanding any other provisions of this definition, any items that are specially allocated pursuant toSection 4.3 or Section 4.4 shall not be taken into account in computing Net Profit or Net Loss.

The amounts of the items of Company income, gain, loss, or deduction available to be specially allocated pursuant toSection 4.3 or Section 4.4 shall be determined by applying rules analogous to those set forth in clauses (a) through (f) above.

"Operating Expenses" means all ordinary and necessary costs, expenses, or charges with respect to the Company's operations, including, without limitation, payments of interest and principal and other monetary obligations due under any loan made to the Company; cost of goods and services sold, selling, general and administrative expenses; labor; employee training and other benefits; working capital investments; development costs; accounting, legal, consulting and auditing fees; taxes payable by the Company; public or private utility charges; sales and use taxes, payroll taxes and withholding taxes related thereto; management fees; buying, leasing, remodeling and maintenance of real property; marketing, promotional and other company sponsored promotions; working capital reserves as determined by the Manager in his sole discretion; and all other advertising, management, leasing, governmental approval, and other operating costs, expenses, and capital expenditures actually paid with respect to the Company's business and operations generally.

"Original Agreement" has the meaning given it in the preamble of this Agreement.

"Partially Adjusted Capital Accounts" means, with respect to any Member as of the close of business on the last day of any Adjustment Period, the Capital Account of such Member as of the beginning of such Adjustment Period, after giving effect to all allocations of items of income, gain, loss, or deduction not included in Net Profit and Net Loss and all Capital Contributions and distributions during such period but before giving effect to any allocations of Net Profit or Net Loss for such period pursuant to Section 4.2, increased by (i) such Member's share of Company Minimum Gain, as determined pursuant to Section 1.704-(2)(d) of the Regulations, as of the end of such Adjustment Period and (ii) such Member's share of Member Nonrecourse Debt Minimum Gain, as determined pursuant to Section 1.704-(2)(i) of the Regulations, as of the end of such Adjustment Period.

"Participant" means a participant in the Long Term Incentive Plan, as further described onExhibit B.

"Participant Agreement" means each certain Participant Agreement by and between the Company and a Participant being granted Class P Units pursuant to the terms and provisions of the Long Term Incentive Plan.

"Partnership Representative" has the meaning given such term in Section 9.4(a).

"Pass Thru Partner" has the meaning given such term in Section 9.4(b).

"Paving Member" has the meaning given such term in Section 9.2.

"Person" includes any individual, partnership, limited partnership, joint venture, corporation, limited liability company, trust, estate, custodian, trustee, executor, administrator, nominee, representative, unincorporated organization, sole proprietorship, trust, employee benefit plan, tribunal, governmental entity, department, agency, or other entity.

"Prime Rate" means the rate of interest per annum quoted in the "Money Rates" section of The Wall Street Journal from time to time and designated as the "Prime Rate". If such prime rate, as so quoted, is split between two or more different interest rates, then the Prime Rate shall be the highest of such interest rates. If such prime rate shall cease to be published or is published infrequently or sporadically, then the Prime Rate shall be determined by reference to another base rate, prime rate or similar lending rate index, generally accepted on a national basis, as selected by the Manager in his sole and absolute discretion.

"Proceeding" means any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, arbitrative, or investigative, any appeal in such an action, suit, or proceeding, and any inquiry or investigation that could lead to such an action, suit, or proceeding.

"Profits Interest" has the meaning given to such term in Section 3.1(b).

"Profits Interest Hurdle" means an amount set forth in each Participant Agreement reflecting the Incentive Liquidation Value of the relevant Class P Units at the time the units are issued.

"Project Area" means the area where Atlas Sand Company now or will operate, including Winkler County, Texas, Ward County, Texas, Crane County, Texas, and Andrews County, Texas.

"Proportionate Percentage" means, as to any Member, the percentage figure that expresses the ratio between the number of Units owned by such Member and the aggregate number of Units owned by all Members participating with the affected Member in any action for which the determination of Proportionate Percentage is relevant.

"Purchase Price" has the meaning given such term in Section 11.2(b).

"Qualifying Class P Units" has the meaning given to such term in Section 4.1(d).

"Regulations" means the income tax regulations promulgated under the Code and effective as of the date of this Agreement and any future amendments to the regulations and any corresponding provisions of succeeding regulations that are mandatory.

"Required Interest" means one or more Members of the Company who own more than 50% of the Units owned by all Members, and must include the Founding Member. For purposes of this definition, a Member is deemed to own a Class A Unit or Class B Unit with respect to which it has been admitted as a Member, even if the Class A Unit or Class B Unit has been Transferred, until a substitute Member is admitted with respect to such Unit.

"ROI" means the ratio of the cumulative Distributable Cash received by a Class B Member divided by the cumulative contributions made by the Class B Member.

"Second Hurdle Threshold" means when each Class B Member has achieved an IRR of 20% and a ROI of 2.0 to 1.0.

"Section" means a section of this Agreement, unless the text indicates otherwise.

"Securities Act" means the Securities Act of 1933, as amended.

"Separate Return" has the meaning given such term in Section 9.2.

"Separate Return Tax" has the meaning given such term in Section 9.2.

"Service Providers" has the meaning given such term in Section 13.19.

"Status Rights" means, with respect to any Membership Interest, any rights and powers of a Member in the Company to participate in the management of the business and affairs of the Company, and the rights to consent to or approve certain actions of the Company but not including the right to share in profits and losses, to receive distributions, and to receive allocations of income, gain, loss, deductions, and similar items of the Company.

"Subsection" means a subsection of this Agreement, unless the text indicates otherwise.

"Subsidiary" means an entity in which the Company directly or indirectly owns at least Majority of the equity.

"Target Capital Account" means, with respect to any Member as of the close of business on the last day of any Adjustment Period, an amount (which may be either a positive or a deficit balance) equal to the amount such Member would receive as a distribution if all assets of the Company as of such date were sold for cash equal to the Gross Asset Value of such assets, all the Company liabilities were satisfied to the extent required by their terms, and the net proceeds were distributed pursuant to Section 4.1.

"Tax Distribution" has the meaning given such term in Section 4.1(c).

"Tax Matters Partner" has the meaning given such term in Section 9.4.

"Tax Rate" means a rate (expressed as a percentage and which may be a blended rate) reasonably determined by the Manager which takes into account the tax character of the income (i.e., ordinary income, capital gain, or alternative minimum taxable income) allocated by the Company to the Members with respect to their Units, the amount of income from each different characterization allocated to such Members, and the tax rates applicable to such income characterizations; provided that in no event may the Tax Rate exceed the combined maximum marginal U.S. federal income tax rate applicable to ordinary income of individuals.

"TBOC" means the Business Organizations Code of the State of Texas, as amended, or, from and after the date any successor statute becomes, by its terms, applicable to the Company, such successor statute, in each case as amended at such time by amendments that are, at that time, applicable to the Company. All references to sections of the Business Organizations Code include any corresponding provision or provisions of any such successor statute.

"Terminated Participant" means any Participant with respect to which a Termination Event has occurred.

"Termination Event" means (i) with respect to any Participant, the termination for any reason, other than death or disability, of such Participant's employment or consulting relationship with the Company (unless the relationship merely changes from employee to consultant) and (ii) with respect to any Participant, the institution against such Participant under Bankruptcy Law of any legal proceedings seeking reorganization, rehabilitation, arrangement, composition, readjustment, liquidation, dissolution, or similar relief.

"Texas Securities Act" has the meaning given such term in Section 13.19.

"Third Hurdle Threshold" means when each Class B Member has achieved an IRR of 30%*and* a ROI of 3.0 to 1.0.

"Transfer" means, with respect to any item, (a) any sale, transfer, encumbrance, gift, donation, assignment, pledge, hypothecation, or other disposition of such item, any part thereof, or any interest therein, including, if the item is a Membership Interest, any pledge or assignment of rights to receive distributions under this Agreement, in each case whether voluntary or involuntary, and whether during a Person's lifetime or upon or after the Person's death, including any Transfer by operation of law, by court order, by judicial process, or by foreclosure, levy, or attachment; or (b) the act of making any of the foregoing.

"Transfer Notice" has the meaning given such term in Section 11.2(a).

"Transferee" means a Person to whom a Transfer is made.

"Transferring Member" has the meaning given such term in Section 11.2(a).

"Unit" means any Class A Unit, Class B Unit, or Class P Unit of the Company.

"Unrecaptured Section 1250 Gain" has the meaning given such term in Section 4.6(d).

"Working Capital Reserve" has the meaning given it in Section 4.7.

1.2 Other Definitions. Certain other terms are defined elsewhere herein and have the meanings so given them.

1.3 Construction. Whenever the context requires, the gender of all words used in this Agreement includes the masculine, feminine, and neuter. Unless the text indicates otherwise, all references to Articles, Sections , or Subsections are to articles, sections, or subsections of this Agreement and all references to Attachments and Exhibits are to attachments and exhibits attached to this Agreement, each of which is made a part of this Agreement for all purposes. All references in this Agreement to "dollars" or means United States of America dollars. The term "including" and variations of the term mean including without limitation. The captions, headings, and arrangements used in this Agreement are for convenience only and do not in any way affect, limit, amplify, or modify the terms and provisions of this Agreement.

1.4 Interest Calculations. Any interest or amounts like interest that are to be calculated under this Agreement shall be computed on the daily outstanding balance of the amount on which interest or amounts like interest accrue hereunder. The calculation of interest and amounts like interest under this Agreement shall be made monthly and shall be computed on the basis of a fraction, the denominator of which is 365 and the numerator of which is the actual number of days in the period for which interest or amounts like interest are being calculated.

ARTICLE 2.
ORGANIZATION

2.1 Formation. The Company was organized on June 1, 2017 as a Texas limited liability company by filing the Certificate of Formation in the office of the Secretary of State of the State of Texas under and pursuant to the TBOC.

2.2 Name. The name of the Company is "Atlas Sand Management Company, LLC and all Company business must be conducted in that name or such other name or names as the Manager may select at any time and from time to time, in compliance with applicable law.

2.3 Purposes. The purpose for which the Company is organized is to own equity in and manage the business of its Subsidiaries, including Atlas Sand Company, and transact any or all lawful business for which limited liability companies may be organized under the TBOC. The Company is authorized to engage in any lawful activity approved by the Members, in addition to the particular purposes set forth in the preceding sentence.

2.4 Registered Office and Registered Agent. The registered office and registered agent of the Company in the State of Texas are as set forth in the Certificate of Formation. At any time and from time to time, the Manager may change the Company's registered office and/or registered agent in the State of Texas in the manner provided in the TBOC.

2.5 Principal Office and Other Offices. The principal address and place of business of the Company and the place where the Company's books and records will be kept or made available as required by the TBOC is currently located at 5914 W. Courtyard Drive, Suite 200, Austin, Texas 78730¬4918. The Manager may change the principal place of business of the Company and the place at which the Company's books and records are kept or made available at any time and from time to time by notice to the Members. The Company may have such other office or offices as the Manager may designate at any time and from time to time by notice to the Members.

2.6 Foreign Qualification. Prior to commencing any activities in any jurisdiction other than the State of Texas, including opening any office in such other jurisdiction(s), the Manager shall, to the full extent required by or advisable under the laws of such jurisdiction (including to the extent required to limit the liability of the Members as contemplated by this Agreement and the TBOC), cause the Company to comply with all requirements for the qualification of the Company as a foreign limited liability company in such jurisdiction, including appointing a registered agent and maintaining a registered office in such jurisdiction.

2.7 Required Documents. Upon the reasonable request of the Manager, each Member shall immediately execute all certificates and other documents consistent with the terms of this Agreement necessary or desirable for the Manager to accomplish all filing, recording, publishing, and other acts as may be appropriate to comply with all requirements to form, operate, qualify, continue, and terminate the Company as (a) a limited liability company under the TBOC and the laws of the State of Texas and (b) a foreign limited liability company in all other jurisdictions where the Company proposes to operate.

2.8 Term. The existence of the Company commenced on the date the Certificate of Formation was filed in the office of the Secretary of State of the State of Texas and shall continue until terminated following an event of dissolution.

2.9 Mergers, Conversions, and Exchanges. The Company may adopt and effect a plan of merger or a plan of conversion and may adopt and effect a plan of exchange if such action is approved by the Manager and is otherwise in compliance with the TBOC.

2.10 No Partnership. Other than for federal and state income tax purposes, the Members intend that the Company not be a partnership (including a limited partnership) or joint venture and that no Member or Manager be a partner or joint venturer of any other Member or Manager. This Agreement may not be construed to suggest otherwise.

ARTICLE 3.
MEMBERSHIP INTERESTS AND CAPITAL CONTRIBUTIONS

3.1 Authorized Units; Additional Members.

(a) The Company has authority to issue an unlimited number of Units of different classes or series, which initially shall be designated as Class A Units, Class B Units, and Class P Units, and any subsequent class or series of Units issued, and any subsequent class or series of Units issued pursuant to the terms of this Agreement. The rights, powers, preferences, duties, liabilities and obligations of holders of the Class A Units, Class B Units, and Class P Units shall be as set forth herein. Additional Units, of the same or different classes or series, having the same or different rights, powers, and duties as preexisting Units may be created and issued to Persons (including existing Members).

(b) Company and each Member hereby acknowledge and agree that, with respect to any Participant, such Participant's Class P Units constitute a "profits interest" in the Company within the meaning of Rev. Proc. 93-27 (a "Profits Interest"), and that any and all Class P Units received by a Participant are received in exchange for the provision of services by the Participant to or for the benefit of the Company in a Service Provider capacity or in anticipation of becoming a Participant. The Company and each Participant who receives Class P Units hereby agree to comply with the provisions of Rev. Proc. 2001-43, and neither the Company nor any Participant who receives Class P Units shall perform any act or take any position inconsistent with the application of Rev. Proc. 2001-43 or any future Internal Revenue Service guidance or other Governmental Authority that supplements or supersedes the foregoing Revenue Procedures.

(c) Additional Members having the same or different rights, powers, and duties as preexisting Members may be admitted as Members, on such terms and conditions as the Manager may determine at the time of such issuance and admission. Any such admission is effective only after the new Member has executed and delivered to the Manager a document including the new Member's address for notices, its agreement to be bound by this Agreement, its representation and warranty that the representations and warranties in Section 5.7 are true and correct with respect to the new Member, and any additional representations, warranties, and covenants as the Manager determine. Upon admission of

a new Member, that new Member shall automatically be vested with the Status Rights related to the Units in respect of which such Member is admitted and the Manager shall reflect the authorization and/or issuance of any additional Units in an amendment to Exhibit A of this Agreement indicating the number and type of such additional Units, and their rights, powers, preferences and duties. The provisions of this Section shall not apply to Membership Interests that are Transferred by a Member. The rights, powers, preferences, duties, liabilities and obligations of holders of the Units shall be as set forth herein.

3.2 Capital Contributions. Each Member has committed to contribute, or contemporaneously with the execution of this Agreement, has contributed, to the capital of the Company the amount in cash or property that is set forth across from the name of such Member on Exhibit A, which contribution is such Member's Capital Contribution to the Company. In exchange for such Capital Contribution, each Member is hereby issued the number of Class A Units, and is hereby admitted as a Member in respect of the Class A Units, shown across from the name of such Member on Exhibit A.

3.3 Units Owned. The Units owned by each Person who hereafter becomes a Member and any changes in the number of Units shall be as set forth in the records of the Company and Exhibit A will be deemed amended accordingly, without further act or deed. The Manager is hereby authorized to substitute a new Exhibit A (indicating the effective date) to reflect such new or changed number of Units owned by a Member. The records of the Company shall be prima facie evidence of the number of Units owned by any Person.

3.4 Additional Capital Contribution.

(a) General. The Members may make certain additional Capital Contributions (each, an "Additional Capital Contribution") to the Company in accordance with the provisions of this Section 3.4.

(b) Funding Notice. Each time the Manager in good faith determines that the Company needs additional funds for a use that is consistent with the purposes of the Company, the Manager may, in his sole and absolute discretion, give notice (the "Funding Notice") to each of the Members. Any Funding Notice issued by the Manager shall (i) specify the amount of the Additional Capital Contributions being requested, (ii) specify the number of Units to be issued in connection with any Additional Capital Contributions requested, (iii) state that each Member has a right to make Additional Capital Contributions in accordance with the provisions of this Section 3.4, (iv) state each Member's pro rata share of such Additional Capital Contributions, based on each Member's ownership of Units at such time, (v) specify the date on which any Additional Capital Contribution is due; and (vi) specify the account or accounts to which such Additional Capital Contributions should be paid.

(c) Voluntary Funding of Contributions and Loans. If a Funding Notice requests Additional Capital Contributions, each Member will have the right, but not the obligation, to make its pro rata share of such Additional Capital Contributions based on such Member's relative ownership of Units at such time. Upon receipt of a Funding Notice from the Manager, each Member shall promptly notify the Manager as to whether such Member consents to provide its pro rata share of the requested funds. A Member who consents to provide the requested funds shall then make such Additional Capital Contribution, as the case may be, in accordance with this Section 3.4 and the Funding Notice.

(d) Terms of Capital Contributions. All Additional Capital Contributions made by a Member to the Company shall be payable in U.S. dollars and made by wire transfer of immediately available funds to the account or accounts designated by the Manager in the Funding Notice. Each Additional Capital Contribution shall be made by each Member on or before the due date specified in the Funding Notice and shall be deemed made on the date received by the Company.

(e) Non-consenting Members. If any Member does not consent to a Funding Notice or otherwise declines to make its pro rata portion of any Additional Capital Contribution, each non-declining Member may make an Additional Capital Contribution of any amount up to its pro rata portion (based on the relative Units owned at such time by each non-declining Member who desires to make an Additional Capital Contribution) of such declined amount. Such process shall be continued until the entire amount of the Additional Capital Contribution requested in the Funding Notice (have been made or each Member has made all of the Additional Capital Contributions that it desires to make.

3.5 Return of Contributions. Except as provided herein, a Member is not entitled to the return of any part of its Capital Contributions or to be paid interest in respect of either its Capital Account or its Capital Contributions. Neither the Company nor any Member is liable for any unreturned Capital Contribution.

3.6 No Duty to Restore Negative Capital Account. Except to the extent otherwise expressly provided herein, a Member is not required to contribute or lend any cash or property to the Company to enable the Company to return any other Member's Capital Contributions or to make any distribution to any other Member, even if such first Member has a deficit balance in its Capital Account.

3.7 Capital Accounts. There shall be established for each Member a Capital Account on the books of the Company to be maintained and adjusted pursuant to this Agreement. The Manager, in his sole discretion, may maintain such other accounts for the Members as it deems necessary or appropriate for financial reporting purposes.

3.8 Other Provisions With Respect to Capital Contributions. Except as otherwise expressly provided in this Agreement, no Member shall be entitled to priority over any other Member with respect to a return of its Capital Contributions. No payment of fees, salary, or loans or of other amounts paid to a Member in transactions that are for fair value or that are approved by the Manager shall be considered a distribution or a return of Capital Contributions.

3.9 No Additional Contribution. No Member shall be required to make any contributions to the capital of the Company except to the extent provided by Section 3.4 or Section 4.6(a).

ARTICLE 4.
DISTRIBUTIONS AND ALLOCATIONS

4.1 Distributable Cash. Prior to the dissolution of the Company, Distributable Cash will be applied by the Company or distributed to the Members at such times as the Manager determines in his sole discretion as follows:

(a) To the Class A Members and the Class B Members pro rata in accordance with the Capital Ratio and in accordance with the respective number of Class A Units and Class B Units owned by the Class A Members and the Class B Members, respectively; and

(b) Further, subject to Section 4.1(d), the Class B Members Distributable Cash distributions shall be distributed to the Class B Members and the Participants as follows:

(i) First, 100% to the Class B Members pro rata in accordance with the respective number of Class B Units owned until such time as the First Hurdle Threshold has been achieved;

(ii) Second, 80% to the Class B Members pro rata in accordance with the respective number of Class B Units owned by each Class B Member and 20% to the Participants pro rata in accordance with the respective number of Class P Units owned by each Participant until the Second Hurdle Threshold has been achieved;

(iii) Third, 70% to the Class B Members pro rata in accordance with the respective number of Class B Units owned by each Class B Member and 30% to the Participants pro rata in accordance with the respective number of Class P Units owned by each Participant until the Third Hurdle Threshold has been achieved;

(iv) Fourth, 60% to the Class B Members pro rata in accordance with the respective number of Class B Units owned by each Class B Member and 40% to the Participants pro rata in accordance with the respective number of Class P Units owned by each Participant until the Fourth Hurdle Threshold has been achieved;

(v) Fifth, 50% to the Class B Members pro rata in accordance with the respective number of Class B Units owned by each Class B Member and 50% to the Participants pro rata in accordance with the respective number of Class P Units owned by each Participant until the Fifth Hurdle Threshold has been achieved; and

(vi) Thereafter, 50% to the Class B Members pro rata in accordance with the respective number of Class B Units owned by each Class B Member and 50% to the Participants pro rata in accordance with the respective number of Class P Units owned by each Participant.

(c) Notwithstanding the provisions of Section 4.1(b), in the event a Member requests in writing in any Adjustment Period that the Company make a Tax Distribution to such Member and the Company has a sufficient amount of Distributable Cash to make such Tax Distribution, the Company may, at the discretion of the Manager, distribute to the

requesting Member cash in an amount equal to the product of (i) the taxable income of the Company for such Adjustment Period allocable to such Member multiplied by (ii) the Tax Rate (the "Tax Distribution"); provided, however, that (y) if the Company makes distributions pursuant to Section 4.1(b) during an Adjustment Period, such distributions shall reduce the amount of Tax Distributions the Company otherwise would be required to make and (z) if the aggregate amounts distributed to any Member for any Adjustment Period pursuant to this Section 4.1(c), including by way of advances, exceed the amount the Company was obligated to distribute to such Member pursuant to this Section 4.1(c) for such Adjustment Period, the amount of such excess shall be applied to reduce the amount the Company would otherwise be obligated to distribute to such Member pursuant to this Section 4.1(c) for the following Adjustment ^nod. The Capital Account of any Member to whom a Tax Distribution is made shall be debited accordingly. Amounts distributed under this Section 4.1(c) shall be deemed an advance of distributions under Section 4.1(b). For the avoidance of doubt, under this Section 4.1(c), holders of Class P Units shall have the same rights as Members holding Class A Units or Class B Units.

(d) It is the intention of the parties to this Agreement that distributions to any Participant with respect to the Class P Units be limited to the extent necessary so that the related interest constitutes a Profits Interest. In furtherance of the foregoing, and notwithstanding anything to the contrary in this Agreement, the Manager shall, if necessary, limit any distributions to any Participant with respect to its Class P Units so that such distributions do not exceed the available profits in respect of such Participant's related Profits Interest. Available profits shall include the aggregate amount of profit and unrealized appreciation in all of the assets of the Company between the date of issuance of such Class P Units and the date of such distribution, it being understood that such unrealized appreciation shall be determined on the basis of the Profits Interest Hurdle applicable to such Unit. In the event that a Participant's distributions and allocations with respect to its Class P Units are reduced pursuant to this Section 4.1(d), an amount equal to such excess distributions shall be treated as instead apportioned to the holders of Class A Units, Class B Units, and Class P Units that have met their Profits Interest Hurdle (such Class P Units, "Qualifying Class P Units"), pro rata in proportion to their aggregate holdings of Class A Units, Class B Units, and Qualifying Class P Units treated as one class of Units.

4.2 Allocation of Net Profit and Net Loss. After application of Section 4.3 and Section 4.4, Net Profit or Net Loss for each Adjustment Period shall be allocated among the Members so as to reduce, proportionately! in the case of any Net Profit, the difference between their respective Target Capital Accounts and Partially Adjusted Capital Accounts for such Adjustment Period and, in the case of Net Loss, the difference between their respective Partially Adjusted Capital Accounts and Target Capital Accounts for such Adjustment Period. No portion of Net Profit or Net Loss for any Adjustment Period shall be allocated to a Member, in the case of Net Profit, whose Partially Adjusted Capital Account is greater than its Target Capital Account or, in the case of Net Loss, whose Target Capital Account is greater than or equal to its Partially Adjusted Capital Account for such Adjustment Period.

4.3 Special Allocations. The following special allocations will be made in the following order before allocations of Net Profit or Net Loss are made:

(a) Company Minimum Gain Chargeback. Notwithstanding any other provision^ this Agreement to the contrary, if in any Adjustment Period there is a net decrease in Company Minimum Gain, then each Member will first be allocated items of Gross Income for the Adjustment Period (and, if necessary, subsequent Adjustment Periods) in an amount equal to the portion of such Member's share of the net decrease in Company Minimum Gain, determined in accordance with the provisions of Section 1.704-2(g) of the Regulations, that is attributable to the disposition of Company property subject to one or more nonrecourse liabilities of the Company that are not Member Nonrecourse Debts; *provided*, *however*, if there is insufficient Gross Income in an Adjustment Period to make the above allocation for all Members for the Adjustment Period, the Gross Income will be allocated among the Members in proportion to the respective amounts they would have been allocated had there been an unlimited amount of Gross Income for the Adjustment Period.

(b) Minimum Gain Chargeback for Member Nonrecourse Debt Notwithstanding any other provision of this Agreement to the contrary other than Subsection 4.3(a), if in any Adjustment Period there is a net decrease in Member Nonrecourse Debt Minimum Gain, then each Member will first be allocated items of Gross Income for the Adjustment Period (and, if necessary, subsequent Adjustment Periods) in an amount equal to the portion of such Member's share of the net decrease in the Member Nonrecourse Debt Minimum Gain during the Adjustment Period (as determined in accordance with Section 1.704-2(i) of the Regulations) attributable to the disposition of Company property subject to one or more Member Nonrecourse Debts; provided, however, if there is insufficient Gross Income in an Adjustment Period to make the above allocation for all Members for the year, the Gross Income will be allocated among the Members in proportion to the respective amounts they would have been allocated had there been an unlimited amount of Gross Income for the Adjustment Period.

(c) Qualified Income Offset. After application of Subsections 4.3(a) and 4.3(b), if in any taxable year a Member unexpectedly receives any adjustment, allocation, or distribution described in Sections 1.704-l(b)(2)(ii)(d)(4), (5), or (6) of the Regulations and if the Member has an Adjusted Capital Account Deficit, items of Gross Income will be allocated to the Member in the amount and in the manner sufficient to eliminate the Adjusted Capital Account Deficit as quickly as possible; *provided*, *however*, that an allocation under this Subsection 4.3(c) will be made only if and to the extent that the Member would have an Adjusted Capital Account Deficit after all other allocations provided for in this Article 4 have been tentatively made as if this Subsection 4.3(c) were not in this Agreement.

(d) Gross Income Allocation. In the event a Member has a deficit Capital Account at the end of any Adjustment Period that is in excess of the sum of (i) the amount the Member is obligated to restore to the Company pursuant to any provision of this Agreement, (ii) the amount that the Member is deemed to be obligated to restore to the Company pursuant to Section 1.704-1 (b)(2)(ii)(c) of the Regulations, and (iii) the amounts that the Member is deemed to be obligated to restore to the Company pursuant to Sections 1,704-2(g)(l) and 1.704-2(i)(5) of the Regulations, items of Gross Income will be allocated to the Member in the amount and in the manner sufficient to eliminate such deficit as quickly as possible; provided, however, that an allocation under this Subsection 4.3(d) will be made only if and to the extent that the Member would have a deficit Capital Account in excess of such sum after all other allocations provided for in this Article 4 have been tentatively made as if Subsection 4.3(c) and this Subsection 4.3(d) were not in this Agreement.

(e) Company Nonrecourse Deductions. Company Nonrecourse Deductions for any Period shall be allocated to the Members pro rata in proportion to their respective ownership of Units. If the Manager determines in its good faith discretion that the Company Nonrecourse Deductions must be allocated in a different ratio to satisfy the safe harbor requirements of the Regulations promulgated under Section 704(b) of the Code, the Manager is authorized, upon notice to the Members, to revise the prescribed ratio to the numerically closest ratio that does satisfy such requirements.

(f) Member Nonrecourse Deductions. Member Nonrecourse Deductions for any Adjustment Period or other period will be allocated to the Member who bears the economic risk of loss with respect to the Member Nonrecourse Debt to which such Member Nonrecourse Deductions are attributable.

(g) Basis Adjustments. To the extent an adjustment to the adjusted tax basis of any Company asset is required pursuant to Code Section 732(d), Code Section 734(b), or Code Section 743(b), the Capital Accounts of the Members will be adjusted pursuant to Section 1.704-l(b)(2)(iv)(m) of the Regulations.

4.4 Other Special Allocations.

(a) If the Company has Net Profit for any Adjustment Period (determined prior to giving effect to this Section 4.4) and the balance of any Member's Partially Adjusted Capital Account is greater than the balance of its Target Capital Account, then the Member with such excess balance shall be specially allocated items of Company deduction or loss for such Adjustment Period (to the extent available) equal to the difference between its Partially Adjusted Capital Account and its Target Capital Account;

(b) If the Company has Net Loss for any Adjustment Period (determined prior to giving effect to this Section 4.4) and the balance of any Member's Partially Adjusted Capital Account is less than the balance of its Target Capital Account, then the Member with such deficit balance shall be specially allocated items of Company income or gain for such Adjustment Period (to the extent available) equal to the difference between its Partially Adjusted Capital Account and its Target Capital Account; and

(c) If the Company has neither Net Profit nor Net Loss for any Adjustment Period (determined prior to giving effect to this Section 4.4) and, notwithstanding the application of Section 4.2, the balance of any Member's Partially Adjusted Capital Account differs from the balance of its Target Capital Account, then the Member with a positive or negative difference, as the case may be, shall be specially allocated items of Company deduction or loss or income or gain, as the case may be, for such Adjustment Period (to the extent available) to eliminate the difference between its Partially Adjusted

Capital Account and its Target Capital Account; provided, however, that no Member shall be allocated any Net Loss or items in the nature of deduction or loss pursuant to Section 4.2 or this Section 4.4 to the extent that such allocation would cause or increase an Adjusted Capital Account Deficit. Allocations of Net Loss that would be made to a Member but for the proviso in the first sentence of this clause shall be made to the remaining Members to the extent not inconsistent with such proviso. To the extent allocations of Net Loss cannot be made to any Member because of such proviso, such allocations shall be made to the Members in accordance with their respective ownership of Units, notwithstanding such proviso.

4.5 Tax Allocations: Code Section 704(c). In accordance with Code Section 704(c) and the Regulations promulgated thereunder, income, gain, loss, and deduction with respect to any property < contributed to the capital of the Company will, solely for tax purposes, be allocated among the Members so as to take account of any variation between the adjusted basis to the Company of the property for federal income tax purposes and the Gross Asset Value of the property. In the event the Gross Asset Value of any Company property is adjusted pursuant to clause (b) of the definition of "Gross Asset Value" in Section 1.1, subsequent allocations of income, gain, loss, and deduction with respect to such asset will take account of any variation between the adjusted basis of such asset for federal income tax purposes and its Gross Asset Value in the same manner as under Code Section 704(c) and the Regulations promulgated thereunder. Any elections or other decisions relating to allocations pursuant to this Section 4.5 will be made in any manner that the Manager determines in his sole discretion (including any manner that may benefit the Manager that is also a Member and its Affiliates). Allocations under this Section 4.5 are solely for purposes of federal, state, and local income taxes and will not affect, or in any way be taken into account in computing, any Member's Capital Account or share of Net Profit, Net Loss, or other items or distributions under any provision of this Agreement.

4.6 Other Distribution and Allocation Rules.

(a) Withholding. Notwithstanding anything to the contrary contained in this Agreement, the Manager, in his sole good faith discretion, may withhold from any distribution of Distributable Cash or other cash or other property to any Member contemplated by this Agreement any amounts due from such Member to the Company. If any provision of the Code, the Regulations, or state or local law or regulations requires the Company to withhold any tax with respect to a Member's distributive share of Company income, gain, loss, deduction, or credit, the Company will withhold the required amount and pay the same over to the taxing authorities as required by such provision. $he amount withheld will be deducted from the amount that would otherwise be distributed to that Member but will be treated as though it had been distributed to the Member with respect to which the Company is required to withhold. If at any time the amount required to be withheld by the Company exceeds the amount of money that would otherwise be distributed to the Member with respect to which the withholding requirement applies, then that Member will make a Capital Contribution to the Company equal to the excess of the amount required to be withheld over the amount, if any, of money that would otherwise be distributed to that Member and that is available to be applied against the withholding requirement. Each of the Members represents that such Member is not aware of any provision of the Code, the Regulations, or state or local law or regulations that currently requires withholding of any tax by the Company with respect to such Member.

(b) Allocations Upon Transfers of Membership Interests. If any Membership Interest is Transferred in compliance with the provisions of Article 11, on any day other than the first day of an Adjustment Period, then Net Profit, Net Loss, each item thereof, and all other items attributable to such Membership Interest for such Adjustment Period will be allocated to the transferor and to the Transferee by taking into account their varying interests during the Adjustment Period in accordance with Section 706(d) of the Code, using any permissible method selected by the Manager, in his sole discretion. Solely for purposes of making such allocations, for Transfers that occur on or prior to the 15th day of a calendar month, each of such items for the entire calendar month in which the Transfer occurs will be allocated to the transferor, and for Transfers that occur after the 15th day of a calendar month, each of such items for the entire calendar month in which the Transfer occurs will be allocated to the Transferee; *provided*, *however*, that gain or loss on a Transfer of all or substantially all of the Company assets or on a sale or other Transfer of a substantial capital asset of the Company not in the ordinary course of business, as determined by the Manager, will be allocated to the Person who is the holder of a Membership Interest on the date of such Transfer and any distribution of proceeds of any such Transfer will be made to the Person who is the holder of such Membership Interest on the date of such Transfer.

(c) Other Items. Except as otherwise provided in this Agreement, all items of Company income, gain, loss, deduction, and other allocations not otherwise provided for will be divided among the Members in the same proportions as they share Net Profit or Net Loss, as the case may be for the period during which such items were allocated.

(d) Recapture income. For purposes of determining the nature (as ordinary income or unrecaptured Section 1250 gain (as defined in Code Section 1(h)(6)(A) ("Unrecaptured Section 1250 Gain"))) of any item of Gross Income, income, or gain allocated among the Members for Federal income tax purposes pursuant to Section 4.2, Section 4.3, Section 4.4, the portion of such item required to be recognized as ordinary income pursuant to Code Section 1245 or Unrecaptured Section 1250 Gain shall be deemed to be allocated among the Members in the same proportion that they were allocated and claimed the tax depreciation deductions, or basis reductions, directly or indirectly giving rise to such treatment under Code Section 1245 or Code Section 1(h)(6), but each Member shall be allocated such amounts only to the extent that such Member is allocated any tax gain from the sale or other disposition of such property. The balance of such recapture, if any, shall be allocated to the Members whose share of tax gain exceeds their share of such recapture ("excess gain"), and such balance shall be allocated between such Members in the proportion in which the excess gain of such Member bears to the excess gains of all Members.

(e) Distributions. Distributions of cash or property in respect of a Unit will be made only to the Member who, according to the books and records of the Company, is the holder of such Units in respect of which such distribution is made on the date of such distribution. The date for any distribution of Distributable Cash will be determined by the Manager, in his sole discretion.

4.7 Working Capital Reserve. At any time and from time to time, the Manager may establish and maintain a reserve of working capital (the "Working Capital Reserve"). If and to the extent the Manager determines that funds in the Working Capital Reserve that have not been utilized by the Company are no longer required to be so maintained, such funds will be released from the Working Capital Reserve and treated as Distributable Cash.

ARTICLE 5.
MEMBERS AND THEIR RIGHTS, OBLIGATIONS, REPRESENTATIONS, AND CERTAIN AGREEMENTS

5.1 Units, Name and Address of Members. The name, address and number of Units owned by each Member of the Company as of the Effective Date are set forth on Exhibit A. Any change in the status of a Person as a Member, the name, address and number of Units owned by each Person who later becomes a Member, and any change in the number of Units or address of any Member of which the Company is given notice will be as set forth in the records of the Company and Exhibit A will be deemed amended appropriately, without further act or deed. The Manager is hereby authorized to substitute a new Exhibit A (indicating its effective date) to reflect such additional and/or different information. The records of the Company shall be prima facie evidence of the status of any Person as a Member.

5.2 Liability for Capital Contributions. The Members shall be required to make Capital Contributions to the Company to the extent required by Article 3 and Section 4.6(a).

5.3 Liability to Third Parties. It is the intention of the Members that, to the fullest extent permitted by law, no Member shall be liable for the debts, obligations, or liabilities of the Company, including under a judgment, decree, or order of a court. Accordingly, no Member shall be required to make a Capital Contribution to the Company in excess of the contributions for which it is liable under Article 3.

5.4 Withdrawal. No Member has the right or power to withdraw from the Company as a member without the approval of all the Members of the Company.

5.5 Removal. Neither the Company, the Manager, nor any Member has the right or power to expel a Member as a member of the Company.

5.6 Lack of Authority. No Member (other than as a Manager or as an officer) has the authority or power to act for or on behalf of the Company, to do any act that would be binding on the Company, or to incur any expenditure on behalf of the Company.

5.7 Representations and Warranties of Members. Each Member, by executing this Agreement or being admitted as a Member, hereby represents and warrants to the Company and each other Member the following:

(a) Authorization and Validity of Agreement. Such Member has full power and authority to execute and deliver this Agreement, to perform the obligations of such Member hereunder, and to consummate the transactions contemplated hereby. The execution, delivery, and performance of this Agreement by such Member, and the consummation by such Member of the transactions contemplated hereby, have been duly authorized and approved by such Member. This Agreement has been duly executed and delivered by such Member and is a valid and binding obligation of such Member, enforceable against such Member in accordance with its terms, except to the extent that its enforceability may be subject to applicable Bankruptcy Laws and to general equitable principles. The execution and delivery of this Agreement do not, and the consummation of the transactions contemplated hereby will not, violate any provision of any agreement, instrument, order, regulation, judgment, or decree to which such Member is subject or by which such Member or any asset of such Member is bound. Such Member is under no legal disability, contractual or otherwise, that prohibits such Member from entering into this Agreement and performing the obligations of such Member hereunder. Such Member is the sole party in interest in the Units of such Member under this Agreement and, as such, has all legal and equitable rights in such Units.

(b) Investment Intent. Such Member is acquiring its Membership Interest for investment and not with a view to or in connection with the distribution thereof within the meaning of the Securities Act or any state securities law, and such interest will not be Transferred by it in contravention of said Securities Act or any applicable state securities laws.

(c) Sophistication. Such Member has such knowledge and experience in financial and business matters that such Member is capable of evaluating the merits and risks of an investment in the Company and its Membership Interest. Such Member is an "Accredited Investor" as that term is defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended.

5.8 Power of Attorney. Each Member hereby appoints the Manager as that Member'sattorney-in-fact for the purpose of executing, swearing to, acknowledging, and delivering all certificates, documents, and other instruments as may be necessary and appropriate in the reasonable business judgment of the Manager in furtherance of the necessary business of the Company or complying with applicable law, including filings of the type described in Section 2.6 and Section 2.7 and amendments to or substitutions of Exhibit A specifically contemplated herein, and any other amendments to this Agreement to reflect any admission or withdrawal of a Member in accordance with the provisions of this Agreement or any other matter approved in accordance with the provisions of this Agreement. This power of attorney may also be used as expressly set forth in other provisions of this Agreement. This power of attorney is irrevocable, shall survive the death, disability, incapacity, insolvency, or dissolution of such Member, and is coupled with an interest. On request by a Manager, a Member shall confirm its grant of this power of attorney or any use of it by the Manager and shall execute, swear to /acknowledge, and deliver any such certificate, document, or other instrument.

5.9 Conflicts of Interest. Subject to the express provisions of this Section and this Agreement or any policy hereafter adopted by the Manager (which shall have prospective application only), each Member may engage in and possess interests in other business ventures of any and every type and description, independently or with others, including those in direct competition with the Company, with no obligation to offer to the Company or any Member the right to participate therein, except that no Member may engage in or possess an interest in other business ventures operating in the same, similar, or related businesses as Atlas Sand Company within the Project Area. Actions in compliance with the foregoing sentence shall not be deemed wrongful or improper and neither the Company nor any Member shall have any right to participate therein. Unless the terms of a transaction between the Company and a Member or an Affiliate of a Member are proven to be unfair to the Company, the Company may transact business with any Member or any Affiliate of a Member.

5.10 Voting; Quorum. Each Member shall have one vote for each Class A Unit or Class B Unit owned by such Member. A Required Interest of the Members shall constitute a quorum for the taking of action of the Members. Except as otherwise required by this Agreement, all actions of the Members shall be taken upon majority vote of a quorum, or by written consent as provided herein.

5.11 Annual and Special Meetings. The Company shall hold annual meetings of the Members at the time and place determined by the Manager. A special meeting of the Members may be called at any time by the Manager or by any Member entitled to a vote at such meeting. Only business within the purpose or purposes described in the notice of special meeting may be conducted at such special meeting.

5.12 Place of Meetings. Meetings of the Members may be held at any place within or without the State of Texas designated by the Person or Persons calling such meeting as provided above. Meetings of the Members shall be held at the principal office of the Company unless another place is designated for meetings in the manner provided herein.

5.13 Notice. Except as otherwise provided by law, written or printed notice stating the place, day, and hour of each, meeting of the Members and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered, not less than ten (10) nor more than sixty (60) days before the date of the meeting by or at the direction of the Manager or the Person or Persons calling the meeting, to each Member entitled to vote at such meeting.

5.14 Procedure; Minutes. At meetings of the Members, business shall be transacted in such order as the Person or Person(s) calling the meeting may determine. The Manager shall appoint at each meeting a natural person to preside at the meeting (which person may be the Manager) and a natural person to act as secretary of the meeting. The secretary of the meeting shall prepare minutes of the meeting, which shall be delivered to the Company for placement in the minute book of the Company.

5.15 Action Without Meeting. Any action that may be taken, or that is required by law or the Certificate of Formation or this Agreement to be taken, at any annual or special meeting of Members may be taken without a meeting, without prior notice, and without a vote, if a consent or consents in writing, setting forth the action so taken, shall have been signed by the Member(s) having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all members entitled to vote thereon were present and voted. The consent may be in one or more counterparts. The signed consent shall be placed in the minute books of the Company. For purposes of this Section, a telegram, telex, electronic mail, cablegram,

or similar transmission by a Person or a photographic, photostatic, facsimile, or similar reproduction of a writing signed by a Person or any other method of communication permitted by the corresponding provisions of the TBOC shall be regarded as signed by that Person. The record date for the purpose of determining Members entitled to consent to any action pursuant to this Section shall be determined in accordance with the principles in the TBOC.

5.16 Action by Telephone Conference. Subject to the requirements of the TBOC, the Certificate of Formation, or this Agreement for notice of meetings, Members may participate in and hold a meeting of Members by means of a conference telephone or similar communications equipment by means of which all Persons participating in the meeting can hear each other, and participation in such meeting shall constitute attendance and presence in person at such meeting, except where a Person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

ARTICLE 6.
MANAGEMENT

6.1 Management by Manager. Except for situations in which the approval of the Members is required by this Agreement or by nonwaivable provisions of applicable law, (i) the powers of the Company shall be exercised by or under the authority of, and the business and affairs of the Company shall be managed under the direction of, the Manager; and (ii) the Manager may make all decisions and take all actions for the Company not otherwise provided for in this Agreement without seeking the approval or consent of the Members, including but not limited to the following:

(a) entering into, making, and performing contracts, agreements, and other undertakings binding the Company that may be necessary, appropriate, or advisable in furtherance of the purposes of the Company and making all decisions and waivers thereunder;

(b) making any expenditure and incurring any obligation it considers necessary or desirable for the conduct of the activities of the Company;

(c) doing and performing all acts as may be necessary or appropriate or desirable to the conduct of the Company's business;

(d) selecting, removing, and changing the authority and responsibility of lawyers, accountants, and other advisers and consultants;

(e) acquiring and maintaining insurance covering Company assets;

(f) controlling any matters affecting the rights and obligations of the Company, including the conduct of litigation and other incurring of legal expense, and settling claims and litigation;

(g) determining distributions of Company cash and other property as provided in Section 4.1;

(h) opening and maintaining bank and investment accounts and arrangements, drawing checks and other orders for the payment of money, and designating individuals with authority to sign or give instructions with respect to those accounts and arrangements;

(i) preparing and distributing to the Members an annual report on the Company's financial performance;

(j) applying for and obtaining governmental approvals or certificates with respect to the Company operations or the ownership or use of its properties or assets;

(k) amending or restating this Agreement to reflect the admission of a Member in accordance with the provisions of this Agreement;

(l) amending or restating the Certificate of Formation;

(m) acquiring, utilizing for Company purposes, and disposing of any asset of the Company;

(n) maintaining the assets of the Company in good order;

(o) selling; leasing, exchanging, or otherwise Transferring all or substantially all of the assets of the Company;

(p) approving any conversion, merger, consolidation, share or interest exchange, or other transaction authorized by or subject to Section 18-209 of the TBOC;

(q) forming and operating Subsidiaries of the Company to facilitate the business operations of the Company;

(r) collecting sums due the Company;

(s) to the extent that funds of the Company are available therefor, paying debts and obligations of the Company;

(t) engaging in transactions between the Company and any Member or Manager acting in and for its own account; and

(u) executing, acknowledging, delivering, filing and recording instruments or documents affecting the foregoing.

(v) approving dissolution of the Company; or

(w) commencing bankruptcy, receivership or any other insolvency proceeding.

6.2 Number; Term: Qualification. The Company shall have one (1) Manager. From and after the Effective Date, the Founding Member shall be the Manager. Each Manager shall hold office until such Manager's death, disability, or voluntary resignation. No Manager need be a Member, a resident of the State of Texas, or a citizen of the United States.

6.3 Resignation, Death or Disability. The Manager may resign at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time is specified, at the time of its receipt by the Members. The acceptance of a resignation shall not be necessary to make it effective, unless expressly so provided in the resignation.

6.4 Vacancies. Any vacancy created by the resignation, disability, or death a Manager shall be filled by a Required Interest of the Members; provided, however, that if the vacancy was created by the death or disability of the Founding Member, the vacancy may be filled by the majority in interest of the remaining Members.

6.5 Regular Meetings. The Manager may hold regular meetings at his discretion, and such meetings may be held without notice at such times and places as may be determined by the Manager.

6.6 Action Without Meeting. Any action that may be taken, or that is required by law, the Certificate of Formation, or this Agreement to be taken, at any annual or special meeting of the Manager may be taken without a meeting, without prior notice, and without a vote, if a consent in writing, setting forth the action so taken, shall have been signed by Manager. The consent may be in one or more counterparts. The signed consent shall be placed in the minute bookof the Company. For purposes of this Section, a telegram, telex, electronic mail, cablegram, or similar transmission by a person or a photographic, photostatic, facsimile, or similar reproduction of a writing signed by a person or any other method of communication permitted by the corresponding provisions of the TBOC shall be regarded as signed by that person.

6.7 Compensation. The Manager shall serve without compensation unless otherwise determined by the Required Interest of the Members and except as otherwise provided herein. The Manager shall be entitled to be reimbursed for out-of-pocket costs and expenses incurred in the course of their services hereunder, including the portion of their overhead reasonably allocable to Company activities.

6.8 Conflicts of Interest. Subject to the express provisions of this Section and this Agreement or any policy hereafter adopted by the Manager (which shall have prospective application only), the Manager may engage in and possess interests in other business ventures of any and every type and description, independently or with others, including those in direct competition with the Company, with no obligation to offer to the Company or any Member the right to participate therein, except that the Manager may not engage in or possess an interest in other business ventures operating in the same, similar, or related businesses as Atlas Sand Company within the Project Area. Actions in compliance with the foregoing sentence shall not be deemed wrongful or improper and neither the Company nor any Member shall have any right to participate therein. Unless the terms of a transaction between the Company and a Manager or an Affiliate of a Manager are proven to be unfair to the Company, the Company may transact business with any Manager or any Affiliate of a Manager.

6.9 Liability to Third Parties. To the fullest extent permitted by law, no Manager shall be liable for the debts, obligations, or liabilities of the Company, including under a judgment, decree, or order of a court.

6.10 Standard of Conduct. The Manager shall be liable for acts, errors, or omissions in performing their duties with respect to the Company ONLY if such performance is not authorized by this Agreement and constitutes bad faith, gross negligence, or willful misconduct. THE MANAGER IS NOT LIABLE FOR ERRORS OR OMISSIONS IN PERFORMING HIS DUTIES WITH RESPECT TO THE COMPANY FOR ANY OTHER REASON, INCLUDING HIS SOLE, PARTIAL, OR CONCURRENT NEGLIGENCE. Furthermore, the Manager is not liable for any action that he may take in reliance on the statements, valuations, information, opinions that were prepared or presented by legal counsel, public accountants, investment bankers or other persons as to matters the Manager believed were within the person's professional or expert competence.

6.11 Affiliates. Except as otherwise provided herein, any Manager shall be entitled to deal with its respective Affiliates in the performance of its duties and obligations under this Agreement.

ARTICLE 7.
OFFICERS

7.1 Election: Qualifications. The Manager may, at any time and from time to time, designate one or more natural persons to be officers of the Company and may assign titles to particular officers. No officer need be a resident of the State of Texas, a Member, or a Manager. Any number of offices may be held by the same person.

7.2 Authority. Any officers designated by the Manager shall have such authority and perform such duties as the Manager may, at any time and from time to time, delegate to them. Unless the Manager decides otherwise, if the title is one commonly used for officers of a business corporation formed under the TBOC, the assignment of such title shall constitute the delegation to such officer of the authority and duties that are normally associated with that office, subject to any specific delegation of authority and duties made to such officer by the Manager pursuant to this Section 7.2.

7.3 Term. Each officer shall hold office at the pleasure of the Manager or until such officer's earlier death, resignation, or removal from office.

7.4 Vacancies. Any vacancy occurring in any office of the Company may be filled by the Manager.

7.5 Resignation. Any officer may resign as such at any time. Such resignation shall be made in writing and shall take effect at the time specified therein or, if no time is specified, at the time of its receipt by the Manager. The acceptance of a resignation shall not be necessary to make it effective, unless expressly so provided in the resignation.

7.6 Removal. Any officer designated by the Manager may be removed by the Manager with or without cause. Designation of an officer or agent shall not of itself create contract rights or rights to employment.

7.7 Compensation. The salaries or other compensation, if any, of the officers and agents of the Company shall be fixed at any time and from time to time by the Manager.

7.8 Conflicts of Interest. The Company may transact business with any officer or any Affiliate of any officer so long as the terms of those transactions are not unfair to the Company. This provision shall not be construed to relieve an officer of the responsibility to act in the best interests of the Company.

7.9 Liability to Third Parties. To the fullest extent permitted by law, no officer of the Company shall be liable for the debts, obligations, or liabilities of the Company, including under a judgment, decree, or order of a court.

ARTICLE 8.
INDEMNIFICATION

8.1 RIGHT TO INDEMNIFICATION. EACH COVERED PERSON WHO WAS, IS, OR IS THREATENED TO BE MADE A NAMED DEFENDANT OR RESPONDENT IN A PROCEEDING BY REASON OF THE FACT THAT SUCH PERSON (OR ANOTHER PERSON OF WHICH SUCH FIRST PERSON IS THE LEGAL REPRESENTATIVE) IS OR WAS A COVERED PERSON SHALL BE INDEMNIFIED BY THE COMPANY TO THE FULLEST EXTENT PERMITTED BY THE CONCEPTS CONTAINED IN THE TBOC (with the terms therein to be interpreted in the context of a limited liability company); provided, however, no such Person shall be indemnified with respect to any action that arises as a result of an act or omission by such Person that (i) constitutes bad faith, active and deliberate fraud, dishonesty, willful neglect, willful misconduct, or gross negligence, (ii) is outside the scope of authority of the Person under this Agreement, (iii) results in such Person or any of such Person's Affiliates actually and knowingly receiving an improper benefit in money, property, or services, (iv) is criminal if such Person had reasonable cause to believe that such act or omission was criminal, or (v) is a material breach of any of the obligations of such Person under this Agreement (other than the obligations to make a Capital Contribution); provided, further, however, that no Covered Person nor any of its Affiliates will lose the right to be indemnified under the foregoing clause with respect to any act or omission on its part that was based upon the advice of counsel, or other expert, professional, or other Person on which it is commercially reasonable to rely if the Person reasonably believed it was entitled to rely on such advice. IT IS EXPRESSLY ACKNOWLEDGED THAT THE INDEMNIFICATION PROVIDED IN THIS ARTICLE 8 COULD INVOLVE INDEMNIFICATION FOR NEGLIGENCE AND UNDER THEORIES OF STRICT LIABILITY.

8.2 Advance Payment. The right to indemnification conferred in this Article 8 shall include the right to be paid or reimbursed by the Company the reasonable expenses incurred by a Person of the type entitled to be indemnified under Section 8.1 who was, is, or is threatened to be made a named defendant or respondent in a Proceeding in advance of the final disposition of the Proceeding and without any determination as to the Person's ultimate entitlement to indemnification; provided, however, that the payment of such expenses incurred by any such Person in advance of the final disposition of a Proceeding shall be made only upon delivery to the Company of a written affirmation by such Person of its good faith belief that such Person has met the standard of conduct necessary for indemnification under this Article 8 and a written undertaking, by or on behalf of such Person, to repay all amounts so advanced if it shall ultimately be determined that such Person is not entitled to be indemnified under this Article 8 or otherwise. If a claim for indemnification or advancement of expenses hereunder is not paid in full by the Company within ninety (90) days after a written claim has been received by the Company, the claimant may at any time thereafter bring suit against the Company to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be entitled to be paid also the expenses of prosecuting such claim.

8.3 Defense to Payment. It shall be a defense to any such action that such indemnification or advancement of costs of defense under this Article 8 is not permitted under the TBOC, but the burden of proving such defense shall be on the Company. Neither (a) the failure of the Company and the Manager, arbitrator(s), special legal counsel, and Members to have made its determination prior to the commencement of such action that indemnification of, or advancement of costs of defense to, the claimant is permissible in the circumstances nor (b) an actual determination by the Company (acting through its Manager or any committee thereof, arbitrator(s), special legal counsel, or Members) that such indemnification or advancement is not permissible shall be a defense to the action or create a presumption that such indemnification or advancement is not permissible under this Article 8.

8.4 Rights Continue After Death. In the event of the death of any Person having a right of indemnification or advancement of costs of defense under the provisions of this Article 8, such right shall inure to the benefit of such Person's heirs, executors, administrators, and personal representatives.

8.5 Indemnification of Officers, Employees, and Agents. The Company, by adoption of a resolution of the Manager, shall indemnify and advance expenses to an officer, employee, or agent of the Company to the same extent and subject to the same conditions under which it may indemnify and advance expenses to Manager under this Article 8; and the Company may indemnify and advance expenses to Persons who are not or were not Managers, officers, employees, or agents of the Company but who are or were serving at the request of the Company as a manager, director, officer, partner, venturer, proprietor, trustee, employee, agent, or similar functionary of another foreign or domestic Person against any liability asserted against such Person and incurred by such Person in such a capacity or arising out of such Person's status as such to the same extent that it may indemnify and advance expenses to the Manager under this Article 8.

8.6 Appearance as a Witness. Notwithstanding any other provision (of this Article 8, the Company may pay or reimburse expenses incurred by a Manager or an officer in connection with such Manager's or officer's appearance (due to the Manager's or officer's status as such) as a witness or other participation in a Proceeding at a time when such Manager or officer, as the case may be, is not a named defendant or respondent in the Proceeding.

8.7 Nonexclusivity of Rights. The right to indemnification and the advancement and payment of expenses conferred in this Article 8 shall not be exclusive of any other right which the Manager or another Person indemnified pursuant to this Article 8 may have or hereafter acquire under any law (common or statutory), provision of the Certificate of Formation or this Agreement, vote of Members, vote of the Manager, or otherwise.

8.8 Insurance. The Company may purchase and maintain insurance, at its expense, to protect itself and any Person who is or was serving as a Manager, officer, employee, or agent of the Company or is or was serving at the request of the Company as a manager, director, officer, partner, venturer, proprietor, trustee, employee, agent, or similar functionary of another foreign or domestic Person against any expense, liability, or loss, whether or not the Company would have the power to indemnify such Person against such expense, liability, or loss under this Article 8.

8.9 Member Notification. To the extent required by law, any indemnification of or advancement of expenses to the Manager in accordance with this Article 8 shall be reported in writing to the Members with or before the notice or waiver of notice of the next Members' meeting or with or before the next submission to Members of a consent to action without a meeting and, in any case, within the twelve-month period immediately following the date of the indemnification or advance.

8.10 Savings Clause. If this Article 8 or any portion shall be invalidated on any ground by any court of competent jurisdiction, then the Company shall nevertheless indemnify and hold harmless each Manager or any other Person indemnified pursuant to this Article 8 as to costs, charges, and expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement with respect to any action, suit, or Proceeding, whether civil, criminal, administrative, or investigative to the full extent permitted by any applicable portion of this Article 8 that shall not have been invalidated and to the fullest extent permitted by applicable law.

8.11 Nature of Rights. Each right under this Article 8 shall be a contract right and as such shall run to the benefit of any Manager who is elected and accepts the position of Manager of the Compal or elects to continue to serve as a Manager of the Company while this Article 8 is in effect. Any repeal or amendment of this Article 8 shall be prospective only and shall not limit the rights of any such Manager or the obligations of the Company with respect to any claim arising from or related to the services of such Manager in any of the foregoing capacities prior to any such repeal or amendment of this Article 8.

8.12 Waiver of Members' Fiduciary Duties.

(a) No Member, in its capacity as a Member, shall have any fiduciary or other duty to the Company, any other Member, any Manager or any other Person that is a party to or is otherwise bound by this Agreement other than the implied contractual covenant of good faith and fair dealing and other than such Member's express obligations under this Agreement, as applicable.

(b) NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, TO THE FULLEST EXTENT PERMITTED BY LAW, NO MEMBER (IN HIS, HER OR ITS CAPACITY AS A MEMBER) OR MANAGER (IN HIS, HER OR ITS CAPACITY AS& MANAGER) SHALL BE LIABLE TO THE COMPANY, TO ANY MEMBER OR TO ANY OTHER PERSON MAKING CLAIMS ON BEHALF OF THE FOREGOING FOR CONSEQUENTIAL, EXEMPLARY PUNITIVE, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES, INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF USE OR REVENUE OR LOSSES BY REASON OF COST OF CAPITAL, ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE BUSINESS OF THE COMPANY OR ANY OF ITS CONTROLLED AFFILIATES, REGARDLESS OF WHETHER SUCH CLAIMS ARE BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, VIOLATION OF ANY

APPLICABLE DECEPTIVE TRADE PRACTICES ACT OR SIMILAR LAW OR ANY OTHER LEGAL OR EQUITABLE DUTY OR PRINCIPLE, AND THE COMPANY AND EACH MEMBER HEREBY RELEASE EACH OTHER MEMBER (IN HIS, HER OR ITS CAPACITY AS A MEMBER) AND MANAGER (IN HIS, HER OR ITS CAPACITY AS A MANAGER) FOR ANY SUCH DAMAGES.

ARTICLE 9.
TAXES

9.1 Preparation of Tax Returns. Except as provided in Section 9.2, the Manager shall arrange for the preparation of all returns of Company income, gain, loss, deduction, credit, and other items necessary for federal, state, and local income tax purposes and shall use commercially reasonable efforts to cause the same to be filed in a timely manner. The Manager shall use commercially reasonable efforts to furnish to the Members a copy of each such return, together with any tax information reasonably required for federal and state income tax reporting purposes. Each Member shall furnish to the Manager all pertinent information in its possession relating to Company operations that is necessary to enable the Company's income tax returns to be prepared and filed. The Manager shall use commercially reasonable efforts to furnish to the Members, if required, within seventy-five (75) days after the end of each calendar year quarter of the Company, the tax information reasonably required for the Members to determine quarterly tax estimated payments.

9.2 Texas Franchise Tax Reporting and Liability. The Manager shall arrange for the preparation and filing of a separate Texas franchise tax return on behalf of the Company for each tax period of the Company (each a "Separate Return") and pay the amount of any tax liability reflected thereon as a Company expense. Notwithstanding the preceding sentence, if the Company is required to be included as a member of a combined group for Texas franchise tax purposes (the "Combined Group") for any applicable tax period ("Combined Report Year"), the Company shall be responsible for paying and shall indemnify any other member of the Combined Group (the "Paying Member") for any Texas franchise taxes for which the Company would have been liable for that year, computed as though the Company had filed a Separate Return for such year (such amount, the "Separate Return Tax"). The intent of this subsection is that the Company should make the Paying Member whole, without more, by reimbursing the Paying Member only to the extent of the Company's Separate Return Tax and any ambiguity in the interpretation hereof shall be resolved, with a view to effectuating such intent.

9.3 Tax Elections. The Manager shall determine whether to make any available tax election. Neither the Company, the Manager, nor any Member may make an election for the Company to be excluded from the application of the provisions of subchapter K of chapter 1 of subtitle A of the Code or any similar provisions of applicable state law,, and no provision of this Agreement (including Section 2.10) shall be construed to sanction or approve such an election.

9.4 Tax Matters Member. The Founding Member shall act as the tax matters partner of the Company (the "Tax Matters Partner") pursuant to, and for purposes of, Section 6231(a)(7) of the Codie (prior to amendment by the 2015 Act;), and, subject to this Section 9.4, shall exercise all rights, obligations and duties of a tax matters partner under the Code.

(a) The Founding Member shall act as the partnership representative of the Company (the "Partnership Representative") pursuant to Section 6223(a) of the Code (as amended by the 2015 Act) for any Post-TEFRA Period. The Founding Member is authorized to take (or cause the Company to take) such other actions as may be necessary pursuant to Treasury Regulations or other guidance to cause the Founding Member to be designated as the "partnership representative" and each Member agrees to consent to such designation to the extent requested by the Founding Member.

(b) Each Person (for purposes of this Section 9.4 called a "Pass Thru Partner") that holds or controls an interest as a Member on behalf of or for the benefit of another person or persons,, or which a Pass Thru Partner is beneficially owned (directly or indirectly) by another person or persons shall, within thirty (30) days following receipt from the Tax Matters Partner of any notice, demand, request for information or similar document, convey such notice or other document in writing to all holders of beneficial interests in the Company holding such interests through such Pass Thru Partner. In the event the Company shall be the subject of an income tax audit by any Federal (for a Post-TEFRA Period), state or local authority, to the extent the Company is treated as an entity for purposes of such audit, including administrative settlement and judicial review, the Tax Matters Partner shall be authorized to act for, and its decision shall be final and binding upon, the Company and each Member thereof. All expenses incurred in connection with any such audit, investigation, settlement or review shall be borne by the Company.

(c) The Partnership Representative shall have the right to make on behalf of the Company any and all elections and take any and all actions that are available to be made or taken by the Tax Matters Partner under the Code or by the Partnership Representative or the Company under the 2015 Act (including an election under Section 62216 of the Code, as amended by the 2015 Act and as the same may subsequently be amended), and the Members shall take such actions requested by the Partnership Representative consistent with any such elections made and actions taken by the Partnership Representative. including filing amended tax returns and paying any tax due in accordance with Section 6225(c)(2) of the Code as amended by the 2015 Act, it being understood that no such amended tax return shall be filed in accordance with such section with respect to the Company without the advance written consent of the Partnership Representative in its sole discretion. The Partnership Representative shall have the authority to amend this Agreement to make any changes in good faith consultation with the Company's tax accountants and tax counsel as are necessary or appropriate: (x) to reduce any Company level assessment under Section 6226 of the Code, as set forth in the 2015 Act, (y) to determine any apportionment of any tax, or (z) to comply with the 2015 Act and administrative, judicial or legislative interpretations thereof or changes thereto.

(d) Each Member shall provide to the Partnership Representative such information (or, if applicable, certify as to filing of initial or amended tax returns;), as is reasonably requested by the Partnership Representative to enable the Partnership Representative (i) to reduce any Company level assessment under Codie Section 6226 as amended by the 2015 Act and as the same may subsequently be amended, (ii) to determine the allocation of any item of income, gain, loss, deduction, or credit of any such Company level assessment among the Members, in good faith consultation with the Company's tax accountants and tax counsel, (iii) to elect out of the 2015 Act or (iv) to comply with or be eligible to invoke any aspect of the 2015 Act in any other respect.

(e) In the event the Company incurs any liability for taxes, interest or penalties pursuant to the 2015 Act:

(i) The Partnership Representative may cause the Members (including any former Member) to whom such liability relates, as determined by the Partnership Representative, in its sole good faith discretion, to pay, and each such Member hereby agrees to pay, such amount to the Company, and such amount shall not be treated as a Capital Contribution;

(ii) Any amount not paid by a Member (or former Member) at the time requested by Partnership Representative shall accrue interest at the rate of eight percent (8%) per annum, compounded quarterly, until paid, and such Member (or former Member) shall also be liable to the Company for any damages resulting from a delay in making such payment beyond the date such payment is requested by Partnership Representative, and for this purpose the fact that the Company could have paid this amount with other funds shall not be taken into account in determining such damages;

(iii) Without reduction in a Member's (or former Member's) obligation underclauses (i) and (ii) of this Section 9.4(e), any amount paid by the Company that is attributable to a Member (or former Member), as determined by the Partnership Representative in its reasonable good faith discretion, and that is not paid by such Member pursuant clauses (i) and (ii) of this Section 9.4(e) shall be treated for purposes of this Agreement as (y) a distribution to such Member (or former Member), and (z) a reduction to such Member's Capital Account balance; and

(iv) The Company may deduct from, and set off against, any distribution or other amount otherwise due or payable to a Member (or former Member) by the Company pursuant to this Agreement or otherwise, the payment obligations of such Member (or former Member) under clauses (i) or (ii) of this Section 9.4(e).

ARTICLE 10.
BOOKS, RECORDS, REPORTS, AND BANK ACCOUNTS

10.1 Maintenance of Books. The Company will keep or cause to be kept appropriate books and records of accounts with respect to the Company's business and minutes of the proceedings of its Members and its Manager at the principal office of the Company or other office as the Manager may designate for that purpose.

(a) The Company shall furnish to each Member, within one hundred twenty (120) days after the end of each Fiscal Year, a consolidated balance sheet of the Company and its Subsidiaries, if any, as of the end of such Fiscal Year and the related consolidated statements of income, Members' equity and cash flows for the Fiscal Year then ended, prepared in accordance with GAAP.

(b) The Company shall furnish to each Member, within seventy-five (75) days after the end of each of the first three (3) quarters of each Fiscal Year, a consolidated balance sheet of the Company and its Subsidiaries, if any, as of the end of such quarter and the related consolidated statements of income, Members' equity and cash flows for the fiscal quarter then ended, prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP).

10.2 Accounts. The Manager shall establish and maintain one or more separate bank and investment accounts and arrangements for Company funds in the Company name with financial institutions and firms that the Manager determines. The Manager may not commingle the Company's funds with the funds of any Member.

10.3 Investments. Company funds may be invested in a manner that is approved by the Manager.

10.4 Access to Books and Records. Any Member shall have the right to obtain from the Manager upon twenty (20) Business Days' prior notice to the Manager, for any proper purpose stated in such notice and related to the Member's Membership Interest, access during the Company's normal business hours to the books and records of the Company, and such books and records may be copied at the expense of the requesting Member.

10.5 Confidentiality. The Company may impose reasonable restrictions on a Member's access to the Company's books and records to the extent necessary to protect the confidentiality of proprietary information of the Company, including a requirement that a Member seeking access to proprietary information enter into a confidentiality agreement with the Company on terms that are reasonable and customary.

ARTICLE 11.
RESTRICTIONS ON CERTAIN TRANSFERS

11.1 General Prohibition on Transfers.

(a) Except for Transfers made pursuant to the provisions of this Article 11, no Person may voluntarily Transfer a Membership Interest without the prior approval of the Manager. Any Transfer or purported Transfer of a Membership Interest not made in accordance with this Article 11 is null and void.

(b) Subject always to Section 11.3 and Section 11.4, a Member may Transfer all or a portion of his, her or its Units (i) to any Affiliate, (ii) to any Person approved in writing by the Manager, (iii) to the Company, (iv) to a member of the Transferring Member's Family Group, or (v) by a pledge of the Units to or for the benefit of any lender; provided, that any Transfer permitted by this Section 11.1(b) shall not release the Member from its obligations to the Company unless such obligations are assumed by the transferee in writing to the satisfaction of the Manager.

11.2 Matters Regarding Transfers of Units.

(a) Option to Purchase Upon Operation of Law. In the event a Transfer of Units is effected (and is not void as otherwise provided in this Agreement) by operation of law, including, but not limited to, any bankruptcy proceedings, foreclosure proceedings, reorganization, or any appointment of a receiver of the assets of such Member ("Transferring Member"), the Transferring Member will send to the Company and the other Members, within five (5) days after such Transfer, notice of such Transfer ("Transfer Notice") which includes the name and address of the Transferee of such Units. Upon a Transfer pursuant to this Section 11.2(a), the Company has the right and option, but not the obligation, to purchase all or any lesser portion of the Transferred Units. Such right, if exercised, must be exercised by delivery of a written notice to the Transferring Member and the other Members within sixty (60) days after the Transfer Notice is received by the Company and the other Members. The Company may freely assign its option to purchase under this Section 11.2(a) to any Person. If the Company or its assignee fails to purchase all of the Units Transferred to the Transferee prior to the expiration of the option period, then the unpurchased Units transferred to the Transferee may be retained by the Transferee, subject to the terms and conditions of this Agreement; provided, however, that such Transferee may become a "Member," as that term is used and defined herein, only upon the consent of the Members, and such Transferee shall execute such documents as are reasonably requested by the Company to acknowledge the Transferee's obligation to be bound by the terms of this Agreement.

(b) Determination of Purchase Price. The purchase price ("Purchase Price") that the Company or any Member, as the case may be, must pay for the Units that such party purchases under Section 11.2(a) will be determined as of the last day of the month immediately preceding (i) the date of the Transfer described in Section 11.2(a) (the "Determination Date"). The Purchase Price under Section 11.2(a) shall be equal to the Fair Value of the Units being purchased. All periods for exercise of the options set forth in this Agreement will not run until any necessary appraisal (as provided in the definition of "Fair Value") has been completed.

(c) Payment of Purchase Price. The Purchase Price for any Units purchased under Section 11.2(a), may be paid by paying at least twenty percent (20%) of the total Purchase Price in immediately available funds at closing and payment of the remaining balance in equal quarterly installments over a period not exceeding ninety (90) days. All deferred obligations of the purchasers of the Units hereunder must be evidenced by a written promissory note bearing interest at the Prime Rate then in effect, which note shall be secured by the Units purchased utilizing such note.

11.3 Rights of Transferee; No Transfer of Status Rights. A Person who alleges to be a Transferee of a Membership Interest that was not Transferred in accordance with this Agreement has no rights of a Transferee, including the right to require any information or account of the Company's transactions, to inspect the Company's books, or to share in profits and losses, to receive distributions, and to receive allocations of income, gain, losses, deductions, credit, and similar items in respect of such Membership Interest. In such instance, the Company is entitled to treat the alleged transferor of a Membership Interest as the absolute owner thereof in all respects

(including with respect to the exercise of the Status Rights if it is then admitted as a Member with respect to such Membership Interest) and incurs no liability to any alleged Transferee for distributions to the Person owning such Membership Interest of record, for allocations of profit or loss, deductions, or credits to the Person owning such Membership Interest of record, or for transmittal of reports and notices required to be given to holders of Membership Interests to the Person owning such Membership Interest of record. Upon the Transfer of any or all of its Membership Interest, a Member shall continue to be a Member with respect to the Transferred Membership Interest or portion thereof and shall maintain the Status Rights associated with such Membership Interest unless and until the owner of such Membership Interest or portion thereof is admitted as a substitute Member in accordance with the provisions of Section 11.4. Unless and until the owner of a Membership Interest or any portion thereof is substituted as a Member in respect of such Membership Interest or portion thereof, ownership of a Membership Interest or any portion thereof only entitles the owner to share in profits and losses, to receive distributions, and to receive allocations of income, gain, losses, deductions, credit, and similar items in respect of such Membership Interest or portion thereof. Only the Person admitted as a Member in respect of a Membership Interest or any portion thereof has the power to exercise any rights or powers of a Member, including the Status Nights.

11.4 Substituted Members. No Transferee of a Membership Interest may become a substituted Member unless and until (a) with respect to any Transfer by a Person, the Person last admitted as a Member in respect of such Membership Interest has given the Transferee the right to such substitution; (b) (unless the Transferee is another Member) the Manager consents to such substitution; (c) the Transferee agrees in writing to become a Member bound by all of the terms and conditions of this Agreement; (d) the Transferee pays all reasonable expenses of the Company incurred in connection with the substitution and assumes all obligations of the Member for which it is to be substituted under this Agreement on terms satisfactory to the Manager; (e) the Transferee and the Member who is admitted in respect of such Transferred Membership Interest execute and deliver such instruments and agreements as counsel for the Company deems reasonably necessary or desirable to effect the substitution; (f) the Transferee delivers its written representation and warranty, on terms satisfactory to the Manager, that the representations and warranties in Section 5.7 are true and correct with respect to it; and (g) the Transferee provides evidence to the Manager of compliance with all other requirements of the TBOC and all state and federal securities laws, rules, and regulations. Upon admission of a substitute Member, that substitute Member shall automatically be vested with the Status Rights related to the Membership Interest in respect of which such Member is admitted and Exhibit A shall be, and shall be deemed to be, automatically amended to reflect such substitution, including any change in the identity and/or address of any or all of the Members resulting from such admission. Each Manager is hereby authorized to execute any amendments to this Agreement and to substitute a new Exhibit A (indicating the effective date) to reflect such substitution and such changes.

ARTICLE 12.
DISSOLUTION

12.1 Dissolution. The Company shall dissolve and its affairs shall be wound up on the first to occur of the following:

(a) the written consent of the Manager; and

(b) entry of a decree of judicial dissolution of the Company under Section 11.051(5) of the TBOC.

The retirement, resignation, expulsion, or bankruptcy of a Member, or the occurrence of any other event that terminates the continued membership of a Member in the Company (including by reason of a Transfer by a Member of its Membership Interest and the admission of a substitute Member in place of such first Member), shall not cause a dissolution of the Company.

12.2 Mechanics.

(a) Upon dissolution of the Company, the business and affairs of the Company shall terminate, and the assets of the Company shall be liquidated under this Article 12.

(b) Dissolution of the Company shall be effective as of the day on which the event occurs giving rise to the dissolution, but the Company shall not terminate until there has been a winding up of the Company's business and affairs, and the assets of the Company have been distributed as provided in Section 12.3.

(c) Upon dissolution of the Company, the Manager may cause any part or all of the assets of the Company to be sold in such manner as the Manager shall determine in an effort to obtain the best prices for such assets; provided, however that the Manager may distribute assets of the Company in kind to the Members to the extent practicable.

12.3 Distribution of Assets Upon Dissolution. In settling accounts after dissolution, the assets of the Company shall be paid in the following order:

(a) First, to creditors, in the order of priority as provided by applicable law, except those to Members of the Company on account of their Capital Contributions; and

(b) Second, to the Members in accordance with the then-applicable paragraph ofSection 4.1.

12.4 Distributions in Kind. If any assets of the Company are distributed in kind, such assets shall be distributed to the Members entitled thereto as tenants-in-common in the same proportions as the Members would have been entitled to cash distributions if such property had been sold for cash and the net proceeds thereof distributed to the Members. In the event that distributions in kind are made to the Members upon dissolution and liquidation of the Company, the Capital Account balances of such Members (as determined for purposes of IRS Regulation section 1.704-l(b)(2)(iv)) shall be adjusted to reflect the Members' allocable share of gain or loss which would have resulted if the distributed property had been sold at its fair market value.

12.5 Certificate of Termination. When all liabilities and obligations of the Company have been paid or discharged, or adequate provision has been made therefor, and all of the remaining property and assets of the Company have been distributed to the Members according to their respective rights and interests, a Certificate of Termination shall be executed on behalf of the Company by the Manager or an authorized Member and shall be filed with the Secretary of State of Texas, and the Manager and Members shall execute, acknowledge and file any and all other instruments necessary or appropriate to reflect the dissolution and termination of the Company.

ARTICLE 13.
GENERAL PROVISIONS

13.1 No Restrictions on the Company or Manager. Except as otherwise provided for in this Agreement or as expressly agreed by the Company, a Required Interest of the Members and the Manager in writing, nothing in this Agreement and/or any other agreement or relationship between a Member, on the one hand, and the Company and/or the Manager, on the other hand, will create or be construed or interpreted to create or imply any restriction on the ability of the Manager to take any and all action that it deems appropriate with respect to the Membership Interests, including selling or not selling Membership Interests, acquiring or not acquiring additional Membership Interests, or acquiring or not acquiring Membership Interests from any Member. Except as otherwise provided for in this Agreement or as expressly agreed by the Company, a Required Interest of the Members and the Manager in writing, nothing in this Agreement and/or any other agreement or relationship between a Member, on the one hand, and the Company and/or the Manager, on the other hand, will create or be interpreted to create or imply any requirement that the Manager take any action, including making capital contributions or loans to the Company.

13.2 Offset. If a Person (including any Member) has any outstanding obligation to pay money to the Company at a time that the Company or any Member is required to make any payment or distribution to the obligated Person, the Company may deduct the amount of the liability from its payment or distribution to the obligated Person and any Member may fulfill its requirement to make a payment to the obligated Person by paying the amount of the obligated Person's liability to the Company instead of to the Person.

13.3 Notices. Except as expressly set forth to the contrary in this Agreement, all notices, requests, demands, and other communications hereunder must be in writing and must be personally delivered or delivered by facsimile, U.S. mail, certified mail, return receipt requested, postage prepaid, or courier service, if to a Member, to the address for such Member set forth an Exhibit A or, if to the Company or to a Manager, at the address for the Company or such Manager, as applicable. Each such notice, request, demand, or other communication will be deemed to have been given and received (whether actually received or not) on the date of actual delivery thereof if personally delivered, three days after deposit in the U.S. mail sent certified mail, return receipt requested, postage prepaid, or on the day specified to the courier service for delivery (if the day is one on which the courier service will give normal assurances that the specified delivery will be made). Any notice, request, demand, or other communication given otherwise than in accordance with this Section 13.3 will be deemed to have been given and received on the date actually received. Rejection or other refusal to accept or inability to deliver because of changed address of which no notice was given shall be deemed to be actual receipt of the notice, request, demand, or other communication. Any party may change its address for purposes of this Section 13.3 by giving written notice of the change to all other parties in the manner hereinabove provided; provided, however, that any notice given to the prior address of such party will be deemed validly given if given no more than five (5) Business Days after such change notice is given.

13.4 Entire Agreement. This Agreement, including the Exhibits hereto constitutes the entire agreement of the Members and their respective Affiliates relating to the Company and supersedes all prior contracts or agreements with respect to the internal affairs of the Company, whether oral or written.

13.5 Effect of Waiver or Consent. A waiver or consent, express or implied, to or of any breach or default by any Person in the performance by that Person of its obligations with respect to the Company is not a consent or waiver to or of any other breach or default in the performance by that Person of the same or any other obligations of that Person with respect to the Company. Failure on the part of a Person to complain of any act of any Person or to declare any Person in default with respect to the Company, irrespective of how long that failure continues, does not constitute a waiver by that Person of its rights with respect to that default until the applicable statute-of-limitations period has run.

13.6 Amendment or Modification. Except to the extent this Agreement otherwise provides for a change to be effected without the approval required in this Section 13.6, this Agreement may be amended or modified at any time and from time to time only by a written instrument approved by the

13.7 Binding Effect; No Third Party Beneficiary. Each and every covenant, term, provision, and agreement herein contained will be binding upon each of the Members and their respective heirs, legal representatives, successors, and assigns and will inure to the benefit of each of the Members. Unless and until properly admitted as a Member, no Transferee will have any rights of a Member beyond those provided by the TBOC to assignees or otherwise expressly provided herein to assignees. The provisions of this Agreement, including those relating to Capital Contributions, are for the exclusive benefit of the Company. No third party shall have the right to enforce any of the provisions of this Agreement, except for Article 8.

13.8 Governing Law. THIS AGREEMENT IS GOVERNED BY AND SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, EXCLUDING ANY CONFLICT-OF-LAWS RULE OR PRINCIPLE THAT MIGHT REFER THE GOVERNANCE OR THE CONSTRUCTION OF THIS AGREEMENT TO THE LAW OF ANOTHER JURISDICTION. In the event of a direct conflict between the provisions of this Agreement and (a) any provision of the Certificate of Formation or (b) any mandatory provision of the TBOC, the applicable provision of the Certificate of Formation or the TBOC shall control.

13.9 Arbitration. Any controversy or claim arising among the Members and the Manager out of or relating to this Agreement, or the breach thereof, shall be determined by final and binding arbitration administered by the American Arbitration Association (“AAA”) under its Commercial Arbitration Rules and Mediation Procedures (“Commercial Rules”), which arbitration shall be held in Houston, Texas.

(a) There shall be three arbitrators. The parties agree that one arbitrator shall be appointed by each party within twenty (20) days of receipt by respondent of the Request for Arbitration (as such term is defined in the Commercial Rules), or in default thereof appointed by the AAA, in accordance with its Commercial Rules, and the third presiding arbitrator shall be appointed by agreement of the two party-appointed arbitrators within fourteen (14) days of the appointment of the second arbitrator or, in default of such agreement, by the AAA.

(b) The award rendered by the arbitrators shall be final,non-reviewable, non- appealable and binding on the parties and may be entered and enforced in any court having jurisdiction, and any court where a party or its assets is located (to whose jurisdiction the parties consent for the purposes of enforcing the award). The arbitrators will have no authority to award punitive or consequential damages.

(c) Except as may be required by law, neither a party nor the arbitrators may disclose the existence, content or results of any arbitration without the prior written consent of both parties, unless to protect or pursue a legal right.

13.10 Further Assurance. In connection with this Agreement and the transactions contemplated hereby, each Member and each other Person who owns a Membership Interest shall execute and deliver any additional documents and instruments and perform any additional acts that the Manager may deem necessary or appropriate to effectuate and perform the provisions of this Agreement and those transactions.

13.11 Waiver of Certain Rights. Each Member irrevocably waives any right it may have to maintain any action for dissolution of the Company or for partition of the property of the Company.

13.12 Notice to Members of Provisions of this Agreement. By executing this Agreement, each Member acknowledges that it has actual notice of (a) all of the provisions of this Agreement, including the restrictions on the transfer of Membership Interests set forth in Article 11, and (b) all of the provisions of the Certificate of Formation. Each Member and each Transferee of a Membership Interest upon receipt thereof hereby agrees that this Agreement constitutes adequate notice of all such provisions, including any notice requirement under Chapter 8 of the Uniform Commercial Code, and each Member hereby waives any requirement that any further notice thereunder be given.

13.13 Counterparts. This Agreement may be executed in any number of counterparts and shall be effective when each party hereto has executed at least one counterpart:, with the same effect as if all signing parties had signed the same document. All counterparts will be construed together and evidence only one agreement:.

13.14 Execution by Facsimile. The manual signature of any party hereto that is transmitted to any other party by facsimile or other electronic means shall be deemed for all purposes to be an original signature.

13.15 Invalid Provisions. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws effective during the term of this Agreement, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a part of this Agreement, and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of each such illegal, invalid, or unenforceable provision, there shall be added automatically as a part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

13.16 Attorneys' Fees. If any action is brought to enforce or interpret the terms of this Agreement (including through arbitration), the prevailing party will be entitled to its reasonable legal fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.

13.17 Non-Waiver; Rights are Cumulative. Neither a failure of a party to this Agreement to exercise any power reserved to it in this Agreement or any ancillary agreement or to insist upon compliance by any other party hereto with any obligation or condition in this Agreement or any ancillary agreement nor any custom or practice of the parties at variance with the terms hereof or any ancillary agreement shall constitute a waiver of such first party's rights to demand exact compliance with the terms of this Agreement or such ancillary agreement. Waiver by a party to this Agreement of any particular default shall not affect or impair such party's right with respect to any subsequent default of the same or of a different nature; nor shall any delay, forbearance, or omission of such party to exercise any power or right arising out of any breach or default by any other party hereto of any of the terms, provisions, or covenants of this Agreement or under any ancillary agreement affect or impair such first party's rights; nor shall such delay, forbearance, or omission constitute a waiver by such first party of any rights hereunder or under any ancillary agreement or rights to declare any subsequent breach or default.

13.18 Representation by Greenberg Traurig, LLP. The Members consent to Founding Member's retention of Greenberg Traurig, LLP to represent the Founding Member. The Members other than the Founding Member further acknowledge and consent that Greenberg Traurig, LLP has represented the Founding Member in connection with the negotiation of this Agreement and represents only the Founding Member, and not any other Member, in connection with the negotiation of this Agreement. The Members other than the Founding Member acknowledge and consent that if Greenberg Traurig, LLP receives information from or about them that it believes the Founding Member should have in order to make decisions regarding the negotiation of this Agreement. Greenberg Traurig, LLP will have the right to share that information with the Founding Member. In representing the Founding Member, Greenberg Traurig, LLP will follow the directions of the Founding Member and will not be responsible for looking out for the interests of any other Member or notifying the Members other than the Founding Member of any decisions that might negatively affect the interests of such Members. The Members other than the Founding Member further acknowledge that they are represented by separate counsel with regard to their individual Units or, if not, have chosen to forego such representation without reliance on Greenberg Traurig, LLP.

13.19 Limits on Claims. Pursuant to the Texas Securities Act, Art. 581-1 et seq. (the "Texas Securities Act"), the liability under the Texas Securities Act of a lawyer, accountant, consultant, the firm of any of the foregoing, and any other Person engaged to provide services relating to an offering of securities of the Company (such Persons, "Service Providers") is limited to a maximum of three times the fee paid by the Company or seller of the Company's securities to the Service Provider for the services related to the offering of the Company's securities, unless the trier of fact finds that such Service Provider engaged in intentional wrongdoing in providing the services. By signing below, each Member hereby acknowledges the disclosure provided in this paragraph.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the undersigned Members have executed this Agreement effective as of the date first written above.

COMPANY:

ATLAS SAND MANAGEMENT COMPANY, LLC

By: /s/ Ben M. Brigham
Name: Ben M. Brigham
Title: Manager

FOUNDING MEMBER:

/s/ Ben M. Brigham
Ben Brigham

EXHIBIT A

MEMBER INFORMATION
(AS OF THE EFFECTIVE DATE)

[Intentionally Omitted.]

EXHIBIT A

EXHIBIT B

LONG TERM INCENTIVE PLAN

[Intentionally Omitted.]

EXHIBIT C

CLASS B UNITS AND CLASS P UNITS
ALLOCATION OF DISTRIBUTIONS

	B Units	P Units	P Units	Hurdle Threshold	Both Are Required	
					IRR	ROI
Until 1st Hurdle Threshold	100%	0%		First	NA	1.0 to 1.0
Until 2nd Hurdle Threshold	80%	20%		Second	20.00%	2.0 to 1.0
Until 3rd Hurdle Threshold	70%	30%		Third	30%	3.0 to 1.0
Until 4th Hurdle Threshold	60%	40%		Fourth	40%	4.0 to 1.0
Until 5th Hurdle Threshold	50%	50%		Fifth	50%	5.0 to 1.0
Thereafter	50%	50%				

Exhibit 10.10

ATLAS SAND COMPANY, LLC

LONG TERM INCENTIVE PLAN

(Amended and Restated Effective January 30, 2018)

1. Purposes of the Plan. This Atlas Sand Long Term Incentive Plan (the "Plan") has been adopted by Atlas Sand Management Company, LLC, a Texas limited liability company (the "Atlas Member"), and by Champion Lone Star, LLC, a Texas limited liability company (the "Champion Member"), CamCol Consultants, LLC, a Texas limited liability company ("CamCol"), Christopher P. Liles ("Liles"), Michael Jobe ("Jobe"), Kermit Royalty, LLC, a Texas limited liability company ("Kermit"), Harold J. Rasmussen ("Rasmussen" and together with the Champion Member, CamCol, Liles, Jobe, Kermit, collectively, the "Champion Group,"), and Permian Dunes Holding Company, LLC, a Texas limited liability company ("Permian Dunes", and together with the Champion Group the Atlas Member, collectively, the "Members"), the Atlas Member, the Champion Group, and Permian Dunes being all of the Members of Atlas Sand Company, LLC, a Delaware limited liability company (the "Company"). The Plan is intended to promote the interests of the Company by providing equity awards of Class P Units to Participants to encourage superior performance. The Plan is also contemplated to enhance the ability of the Company and the Managers to attract and retain the services of individuals who are essential for the growth and profitability of the Company and to encourage them to devote their best efforts to advancing the business of the Company.

2. Definitions. Whenever the following terms are used in the Plan, they shall have the meaning specified below unless the context clearly indicates to the contrary. The masculine pronoun shall include the feminine and neuter and the singular shall include the plural, where the context so indicates.

(a) "Administrator" means the Atlas Member of the Company, who is granted authority to administer the Plan under Section 4 hereof.

(b) "Affiliate" means, as to any Person, any other Person that directly or indirectly, through one or more intermediaries controls, is controlled by, or is under common control with such specified Person. For the purposes of this Agreement, "control," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract, or otherwise; and the terms "affiliated," "controlling," and "controlled" have meanings correlative to the foregoing.

(c) "Applicable Laws" means the requirements relating to the administration of incentive plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code and the applicable laws of any other country or jurisdiction where Class P Units are granted under the Plan.

(d) "Atlas Member" has the meaning set forth in Section 1 hereof.

(e) "Cam Col" has the meaning set forth in Section 1 hereof.

(f) "Capital Event" means (i) when the Company, through a transaction or a series of related transactions becomes a publicly traded entity or (ii) the sale of all or substantially all of the assets or equity of the Company to an unaffiliated Person.

(g) "Champion Group" has the meaning set forth in Section 1 hereof.

(h) "Champion Member" has the meaning set forth in Section 1 hereof.

(i) "Class P Unit" means a Class P Unit issued under this Plan, which is subject to restrictions set forth in that certain Third Amended and Restated Limited Liability Company Agreement of Atlas Sand Company, LLC, dated on or about the date hereof (the "Company Agreement") and the Participant Agreement.

(j) "Company" has the meaning set forth in Section 1 hereof.

(k) "Company Agreement" has the meaning set forth in Section 2(i) hereof.

(l) "Code" shall mean the Internal Revenue Code of 1986, as amended, or any successor thereto.

(m) "Effective Date" means the date on which the Members adopt the Plan.

(n) "Jobe" has the meaning set forth in Section 1 hereof.

(o) "Kermit" has the meaning set forth in Section 1 hereof.

(p) "Liles" has the meaning set forth in Section 1 hereof.

(q) "Participant" means any of the following who are granted Class P Units under the Plan: officers, employees, directors, Managers, consultants, or other advisors of the Company or the Managers. Notwithstanding the foregoing, consultants and advisors of the Company or the Managers shall not be Participants unless (i) they are natural persons, (ii) they provide bona fide services to the Company or the Managers, and (iii) the services are not in connection with the offer or sale of securities in a capital-raising transaction, and do not directly or indirectly promote or maintain a market for the Company's securities.

(r) "Participant Agreement" shall mean the agreement entered into between the Company and a Participant pursuant to which the Participant is granted Class P Units and which sets forth the terms and conditions applicable to the Class P Units.

(s) "Permian Dunes" has the meaning set forth in Section 1 hereof.

(t) "Person" includes any individual, partnership, limited partnership, joint venture, corporation, limited liability company, trust, estate, custodian, trustee, executor, administrator, nominee, representative, unincorporated organization, sole proprietorship, trust, employee benefit plan, tribunal, governmental entity, department, agency, or other entity.

(u) "Plan" has the meaning set forth in Section 1 hereof.

(v) "Rasmussen" has the meaning set forth in Section 1 hereof.

(w) "Restricted Activity" shall be deemed to have occurred if a Participant, individually, or on behalf of another Person, either directly or indirectly: (i) owns, operates, manages, finances, supervises, is employed by, provides consulting services to, or is otherwise engaged in a Restricted Business within the Restricted Area, (ii) solicits, induces, recruits or encourages any employee or contractor of the Company or any of its Affiliates or Subsidiaries to terminate their employment or engagement with the Company or the applicable Affiliate or Subsidiary of the Company, or hire or take away such employees or contractors, or attempt to solicit, induce, recruit, encourage, hire or take away employees or contractors of the Company or its Affiliates or Subsidiaries, either for the benefit of such Participant or for any other Person, (iii) engages in any act of dishonesty, fraud, theft, misrepresentation, misappropriation or embezzlement or other similar conduct by the Participant with respect to any aspect of the business or assets of the Company or any of its Affiliates, (iv) breaches or violates any covenant in any agreement or obligation in favor of the Company or any of its Affiliates to which Participant is a party or is subject that imposes restrictions or requirements with respect to (A) Participant's use or disclosure of confidential or proprietary information of the Company, or (B) the Participant's assignment of inventions or other intellectual property rights to the Company or any of its Affiliates, and/or (v) violates a law or regulation that is applicable to the Company's business, which violation, in the reasonable discretion of the Administrator, does or is reasonably likely to be materially injurious to the Company or any of its Affiliates. Notwithstanding the foregoing, nothing in this Plan shall be construed to restrict or prohibit ownership by a Participant of stock of any company listed on the New York or American Stock Exchanges or the Nasdaq National Market System; *provided*, that such Participant's aggregate ownership interest is not more than five percent (5%) or more of the outstanding voting shares of such company.

(x) "Restricted Area" means the area where the Company now or will operate, including Winkler County, Texas, Ward County, Texas, Crane County, Texas, and Andrews County, Texas.

(y) "Restricted Business" means, directly or indirectly, through the ownership of subsidiary entities, acquiring, processing, developing, and marketing frac sands.

(z) "Subsidiary" means an entity in which the Company directly or indirectly owns at least a majority of the equity.

(aa) "Terminated Participant" means any Participant with respect to which a Termination Event has occurred.

(bb) "Termination Date" means the date on which a Termination Event has occurred.

(cc) "Termination Event" means the termination for any reason of Participant's employment, agency, or consulting relationship (unless the relationship merely changes from employee or agent to consultant, or vice versa) with the Company or an Affiliate or Subsidiary of the Company, or a successor to the Company in the event that this Plan is assumed by a successor to the Company.

(dd) "Unvested Class P Unit" has the meaning given such term in Section 10(a).

(ee) "Vested Class P Unit" has the meaning given such term in Section 10(a).

3. Units Authorized to be Issued Under the Plan The maximum aggregate amount of Class P Units authorized to be issued under the Plan is 149,425. Notwithstanding the number Class P Units issued under the Plan, the Class P Units shall be entitled to receive no more than 13% of the profits of the Company except as otherwise expressly provided in the Company Agreement. The issuance of Class P Units shall reduce the total number of Class P Units available under the Plan. Any Class P Units canceled or repurchased by the Company under the Plan, a Participant Agreement, or the Company Agreement shall resume the status of authorized and unissued Class P Units under the Plan. All Class P Units issued under the Plan shall be subject to the terms of the Company Agreement and the Company Agreement under which they were granted.

4. Administration of the Plan.

(a) Administrator. The Plan shall be administrated by the Atlas Member of the Company.

(b) Powers of the Administrator. Subject to the provisions of the Plan and to the approval of any relevant authorities, the Administrator shall have the full power and authority to:

(i) designate Participants to whom Class P Units may from time to time be granted hereunder;

(ii) determine the number of Class P Units to be covered by each such award granted hereunder;

(iii) approve forms of Participant Agreement for use under the Plan;

(iv) determine the terms and conditions of any grant of Class P Units hereunder, including without limitation the vesting schedule for such grant;

(v) interpret and administer the Plan and any instrument or agreement relating to the grant of Class P Units made under the Plan;

(vi) establish, amend, suspend or waive such rules and regulations and appoint such agents as it shall deem appropriate for the proper administration of the Plan; and

(vii) make any other determination and take any other action that the Administrator deems necessary or desirable for the administration of the Plan.

(c) Effect of Administrator's Decision. The Administrator may correct any defect or supply any omission or reconcile any inconsistency in the Plan and any Participant Agreement in such manner and to such extent as the Administrator deems necessary or appropriate in its sole discretion. Unless otherwise expressly provided in the Plan, all designations, determinations, interpretations and other decisions of the Administrator under or with respect to the Plan or any award hereunder shall be within the sole discretion of the Administrator and shall be final and binding on all Participants.

(d) Limitation of Liability; Indemnification. The Administrator shall be free from all liability for the Administrator's acts and conduct in the administration of the Plan and the Participant Agreements except for acts of gross negligence, fraud or willful misconduct. All managers, directors, and officers of the Administrator, each manager and officer of the Company, and each employee of the Company acting on behalf of the Administrator shall, to the extent permitted by law, be fully indemnified and protected by the Company in respect of any such action, determination, or interpretation.

5. Eligibility. Any Participant may be granted Class P Units under the Plan.

6. Term of Plan. The Plan shall be effective on the date of its approval by the Members and shall continue until no Class P Units are outstanding, whereupon the Plan may be terminated by the Managers. No such termination of the Plan shall impair the rights of any Participant under any Participant Agreement, unless expressly permitted in the Plan or such Participant's Participant Agreement or as mutually agreed to between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it under the Plan and the Participant Agreements with respect to Class P Units granted under the Plan prior to the date of such termination.

7. Grant of Class P Units.

(a) Authorization to Grant Class P Units. Grants of Class P Units shall be made by the Administrator pursuant to the terms and conditions of the Participant Agreement as set forth in Section 7(b).

(b) Participant Agreement. The Administrator shall require a Participant to whom Class P Units are granted pursuant to the Plan to enter into a written Participant Agreement with the Company, which shall be executed by such Participant and on behalf of the Company and which shall contain such terms and conditions as the Administrator shall determine, consistent with the Plan.

8. Non-Transferability of Class P Units. Class P Units may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than as provided for in the Participant Agreement. Unvested Class P Units may not be sold, pledged, assigned, hypothecated or disposed of in any manner and any such purported sale, pledge, assignment, hypothecation or other disposal shall be void.

9. Time of Granting Class P Units. The date of grant of Class P Units shall, for all purposes, be the date on which the Administrator makes the determination granting such Class P Units, or such later date as is determined by the Administrator. Notice of the determination shall be given to each Participant to whom Class P Units are granted within a reasonable time after the date of such grant.

10. Vesting; Termination Event.

(a) Vesting of Class P Units. The vesting schedule for each grant of Class P Units under the Plan shall be determined by the Administrator and set forth in the related Participant Agreement. All of a Participant's Class P Units that have vested pursuant to the Participant Agreement of such Participant are referred to herein as "Vested Class P Units" and all of a Participant's Class P Units that have not yet vested pursuant to the Participant Agreement of such Participant are referred to herein as "Unvested Class P Units."

(b) Effects of Termination Event. Except as otherwise provided in a Participant Agreement, if a Termination Event occurs, (i) then all of such Terminated Participant's Class P Units that are Unvested Class P Units will be automatically and immediately cancelled without further action and (ii) the Company will automatically have the right, but not the obligation, to purchase all or any portion of such Terminated Participant's Class P Units that are Vested Class P Units pursuant to the terms and conditions of the Company Agreement. Company may freely assign its option to purchase under this Section 10(b) to any Person. Any and all Class P Units that are cancelled and/or repurchased by the Company pursuant to thisSection 10(b) shall automatically be deemed retired and shall no longer be deemed to be issued or outstanding; *provided*, *however* that such Class P Units that are cancelled and/or repurchased by the Company pursuant to this Section 10(b) shall be available for re-issuance under the Plan.

(c) Restricted Activity Cancellation Rights. If a Participant engages in a Restricted Activity, whether before the termination of such Participant's services or at any time on or before the expiration of one (1) year after the occurrence of a Termination Event, then all of such Participant's Vested Class P Units that have not previously been purchased by the Company and/or the other Member pursuant to Section 10(b) may in the sole discretion of the Administrator be cancelled upon written notice to such Participant without the payment of any money to such Participant. Any and all such cancelled Class P Units shall automatically be deemed retired and shall no longer be deemed to be issued or outstanding; *provided*, *however* that such cancelled Class P Units shall be available for re-issuance under the Plan.

11. Amendment and Termination of Plan; Adjustments; Capital Events.

(a) Amendment and Termination. Subject to Section 6, the Administrator may amend, alter, suspend or terminate the Plan in any manner, including increasing or decreasing the number of Class P Units available for grant under the Plan, without the consent of any member, Participant or any other Person.

(b) Effect of Amendment or Termination. Notwithstanding the foregoing, no amendment, alteration, suspension or termination of the Plan shall be made, without the consent of a Participant, if such action would diminish any of the rights of the Participant under any grant theretofore made to such Participant under the Plan. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Class P Units granted under the Plan prior to the date of such termination.

(c) Amendments related to 409A. Notwithstanding any provision of the Plan or any Participant Agreement to the contrary, in the event that the Administrator determines that any amounts payable hereunder will be taxable to a Participant under Section 409A of the Code and related Department of Treasury guidance prior to payment to such Participant of such amount, the Company may (i) adopt such amendments to the Plan and the rights relating to Class P Units and appropriate policies and procedures, including amendments and policies with retroactive effect, that the Administrator determines necessary or appropriate to preserve the intended tax treatment of the benefits provided by the Plan and the rights relating to Class P Units hereunder and/or (ii) take such other actions as the Administrator determines necessary or appropriate to avoid the imposition of an additional tax under Section 409A of the Code.

(d) Adjustments. In the event that any recapitalization, reorganization, merger, consolidation,split-up, spin-off, combination, repurchase, or exchange of interests or other securities of the Company, or other change in the corporate structure of the Company affecting the Class P Units occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, may in its sole discretion adjust the number and class of units that may be delivered under the Plan and/or the number and class of units covered by each outstanding Participant Agreement.

(e) Capital Event. Subject to the applicable requirements of Section 409A of the Code and the regulations or other guidance issued thereunder, in the event that the Company undergoes a Capital Event, then immediately prior to the occurrence of the Capital Event, all outstanding Class P Units, whether vested or unvested, shall, for the purposes of the Capital Event, be deemed to be Vested Class P Units.

12. Conditions Upon Issuance of Class P Units.

(a) Legal Compliance. Class P Units shall not be issued unless the issuance and delivery of such Class P Units shall comply with Applicable Laws.

(b) Investment Representations. As a condition to the granting of Class P Units, the Administrator may require the Participant being granted such Class P Units to represent and warrant at the time of any such grant that the Class P Units are being purchased only for investment and without any present intention to sell or distribute such Class P Units if, in the opinion of counsel for the Company, such a representation is required.

13. No Right to Employment or Class P Units. The granting of Class P Units under the Plan shall impose no obligation on the Company or any Affiliate or Subsidiary to continue the employment of a Participant and shall not lessen or affect the Company's, Affiliate's or Subsidiary's right to terminate the employment of such Participant. No Participant or other Person shall have any claim to be granted Class P Units, and there is no obligation for uniformity of treatment of Participants, or holders or beneficiaries of Class P Units. The terms and conditions of Class P Units and the Administrator's determinations and interpretations with respect thereto need not be the same with respect to each Participant (whether or not such Participants are similarly situated).

14. Indemnification of the Managers of the Company. The Administrator shall not be personally liable for any action, determination, or interpretation taken or made in good faith with respect to the Plan, and the Administrator shall, to the extent permitted by law, be fully indemnified and protected by the Company in respect of any such action, determination, or interpretation.

15. Section 409A. To the extent applicable, this Plan and the Class P Units issued hereunder shall be interpreted in accordance with Section 409A of the Code and Department of Treasury regulations and other interpretative guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding other provisions of the Plan or any Participant Agreements thereunder, no rights with respect to Class P Units shall be granted, deferred, accelerated, extended, paid out or modified under this Plan in a manner that would result in the imposition of an additional tax under Section 409A of the Code upon a Participant. In the event that it is reasonably determined by the Administrator that, as a result of Section 409A of the Code, payments in respect of any rights with respect to Class P Units under the Plan may not be made at the time contemplated by the terms of the Plan or the relevant Participant Agreement, as the case may be, without causing the Participant holding such Class P Units to be subject to taxation under Section 409A of the Code, the Company may take whatever actions the Administrator determines necessary or appropriate to comply with, or exempt the Plan and the Participant Agreement from the requirements of Section 409A of the Code and related Department of Treasury guidance and other interpretive materials as may be issued after the Effective Date, which action may include, but is not limited to, delaying payment to a Participant who is a "specified employee" within the meaning of Section 409A of the Code until the first day following the six-month period beginning on the date of the Participant's termination of employment or engagement with the Company. The Company shall use commercially reasonable efforts to implement the provisions of this Section 15 in good faith; *provided* that neither the Company, the Administrator nor any employee, director or representative of the Company, the Administrator or of any of its Subsidiaries shall have any liability to Participants with respect to any actions taken pursuant to this Section 15 or as a result of application of Section 409A to any Participant with respect to Class P Units granted under the Plan.

16. General Provisions.

(a) Effectiveness of the Plan. The Plan shall be effective as of the Effective Date.

(b) Successors and Assigns. Subject to Section 8 hereof, the Plan will be binding on all successors and assigns of the Company and a Participant, including without limitation, the estate of such Participant and the executor, administrator or trustee of such estate, or any receiver or trustee in bankruptcy or representative of the Participant's creditors.

(c) Choice of Law. The Plan shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to its conflicts of laws principles.

(d) Headings. Headings are given to the Sections and subsections of the Plan solely as a convenience to facilitate reference. Such headings shall not be deemed in any way material or relevant to the construction or interpretation of the Plan or any provision thereof.

* * * *

Exhibit 10.11

LONG TERM INCENTIVE PLAN

1. Purposes of the Plan. This Atlas Sand Management Long Term Incentive Plan (the "***Plan***") has been adopted by Ben M. Brigham, the Manager and Founding Member of Atlas Sand Management Company, LLC, a Texas limited liability company (the "***Company***"). The Plan is intended to promote the interests of the Company by providing equity awards of Class P Units to Participants to encourage superior performance. The Plan is also contemplated to enhance the ability of the Company and the Manager to attract and retain the services of individuals who are essential for the growth and profitability of the Company and its Subsidiaries and to encourage them to devote their best efforts to advancing the business of the Company and its Subsidiaries.

2. Definitions. Whenever the following terms are used in the Plan, they shall have the meaning specified below unless the context clearly indicates to the contrary. The masculine pronoun shall include the feminine and neuter and the singular shall include the plural, where the context so indicates. Terms used but not otherwise defined in the Plan shall have the meaning given to them in the Company Agreement.

(a) "*Administrator*" means the Manager of the Company, who is granted authority to administer the Plan under Section 4 hereof.

(b) "*Affiliate*" means, as to any Person, any other Person that directly or indirectly, through one or more intermediaries controls, is controlled by, or is under common control with such specified Person. For the purposes of this Agreement, "*control*," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by extract, or otherwise; and the terms "*affiliated*," "*controlling*," and "*controlled*" have meanings correlative to the foregoing.

(c) "*Applicable Laws*" means the requirements relating to the administration of incentive plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code and the applicable laws of any other country or jurisdiction where Class P Units are granted under the Plan.

(d) "*Capital Event*" means a sale, merger, conversion, or transfer to an unrelated Person or a change of control or similar event affecting the ownership and structure of the Company.

(e) "*Class P Unit*" means a Class P Unit issued under this Plan, which is subject to restrictions set forth in that certain Amended and Restated Company Agreement of Atlas Sand Management Company, LLC, dated as of August 4, 2017 (the "***Company Agreement***") and the Participant Agreement.

(f) "*Code*" shall mean the Internal Revenue Code of 1986, as amended, or any successor thereto.

(g) "*Company*" has the meaning set forth in Section 1 hereof.

(h) "*Company Agreement*" has the meaning set forth in Section 2(e) hereof.

(i) "*Effective Date*" means the date on which the Member adopts the Plan.

(j) "*Participant*" means any of the following who are granted Class P Units under the Plain: officers, employees, directors, Managers, consultants, or other advisors of the Company or the Manager. Notwithstanding the foregoing, consultants and advisors of the Company or the Manager shall not be Participants unless (i) they are natural persons, (ii) they provide bona fide services to the Company or the Manager, and (iii) the services are not in connection with the offer or sale of securities in a capital-raising transaction, and do not directly or indirectly promote or maintain a market for the Company's securities.

(k) "*Participant Agreement*" shall mean the agreement entered into between the Company and a Participant pursuant to which the Participant is granted Class P Units and which sets forth the terms and conditions applicable to the Class P Units.

(l) "*Person*" includes any individual, partnership, limited partnership, joint venture, corporation, limited liability company, trust, estate, custodian, trustee, executor, administrator, nominee, representative, unincorporated organization, sole proprietorship, trust, employee benefit plan, tribunal, governmental entity, department, agency, or other entity.

(m) "*Plan*" has the meaning set forth in Section 1 hereof.

(n) "*Restricted Activity*" shall be deemed to have occurred if a Participant, individually, or on behalf of another Person, either directly or indirectly: (I) owns, operates, manages, finances, supervises, is employed by., provides consulting services to, or is otherwise engaged in a Restricted Business within the Restricted Area, (II) solicits, induces, recruits or encourages any employ.ee or contractor of the Company or any of its Affiliates or Subsidiaries to terminate their employment or engagement with the Company or the applicable Affiliate or Subsidiary of the Company, or hire or take away such employees or contractors, or attempt to solicit, induce, recruit, encourage, hue or take away employees or contractors of the Company or its Affiliates or Subsidiaries, either for the benefit of such Participant or for any other Person, (III) engages in any act of dishonesty, fraud, theft;, misrepresentation, misappropriation or embezzlement or other similar conduct by the Participant with respect to any aspect of the business or assets of the Company or any of its Affiliates, (IV) breaches or violates any covenant in any agreement or obligation in favor of the Company or any of its Affiliates to which Participant is a party or is subject that imposes restrictions or requirements with respect to (A) Participant's use or disclosure of confidential or proprietary information of the Company, or (B) the Participant's assignment of inventions or other intellectual property rights to the Company or any of its Affiliates, and/or (V) violates a law or regulation that is applicable to the Company's business, which violation, in the reasonable discretion of the Administrator, does or is reasonably likely to be materially injurious to the Company or any of its Affiliates. Notwithstanding the foregoing, nothing in this Plan shall be construed to restrict or prohibit ownership by a Participant of stock of any company listed on the New York or American Stock Exchanges or the Nasdaq National Market System; provided, that such Participant's aggregate ownership interest is not more than five percent (5%) or more of the outstanding voting shares of such company.

(o) "*Restricted Area*" means the area where Atlas Sand Company now or will operate, including Winkler County, Texas, Ward County, Texas, Crane County, Texas, and Andrews County, Texas.

(p) "*Restricted Business*" means, directly or indirectly, through the ownership of subsidiary entities, acquiring, processing, developing, and marketing frac sands.

(q) "*Subsidiary*" means an entity in which the Company directly or indirectly owns at least a majority of the equity.

(r) "*Terminated Participant*" means any Participant with respect to which a Termination Event has occurred.

(s) "*Termination Date*" means the date on which a Termination Event has occurred.

(t) "*Termination Event*" means the termination for any reason of Participant's employment, agency, or consulting relationship (unless the relationship merely changes from employee or agent to consultant, or vice versa) with the Company or an Affiliate or Subsidiary of the Company, or a successor to the Company in the event that this Plan is assumed by a successor to the Company.

(u) "*Unvested Class P Unit*" has the meaning given such term in Section 10.1.

(v) "*Vested Class P Unit'* has the meaning given such term in Section 10.1.

3. Units Authorized to be Issued Under the Plan The maximum aggregate amount of Class P Units authorized to be issued under the Plan shall be determined by the Administrator. The issuance of Class P Units shall reduce the total number of Class P Units available under the Plan. Any Class P Units canceled or repurchased by the Company under the Plan, a Participant Agreement, or the Company Agreement shall resume the status of authorized and unissued Class P Units under the Plan. All Class P Units issued under the Plan shall be subject to the terms of the Company Agreement and the Company Agreement under which they were granted.

4. Administration of the Plan

4.1 Administrator. The Plan shall be administrated by the Manager of the Company.

4.2 Powers of the Administrator . Subject to the provisions of the Plan and to the approval of any relevant authorities, the Administrator shall have the full power and authority to:

4.2.1 designate Participants to whom Class P Units may from time to time be granted hereunder;

4.2.2 determine the number of Class P Units to be covered by each such award granted hereunder;

4.2.3 approve forms of Participant Agreement for use under the Plan;

4.2.4 determine the terms and conditions of any grant of Class P Units hereunder, including without limitation the vesting schedule for such grant;

4.2.5 interpret and administer the Plan and any instrument or agreement relating to the grant of Class P Units made under the Plan;

4.2.6 establish, amend, suspend or waive such rules and regulations and appoint such agents as it shall deem appropriate for the proper administration of the Plan; and

4.2.7 make any other determination and take any other action that the Administrator deems necessary or desirable for the administration of the Plan.

4.3 Effect of Administrator's Decision . The Administrator may correct any defect or supply any omission or reconcile any inconsistency in the Plan and any Participant Agreement in such manner and to such extent as the Administrator deems necessary or appropriate in its sole discretion. Unless otherwise expressly provided in the Plan, all designations, determinations, interpretations and other decisions of the Administrator under or with respect to the Plan or any award hereunder shall be within the sole discretion of the Administrator and shall be final and binding on all Participants.

4.4 Limitation of Liability: Indemnification. The Administrator shall be free from all liability for the Administrator's acts and conduct in the administration of the Plan and the Participant Agreements except for acts of gross negligence, fraud or willful misconduct. All managers, directors, and officers of the Administrator, each manager and officer of the Company, and each employee of the Company acting on behalf of the Administrator shall, to the extent permitted by law, be fully indemnified and protected by the Company in respect of any such action, determination, or interpretation.

5. Eligibility. Any Participant may be granted Class P Units under the Plan.

6. Term of Plan. The Plan shall be effective on the date of its approval by the Members and shall continue until no Class P Units are outstanding, whereupon the Plan may be terminated by the Manager. No such termination of the Plan shall impair the rights of any Participant under any Participant Agreement, unless expressly permitted in the Plan or such Participant's Participant Agreement or as mutually agreed to between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it under the Plan and the Participant Agreements with respect to Class P Units granted under the Plan prior to the date of such termination.

7. Grant of Class P Units.

7.1 Authorization to Grant Class P Units. Grants of Class P Units shall be made by the Administrator pursuant to the terms and conditions of the Participant Agreement as set forth in Section 7.2.

7.2 Participant Agreement. The Administrator shall require a Participant to whom Class P Units are granted pursuant to the Plan to enter into a written Participant Agreement with the Company, which shall be executed by such Participant and on behalf of the Company and which shall contain such terms and conditions as the Administrator shall determine, consistent with the Plan.

8. Non-Transferability of Class P Units. Class P Units may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than as provided for in the Participant Agreement. Unvested Class P Units may not be sold, pledged, assigned, hypothecated or disposed of in any manner and any such purported sale, pledge, assignment, hypothecation or other disposal shall be void.

9. Time of Granting Class P Units. The date of grant of Class P Units shall, for all purposes, be the date on which the Administrator makes the determination granting such Class P Units, or such later date as is determined by the Administrator. Notice of the determination shall be given to each Participant to whom Class P Units are granted within a reasonable time after the date of such grant.

10. Vesting~~.~~, Termination Event.

10.1 Vesting of Class P Units. The vesting schedule for each grant of Class P Units under the Plan shall be determined by the Administrator and set forth in the related Participant Agreement. All of a Participant's Class P Units that have vested pursuant to the Participant Agreement of such Participant are referred to herein as "*Vested Class P Units*" and all of a Participant's Class P Units that have not yet vested pursuant to the Participant Agreement of such Participant are referred to herein as "*Unvested Class P Units*."

10.2 Effects of Termination Event. Except as otherwise provided in a Participant Agreement, if a Termination Event occurs, (i) then all of such Terminated Participant's Class P Units that are Unvested Class P Units will be automatically and immediately cancelled without further action and (ii) the Company will automatically have the right, but not the obligation, to purchase all or any portion of such Terminated Participant's Class P Units that are Vested Class P Units at the Fair Value of such Class P Units on the Termination Date. To exercise such right to purchase the Terminated Participant's Class P Units, the Company must give written notice of the Company's desire to purchase all or a portion of such Class P Units to the Terminated Participant and the Members before the first anniversary of the Termination Date. In the event the Company exercises its right to purchase all or a portion of the Class P Units, such transaction shall be closed within the later of thirty (30) days after such exercise, or thirty (30) days after the Fair Value of such Class P Units has been determined. Company may freely assign its option to purchase under this Section 10.2 to any Person. Any and all Class P Units that are cancelled and/or repurchased by the Company pursuant to this Section 10.2 shall automatically be deemed retired and shall no longer be deemed to be issued or outstanding; provided, however that such Class P Units that are cancelled and/or repurchased by the Company pursuant to this Section 10.2 shall be available for re-issuance under the Plan.

10.3 Restricted Activity Cancellation Rights. If a Participant engages in a Restricted Activity, whether before the termination of such Participant's services or at any time on or before the expiration of one (1) year after the occurrence of a Termination Event, then all of such Participant's Vested Class P Units that have not previously been purchased by the Company and/or the other Member pursuant to Section 10.2 may in the sole discretion of the Administrator be cancelled upon written notice to such Participant without the payment of any money to such Participant. Any and all such cancelled Class P Units shall automatically be deemed retired and shall no longer be deemed to be issued or outstanding; provided, however that such cancelled Class P Units shall be available for re-issuance under the Plan.

11. Amendment and Termination of Plan; Adjustments; Capital Events.

11.1 Amendment and Termination. Subject to Section 6, the Administrator may amend, alter, suspend or terminate the Plan in any manner, including increasing or decreasing the number of Class P Units available for grant under the Plan, without the consent of any Member, Participant or any other Person.

11.2 Effect of Amendment or Termination. Notwithstanding the foregoing, no amendment, alteration, suspension or termination of the Plan shall be made, without the consent of a Participant, if such action would diminish any of the rights of the Participant under any grant theretofore made to such Participant under the Plan. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Class P Units granted under the Plan prior to the date of such termination.

11.3 Amendments related to 409A. Notwithstanding any provision of the Plan or any Participant Agreement to the contrary, in the event that the Administrator determines that any amounts payable hereunder will be taxable to a Participant under Section 409A of the Code and related Department of Treasury guidance prior to payment to such Participant of such amount, the Company may (a) adopt such amendments to the Plan and the rights relating to Class P Units and appropriate policies and procedures, including amendments and policies with retroactive effect, that the Administrator determines necessary or appropriate to preserve the intended tax treatment of the benefits provided by the Plan and the rights relating to Class P Units hereunder and/or (b) take such other actions as the Administrator determines necessary or appropriate to avoid the imposition of an additional tax under Section 409A of the Code.

11.4 Adjustments. In the event that any recapitalization, reorganization, merger, consolidation,split-up, spin-off, combination, repurchase, or exchange of interests or other securities of the Company, or other change in the corporate structure of the Company affecting the Class P Units occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, may in its sole discretion adjust the number and class of units that may be delivered under the Plan and/or the number and class of units covered by each outstanding Participant Agreement.

11.5 Capital Event. Subject to the applicable requirements of Section 409A of the Code and the regulations or other guidance issued thereunder, in the event that the Company undergoes a Capital Event, then immediately prior to the occurrence of the Capital Event, all outstanding Class P Units, whether vested or unvested, shall, for the purposes of the Capital Event, be deemed to be Vested Class P Units.

12. Conditions Upon Issuance of Class P Units.

12.1 Legal Compliance. Class P Units shall not be issued unless the issuance and delivery of such Class P Units shall comply with Applicable Laws.

12.2 Investment Representations. As a condition to the granting of Class P Units, the Administrator may require the Participant being granted such Class P Units to represent and warrant at the time of any such grant that the Class P Units are being purchased only for investment and without any present intention to sell or distribute such Class P Units if, in the opinion of counsel for the Company, such a representation is required.

13. No Right to Employment or Class P Units. The granting of Class P Units under the Plan shall impose no obligation on the Company or any Affiliate or Subsidiary to continue the employment of a Participant and shall not lessen or affect the Company's, Affiliate's or Subsidiary's right to terminate the employment of such Participant. No Participant or other Person shall have any claim to be granted Class P Units, and there is no obligation for uniformity of treatment of Participants, or holders or beneficiaries of Class P Units. The terms and conditions of Class P Units and the Administrator's determinations and interpretations with respect thereto need not be the same with respect to each Participant (whether or not such Participants are similarly situated).

14. Indemnification of the Manager of the Company. The Administrator shall not be personally liable for any action, determination, or interpretation taken or made in good faith with respect to the Plan, and the Administrator shall, to the extent permitted by law, be fully indemnified and protected by the Company in respect of any such action, determination, or interpretation.

15. Section 409A. To the extent applicable, this Plan and the Class P Units issued hereunder shall be interpreted in accordance with Section 409A of the Code and Department of Treasury regulations and other interpretative guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding other provisions of the Plan or any Participant Agreements thereunder, no rights with respect to Class P Units shall be granted, deferred, accelerated, extended, paid out or modified under this Plan in a manner that would result in the imposition of an additional tax under Section 409A of the Code upon a Participant. In the event that it is reasonably determined by the Administrator that, as a result of Section 409A of the Code, payments in respect of any rights with respect to Class P Units under the Plan may not be made at the time contemplated by the terms of the Plan or the relevant Participant Agreement, as the case may be, without causing the Participant holding such Class P Units to be subject to taxation under Section 409A of the Code, the Company may take whatever actions the Administrator determines necessary or appropriate to comply with, or exempt the Plan and the Participant Agreement from the requirements of Section 409A of the Code and related Department of Treasury guidance and other interpretive materials as may be issued after the Effective Date, which action may include, but is not limited to, delaying payment to a Participant who is a "specified employee" within the meaning of Section 409A of the Code until the first day following the six-month period beginning on the date of the Participant's termination of employment or engagement with the Company. The Company shall use commercially reasonable efforts to implement the provisions of this Section 15 in good faith; provided that neither the Company, the Administrator nor any employee, director or representative of the Company, the Administrator or of any of its Subsidiaries shall have any liability to Participants with respect to any actions taken pursuant to this Section 15 or as a result of application of Section 409A to any Participant with respect to Class P Units granted under the Plan.

16. General Provisions.

16.1 Effectiveness of the Plan. The Plan shall be effective as of the Effective Date.

16.2 Successors and Assigns. Subject to Section 8 hereof, the Plan will be binding on all successors and assigns of the Company and a Participant, including without limitation, the estate of such Participant and the executor, administrator or trustee of such estate, or any receiver or trustee in bankruptcy or representative of the Participant's creditors.

16.3 Choice of Law. The Plan shall be governed by and construed in accordance with the laws of the State of Texas, without regard to its conflicts of laws principles.

16.4 Headings. Headings are given to the Sections and subsections of the Plan solely as a convenience to facilitate reference. Such headings shall not be deemed in any way material or relevant to the construction or interpretation of the Plan or any provision thereof.

* * * *

Exhibit 10.12

Form of Participant Agreement

This Participant Agreement (this "Agreement") is executed and agreed to as of [_____] (the "Effective Date"), by and between Atlas Sand Company, LLC, a Delaware limited liability company (the "Company"), and [_____] (the "Participant") pursuant to the terms of that certain Atlas Sand Company Long Term Incentive Plan, as amended and restated effective May 28, 2018 (the "Plan").

WHEREAS, capitalized terms used in this Agreement but not defined in the body of this Agreement have the meanings assigned to them in the Plan or, if not defined in the Plan, the Company Agreement.

WHEREAS, the Participant is an employee or other service provider of the Company or the Managers.

WHEREAS, the Plan authorizes the grant by the Company of Class P Units to employees and other service providers of the Company and the Managers.

WHEREAS, subject to the terms and conditions set forth in this Agreement and the Plan, the Company desires to issue to the Participant on the terms and conditions hereinafter set forth, and the Participant desires to accept on such terms and conditions, the number of Class P Units specified herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants and obligations contained herein and other good and valuable consideration, the Company and the Participant agree as follows:

1. **Issuance of Restricted Units**. The Company hereby grants [_____] Class P Units to the Participant effective as of the Effective Date. The Class P Units are intended to constitute "profits interests" within the meaning of Revenue Procedures 93-27 and 2001-43 (or the corresponding requirements of any subsequent guidance promulgated by the United States Internal Revenue Service or other applicable law) and, therefore, the initial Capital Account associated with each such Class P Unit at the time of its issuance is equal to zero dollars ($0.00). The Profits Interest Hurdle for such Class P Units shall be $0.00. The Class P Units issued by the Company to the Participant pursuant this Agreement are referred to below as the "Restricted Units."

2. **Terms of Issuance**.

(a) The Participant acknowledges and agrees that no provision contained in this Agreement shall entitle the Participant to remain an employee or service provider of, or otherwise be affiliated with, the Company or its Affiliates for any particular period of time.

(b) The Participant acknowledges and agrees that the Participant's execution of this Agreement evidences the Participant's intention to be bound by the terms of the Third Amended and Restated Limited Liability Company Agreement of Atlas Sand Company, LLC dated as of January 30, 2018 (as amended, supplemented or restated from time to time, the "Company Agreement"), in addition to the terms of the Plan and this Agreement. The Participant further acknowledges and agrees that the Restricted Units are subject to all of the applicable terms, conditions, and restrictions in the Company Agreement, the Plan and in this Agreement. On or prior to the Effective Date, the Participant shall have executed a Joinder Agreement to the Company Agreement in substantially the form attached hereto as Exhibit A.

(c) The Participant acknowledges and agrees to make a timely election under Section 83(b) of the Code in substantially the form attached hereto as Exhibit B with respect to the Restricted Units and to consult with the Participant's tax advisor to determine the tax consequences of filing such an election under Section 83(b) of the Code. The Participant acknowledges that it is the Participant's sole responsibility, and not the responsibility of the Company, to timely file the election under Section 83(b) of the Code even if the Participant requests the Company or any of its Affiliates or any of their respective managers, directors, officers, employees and authorized representatives (including attorneys, accountants, consultants, bankers, lenders, prospective lenders or financial representatives) to assist in making such filing. The Participant agrees to provide the Company, on or before the due date for filing such election, proof that such election has been timely filed.

3. **Unvested Restricted Units**. All of the Restricted Units issued pursuant to this Agreement shall initially be Unvested Class P Units under the Plan, shall not have any voting rights under the Company Agreement, shall be subject to all of the restrictions on Unvested Class P Units (as well as on Class P Units, in general) under the Plan and the Company Agreement, and shall carry only such rights as are conferred on Unvested Class P Units by the Plan and the Company Agreement (the "Unvested Restricted Units"). Unvested Restricted Units will become Vested Restricted Units (as defined below) in accordance with the provisions of Section 4.

4. **Vesting of Restricted Units**.

(a) Except as otherwise provided in this Section 4, the Unvested Restricted Units shall become Vested Class P Units under the Plan, shall no longer be subject to the restrictions on Unvested Class P Units (but shall remain subject to the restrictions on Class P Units in general and, accordingly, shall have no voting rights) under the Plan and the Company Agreement, and shall carry all of the rights conferred on Vested Class P Units under the Plan and the Company Agreement (the "Vested Restricted Units") in accordance with the following schedule so long as the Participant remains continuously employed by, or in the service of, the Company or its Affiliates from the Effective Date through each vesting date set forth below:

Vesting Date	Percentage Vested
[_____]	33.34%
[_____]	33.33%
[_____]	33.33%

(b) Upon the occurrence of a Capital Event, all Restricted Units issued to the Participant that have not previously become Vested Restricted Units shall become Vested Restricted Units immediately prior to the occurrence of the Capital Event, provided that the Participant has remained continuously employed by, or in the service of, the Company or its Affiliates from the Effective Date until such Capital Event.

(c) If the Participant experiences a Termination Event by reason of death or Disability, all Restricted Units issued to the Participant that have not previously become Vested Restricted Units shall become Vested Restricted Units upon the occurrence of such Termination Event, provided that the Participant has remained continuously employed by, or in the service of; the Company or its Affiliates from the Effective Date until such Termination Event. For purposes of this Agreement, "Disability" shall mean the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months.

(d) Notwithstanding any other provision of this Agreement, the Plan or the Company Agreement, all Distributable Cash, other than Tax Distributions made in accordance with Section 4.1(c) of the Company Agreement, to be provided to the Participant by the Company in connection with the Unvested Restricted Units shall be retained by the Company in a separate account (collectively, the "Retained Distributions"). The Company shall distribute to the Participant 100% of the Retained Distributions with respect to each Unvested Restricted Unit within 60 days of it becoming a Vested Restricted Unit.

5. **Forfeiture of Restricted Units**.

(a) If the Participant experiences a Termination Event by reason of such Person's: (i) conviction of, or plea of nob contendere to, any felony or other crime or offense causing substantial harm to the Company or its Affiliates or involving acts of theft, fraud, embezzlement, moral turpitude, or similar conduct; (ii) repeated intoxication by alcohol or drugs while performing such Person's duties in a manner that materially and adversely affects such performance; (iii) malfeasance, in the conduct of such Person's duties, including, but not limited to, (A) misuse or diversion of funds or property of the Company or its Affiliates, (B) embezzlement, or (C) misrepresentations or concealments, including without limitation on any written reports submitted to the Company or its Affiliates; (iv) material violation of any provision of this Agreement; or (v) failure to perform such Person's duties or failure to follow or comply with the reasonable and lawful written directives of the Manager, in either case contemplated in this clause (v) after such Person has received written notice of such material failure ("Cause"), then on the Termination Date, the Participant shall forfeit to the Company without consideration all of the Restricted Units (including Restricted Units that remain Unvested Restricted Units and Restricted Units that have become Vested Restricted Units) and all rights arising from such Restricted Units and from being a holder of such Restricted Units (including the rights to any Retained Distributions). The forfeiture of Restricted Units subject to the terms and conditions of this Section 5(a) shall occur immediately and without further action of the Company, the Participant, or any other person upon the termination giving rise to such forfeitures.

(b) If the Participant experiences a Termination Event for any reason other than for Cause or as a result of death or Disability, then on the Termination Date, the Grantee shall forfeit to the Company without consideration all of the Unvested Restricted Units and all rights arising from such Unvested Restricted Units and from being a holder of such Unvested Restricted Units (including the rights to any Retained Distributions). The forfeiture of Unvested Restricted Units subject to the terms and conditions of this Section 5(b) shall occur immediately and without further action of the Company, the Participant, or any other person upon the termination giving rise to such forfeitures.

(c) If the Participant experiences a Termination Event for any reason other than for Cause, including as a result of death or Disability, then the Company or its designee shall have the right (but not the obligation) to repurchase, in accordance with Section 11.6 of the Company Agreement, any or all of the Vested Restricted Units held by the Terminated Participant at a purchase price equal to the then Fair Value of such Class P Units on the Termination Date. Further, if a Termination Event for any reason other than Cause occurs, Employee shall receive one (1) year's salary and benefits payable commensurate with regular payroll practices, defined and calculated as of the date of termination.

(d) If a Participant engages in a Restricted Activity or otherwise violates any nonsolicitation or noncompetition provision of an agreement with the Company, in each case, whether on or before a Termination Event or at any time within two (2) years following the occurrence of a Termination Event, then all of such Participant's Restricted Units (including Restricted Units that remain Unvested Restricted Units and Restricted Units that have become Vested Restricted Units), and all rights arising from such Restricted Units and from being a holder of such Restricted Units (including the rights to any Retained Distributions), that have not previously been repurchased by the Company or its designee pursuant to Section 5(c) above may in the sole discretion of the Administrator be cancelled upon written notice to such Participant without consideration. The cancellation of Restricted Units subject to the terms and conditions of this Section 5(d) shall occur immediately and without further action of the Company, the Participant, or any other person upon written notice to the Participant.

6. **Representations and Warranties of the Participant and the Company**.

(a) The Participant represents and warrants to the Company as follows:

(i) Each of this Agreement, the Plan and the Company Agreement constitute legal, valid, and binding obligations of the Participant, enforceable in accordance with its respective terms, and that the execution, delivery, and performance of this Agreement, the Plan and the Company Agreement by the Participant do not and shall not conflict with, violate, or cause a breach of any agreement, contract, or instrument to which the Participant is a party or by which the Participant is bound or any judgment, order, or decree to which the Participant is subject.

(ii) The Participant has received all the information the Participant considers necessary in connection with the Participant's execution of this Agreement, that the Participant has had an adequate opportunity to ask questions and receive answers from the Company and the Participant's independent legal counsel regarding the terms, conditions, and limitations set forth in this Agreement, the Plan and the Company Agreement and the business, properties, prospects, and financial condition of the Company and to obtain additional information (to the extent the Company possesses such information or could acquire it without unreasonable effort or expense) necessary to verify the accuracy of any information furnished to the Participant or to which the Participant had access.

(iii) The Participant understands that the Restricted Units are not registered under the Securities Exchange Act of 1934, as amended (the "Securities Act"), on the ground that the grant provided for in this Agreement and the issuance of securities hereunder is exempt from registration under the Securities Act pursuant to Section 4(2) thereof or pursuant to Rule 701 promulgated thereunder and cannot be disposed of unless (A) they are subsequently registered or exempted from registration under the Securities Act and (B) such disposition is permitted under this Agreement, the Plan and the Company Agreement.

(iv) Neither the Company nor any of their Affiliates nor any of their respective managers, directors, officers, employees, or authorized representatives (including attorneys, accountants, consultants, bankers, lenders, prospective lenders, or financial representatives) has provided any tax or legal advice to the Participant regarding this Agreement, the Plan or the Company Agreement and the Participant has had an opportunity to receive sufficient tax and legal advice from advisors of the Participant's own choosing such that the Participant is entering into this Agreement with full understanding of the tax and legal implications thereof.

(v) The Participant acknowledges that Thompson & Knight LLP has not represented the Participant in connection with the preparation and negotiation of this Agreement, the Plan, the Company Agreement and the Company's other organizational documents, and neither such counsel shall owe any duties whatsoever to the Participant.

(vi) The representations and warranties of the Participant set forth in this Agreement and in the Company Agreement are true and correct.

(b) The Company represents and warrants to the Participant that this Agreement, the Plan and the Company Agreement constitute legal, valid, and binding obligations of the Company, enforceable in accordance with their respective terms, and that the execution, delivery, and performance of this Agreement, the Plan and the Company Agreement by the Company do not and will not conflict with, violate, or cause a breach of any agreement, contract, or instrument to which the Company is a party or by which the Company is bound or any judgment, order, or decree to which the Company is subject.

7. **General Provisions**.

(a) **Notices**. For purposes of this Agreement, notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or sent by facsimile transmission to the number, if applicable, set forth below, or sent by internationally recognized overnight or second-day courier service with proof of receipt maintained, at the following address(es) (or any other address(es) that any party may designate by written notice to the other party, in accordance herewith, except that such notice shall be effective only upon receipt):

If to the Company to:

Atlas Sand Company, LLC
5914 W. Courtyard Drive, Suite 200
Austin, Texas 78730-4918

Attn: John Turner

If to the Participant to:

[_____]

Any such notice shall, if delivered personally, be deemed received upon delivery; and shall, if delivered by internationally recognized overnight or second-day courier service, be deemed received on the second Business Day after being sent.

(b) **Governing Law; Venue**. THIS AGREEMENT IS GOVERNED BY AND SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE, WITHOUT REGARD TO THE CONFLICTS OF LAW PRINCIPLES OF SUCH STATE. The parties hereby irrevocably consent to the binding and exclusive venue for any legal claim between them or their affiliates arising out of or related to this Agreement being in the state or federal court of competent jurisdiction that regularly conducts proceedings in Dallas County, Texas. Nothing in this Agreement, however, precludes any party from seeking to remove a civil action from any state court to federal court.

(c) **Amendment and Waiver**. Notwithstanding any provision herein to the contrary, no amendment, alteration, suspension or termination of this Agreement shall be made, without the consent of the Participant, if such action would diminish any of the rights of the Participant hereunder. The provisions of this Agreement may be amended or modified only with the prior written consent of the Company and the Participant. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No course of conduct or failure or delay in enforcing the provisions of this Agreement shall be construed as a waiver of such provisions or affect the validity, binding effect, or enforceability of this Agreement or any provision hereof.

(d) **Severability**. The provisions of this Agreement are severable; if any provision of this Agreement is determined by a court of competent jurisdiction to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability shall not affect or impair the remainder of this Agreement, and this Agreement shall remain in full force and effect without such invalid, illegal, or unenforceable provision. In addition, any invalid, illegal, or unenforceable provisions shall be, and are, automatically reformed by such court to the maximum limitations permitted by applicable law.

(e) **Entire Agreement**. The Agreement, the Plan and the Company Agreement embody the complete agreement and understanding among the parties with respect to the subject matter of this Agreement and supersede and preempt any prior understandings, agreements, or representations by or among the parties, written or oral, which may have related to the subject matter hereof in any way. To the extent of any conflict between the provisions of this Agreement, the Plan and the Company Agreement, the provisions of this Agreement shall control.

(f) **Counterparts**. This Agreement may be executed in one or more counterparts (including portable document format (.pdf) and facsimile counterparts), each of which shall be deemed to be an original, but all of which together shall constitute one and the same agreement.

(g) **Gender and Plurals**. Whenever the context may require, any pronouns used herein shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural and vice versa.

(h) **Successors and Permitted Assigns**. Except as otherwise provided herein, this Agreement shall bind and inure to the benefit of and be enforceable by and against the Participant, the Company, and their respective successors, permitted assigns, and representatives, as the case may be (including subsequent holders of Restricted Units); *provided* that the rights and obligations of the Participant under this Agreement shall not be assignable except in connection with a transfer of the Restricted Units permitted under the Plan, the Company Agreement and this Agreement. Notwithstanding any other provision of this Agreement or in the Plan or the Company Agreement (i) each Restricted Unit shall remain subject to the terms of the Plan, the Company Agreement and this Agreement (including Sections 4 and 5, which shall be applied based on the Participant's employment status rather than that of any holder of the Restricted Unit), regardless of who holds such Restricted Unit, and (ii) the effect that the employment of the Participant by the Company or its Affiliates or events related to such employment have on the rights of and restrictions on the Restricted Units, including vesting and the rights of the Company with regard to the Restricted Units under this Agreement, the Plan and the Company Agreement, shall not be altered by any transfer of the Restricted Units. For the avoidance of doubt, each family member of the Participant or any other transferee pursuant to a transfer made in accordance with this Agreement, the Plan and the Company Agreement who acquires Restricted Units from the Participant shall be subject to the provisions of this Agreement as if such family member(s) or other transferee or transferees were a party or parties to this Agreement.

(i) **No Guarantee of Employment**. Nothing in this Agreement shall confer upon the Participant any right to continue in the employ or service of the Company or its Affiliate or interfere in any way with the right of the Company or its Affiliate to terminate Participant's employment or service at any time and for any reason.

(j) **Rights of Third Parties**. Nothing expressed or implied in this Agreement is intended or shall be construed to confer upon or give any Person, other than the parties to this Agreement and the estate, legal representative, or guardian of any individual party hereto, any rights or remedies under or by reason of this Agreement.

(k) **Headings; References; Interpretation**. All Section headings in this Agreement are for convenience only and shall not be deemed to control or affect the meaning or construction of any of the provisions hereof. The words "hereof," "herein" and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole, including all Exhibits attached hereto, and not to any particular provision of this Agreement. All references herein to Sections and Exhibits shall, unless the context requires a different construction, be deemed to be references to the Sections of this Agreement and the Exhibits attached hereto, and all such Exhibits attached hereto are hereby incorporated herein and made a part hereof for all purposes. The use herein of the word "including" following any general statement, term or matter shall not be construed to limit such statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation", "but not limited to", or words of similar import) is used with reference thereto, but rather shall be deemed to refer to all other

items or matters that could reasonably fall within the broadest possible scope of such general statement, term or matter. The word "or" as used herein is not exclusive and shall be deemed to have the meaning "and/or". Unless the context requires otherwise, all references herein to an agreement, instrument or other document shall be deemed to refer to such agreement, instrument or other document as amended, supplemented, modified and restated from time to time to the extent permitted by the provisions thereof. Neither this Agreement nor any uncertainty or ambiguity herein shall be construed or resolved against any party hereto, whether under any rule of construction or otherwise. On the contrary, this Agreement has been reviewed by each of the parties hereto and shall be construed and interpreted according to the ordinary meaning of the words used so as to fairly accomplish the purposes and intentions of the parties hereto.

(l) **Survival of Representations, Warranties and Agreements**. All representations, warranties, and agreements contained in this Agreement shall survive the consummation of the transactions contemplated hereby and the termination of this Agreement.

(m) **Deemed Resignations**. Unless otherwise agreed to in writing by the Company and the Participant, any termination of the Participant's employment with the Company or its Affiliate shall constitute an automatic resignation of the Participant as an officer of the Company and its Affiliates (if applicable), and an automatic resignation of the Participant from the board of managers (or similar governing body) of the Company and from the board of managers (or similar governing body) of all Affiliates of the Company (if applicable) and from the board of directors (or similar governing body) of any corporation, limited liability company, or other entity in which the Company holds a direct or indirect equity interest and with respect to which board (or similar governing body) the Participant serves as the designee or other representative of the Company or any of its Affiliates.

(n) **WAIVER OF JURY TRIAL**. NOTWITHSTANDING ANY OTHER PROVISION IN THIS AGREEMENT, EACH PARTY SHALL, AND HEREBY DOES, IRREVOCABLY WAIVES TO THE FULLEST EXTENT ALLOWED BY LAW THE RIGHT TO TRIAL BY JURY WITH RESPECT TO ANY CLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT.

(o) **WAIVER OF PUNITIVE AND EXEMPLARY DAMAGE CLAIMS**. EACH PARTY, BY EXECUTING THIS AGREEMENT, WAIVES, TO THE FULLEST EXTENT ALLOWED BY LAW, ANY CLAIMS TO RECOVER PUNITIVE, CONSEQUENTIAL, EXEMPLARY, OR SIMILAR DAMAGES NOT MEASURED BY THE PREVAILING PARTY'S ACTUAL DAMAGES IN ANY DISPUTE OR CONTROVERSY ARISING UNDER, RELATING TO OR IN CONNECTION WITH THIS AGREEMENT, INCLUDING ANY ARBITRATION PROCEEDING.

(p) **Section 409A of the Code**. The issuance of the Restricted Units is intended to be the grant of a profits interest rather than a deferral of compensation pursuant to Section 409A of the Internal Revenue Code and this Agreement and the issuance of the Restricted Units hereunder shall be construed and interpreted in accordance with such intent. Any action required by either of the parties pursuant to this Agreement will be performed in such a manner that the Restricted Units do not become subject to the provisions of Section 409A of the Internal Revenue Code or the Treasury regulations and other interpretive guidance issued thereunder.

(q) **Specific Performance**. The Participant acknowledges that the covenants and agreements in this Agreement are of a special nature and that any actual or threatened breach, violation, or evasion of the terms of this Agreement by him will (i) result in damages to the Company in amounts difficult to ascertain, and (ii) give rise to irreparable injury to the Company. Accordingly, the Participant agrees that the Company shall have the right to sue and is entitled to equitable relief, including without limitation injunctive relief (in the form of a temporary restraining order, temporary injunction, and permanent injunction) and specific performance, without the necessity of proof of actual damage or posting a bond, against the actual or threatened breach, violation, or evasion of this Agreement by the Participant in any proceeding that such Company may bring to enforce any provision of this Agreement, including with respect to the enforcement of the subject matter contained in Section 5. The remedies described in this paragraph shall not be deemed to be the exclusive remedies available to the Company for a breach by the Participant of this Agreement, but shall be in addition to all other remedies available at law or equity.

(r) **Spousal Provisions**.

(i) If the Participant is married on the Effective Date, then the Participant shall cause his spouse to execute a spousal consent in the form set forth on Exhibit A (the "Spousal Consent") to evidence such spouse's agreement and consent to be bound by the terms and conditions of this Agreement, the Plan and the Company Agreement as to such spouse's interest, whether as community property or otherwise, if any, in the Restricted Units held by the Participant. Notwithstanding the execution and delivery thereof, such Spousal Consent shall not be deemed to confer or convey to such spouse any rights in the Participant's Restricted Units that do not otherwise exist by operation of law or by agreement of the parties. If the Participant should marry or remarry subsequent to the Effective Date, the Participant shall, within 30 days thereafter, obtain his new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement, the Plan and the Company Agreement by causing such spouse to execute and deliver a Spousal Consent. If any spouse of the Participant fails to execute the Spousal Consent as required hereunder, until such time as the Spousal Consent is duly executed by such spouse, the Participant's economic rights associated with the Restricted Units will be suspended and not subject to recovery.

(ii) In the event of a property settlement or separation agreement between the Participant and his spouse, to the extent any interest in or with respect to the Restricted Units is assigned to the Participant's spouse or former spouse, the Participant shall use his best efforts to assign to such spouse or former spouse only the right to share in profits and losses, to receive distributions, and to receive allocations of income, gain, loss, deduction or credit or similar item to which the Participant was entitled with respect to the Restricted Units.

* * * * * * * * *

[Remainder of this page left intentionally blank]

IN WITNESS WHEREOF, the parties hereto have executed this Participant Agreement as of the date first written above.

ATLAS SAND COMPANY, LLC

By: _____
Ben M. Brigham, Manager

PARTICIPANT

_____

EXHIBIT A

JOINDER AGREEMENT

[Intentionally Omitted.]

EXHIBIT B

SECTION 83(B) ELECTION FORM

[Intentionally Omitted.]

Exhibit 10.13

Form of Participant Agreement

This Participant Agreement (this "Agreement") is executed and agreed to as of [_____] (the "Effective Date"), by and between Atlas Sand Management Company, LLC, a Delaware limited liability company (the "Company"), and [_____] (the "Participant") pursuant to the terms of that certain Atlas Sand Management Long Term Incentive Plan, as amended and restated effective May 28, 2018 (the "Plan").

WHEREAS, capitalized terms used in this Agreement but not defined in the body of this Agreement have the meanings assigned to them in the Plan or, if not defined in the Plan, the Company Agreement.

WHEREAS, the Participant is an employee or other service provider of the Company or the Manager.

WHEREAS, the Plan authorizes the grant by the Company of Class P Units to employees and other service providers of the Company and the Manager.

WHEREAS, subject to the terms and conditions set forth in this Agreement and the Plan, the Company desires to issue to the Participant on the terms and conditions hereinafter set forth, and the Participant desires to accept on such terms and conditions, the number of Class P Units specified herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants and obligations contained herein and other good and valuable consideration, the Company and the Participant agree as follows:

1. **Issuance of Restricted Units**. The Company hereby grants [_____] Class P Units to the Participant effective as of the Effective Date. The Class P Units are intended to constitute "profits interests" within the meaning of Revenue Procedures 93-27 and 2001-43 (or the corresponding requirements of any subsequent guidance promulgated by the United States Internal Revenue Service or other applicable law) and, therefore, the initial Capital Account associated with each such Class P Unit at the time of its issuance is equal to zero dollars ($0.00). The Profits Interest Hurdle for such Class P Units shall be $0.00. The Class P Units issued by the Company to the Participant pursuant this Agreement are referred to below as the "Restricted Units."

2. **Terms of Issuance**.

(a) The Participant acknowledges and agrees that no provision contained in this Agreement shall entitle the Participant to remain an employee or service provider of, or otherwise be affiliated with, the Company or its Affiliates for any particular period of time.

(b) The Participant acknowledges and agrees that the Participant's execution of this Agreement evidences the Participant's intention to be bound by the terms of the First Amended and Restated Limited Liability Company Agreement of Atlas Sand Management Company, LLC dated as of September 15, 2017 (as amended, supplemented or restated from time to time, the "Company Agreement"), in addition to the terms of the Plan and this Agreement. The Participant further acknowledges and agrees that the Restricted Units are subject to all of the applicable terms, conditions, and restrictions in the Company Agreement, the Plan and in this Agreement. On or prior to the Effective Date, the Participant shall have executed a Joinder Agreement to the Company Agreement in substantially the form attached hereto as Exhibit A.

(c) The Participant acknowledges and agrees to make a timely election under Section 83(b) of the Code in substantially the form attached hereto as Exhibit B with respect to the Restricted Units and to consult with the Participant's tax advisor to determine the tax consequences of filing such an election under Section 83(b) of the Code. The Participant acknowledges that it is the Participant's sole responsibility, and not the responsibility of the Company, to timely file the election under Section 83(b) of the Code even if the Participant requests the Company or any of its Affiliates or any of their respective managers, directors, officers, employees and authorized representatives (including attorneys, accountants, consultants, bankers, lenders, prospective lenders or financial representatives) to assist in making such filing. The Participant agrees to provide the Company, on or before the due date for filing such election, proof that such election has been timely filed.

3. **Unvested Restricted Units**. All of the Restricted Units issued pursuant to this Agreement shall initially be Unvested Class P Units under the Plan, shall not have any voting rights under the Company Agreement, shall be subject to all of the restrictions on Unvested Class P Units (as well as on Class P Units, in general) under the Plan and the Company Agreement, and shall carry only such rights as are conferred on Unvested Class P Units by the Plan and the Company Agreement (the "Unvested Restricted Units"). Unvested Restricted Units will become Vested Restricted Units (as defined below) in accordance with the provisions of Section 4.

4. **Vesting of Restricted Units**.

(a) Except as otherwise provided in this Section 4, the Unvested Restricted Units shall become Vested Class P Units under the Plan, shall no longer be subject to the restrictions on Unvested Class P Units (but shall remain subject to the restrictions on Class P Units in general and, accordingly, shall have no voting rights) under the Plan and the Company Agreement, and shall carry all of the rights conferred on Vested Class P Units under the Plan and the Company Agreement (the "Vested Restricted Units") in accordance with the following schedule so long as the Participant remains continuously employed by, or in the service of, the Company or its Affiliates from the Effective Date through each vesting date set forth below:

Vesting Date	Percentage Vested
[ ]	33.34%
[ ]	33.33%
[ ]	33.33%

(b) Upon the occurrence of a Capital Event, all Restricted Units issued to the Participant that have not previously become Vested Restricted Units shall become Vested Restricted Units immediately prior to the occurrence of the Capital Event, provided that the Participant has remained continuously employed by, or in the service of, the Company or its Affiliates from the Effective Date until such Capital Event.

(c) If the Participant experiences a Termination Event by reason of death or Disability, all Restricted Units issued to the Participant that have not previously become Vested Restricted Units shall become Vested Restricted Units upon the occurrence of such Termination Event, provided that the Participant has remained continuously employed by, or in the service of; the Company or its Affiliates from the Effective Date until such Termination Event. For purposes of this Agreement, "Disability" shall mean the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months.

(d) Notwithstanding any other provision of this Agreement, the Plan or the Company Agreement, all Distributable Cash, other than Tax Distributions made in accordance with Section 4.1(b) of the Company Agreement, to be provided to the Participant by the Company in connection with the Unvested Restricted Units shall be retained by the Company in a separate account (collectively, the "Retained Distributions"). The Company shall distribute to the Participant 100% of the Retained Distributions with respect to each Unvested Restricted Unit within 60 days of it becoming a Vested Restricted Unit.

5. **Forfeiture of Restricted Units**.

(a) If the Participant experiences a Termination Event by reason of such Person's: (i) conviction of, or plea of nob contendere to, any felony or other crime or offense causing substantial harm to the Company or its Affiliates or involving acts of theft, fraud, embezzlement, moral turpitude, or similar conduct; (ii) repeated intoxication by alcohol or drugs while performing such Person's duties in a manner that materially and adversely affects such performance; (iii) malfeasance, in the conduct of such Person's duties, including, but not limited to, (A) misuse or diversion of funds or property of the Company or its Affiliates, (B) embezzlement, or (C) misrepresentations or concealments, including without limitation on any written reports submitted to the Company or its Affiliates; (iv) material violation of any provision of this Agreement; or (v) failure to perform such Person's duties or failure to follow or comply with the reasonable and lawful written directives of the Manager, in either case contemplated in this clause (v) after such Person has received written notice of such material failure ("Cause"), then on the Termination Date, the Participant shall forfeit to the Company without consideration all of the Restricted Units (including Restricted Units that remain Unvested Restricted Units and Restricted Units that have become Vested Restricted Units) and all rights arising from such Restricted Units and from being a holder of such Restricted Units (including the rights to any Retained Distributions). The forfeiture of Restricted Units subject to the terms and conditions of this Section 5(a) shall occur immediately and without further action of the Company, the Participant, or any other person upon the termination giving rise to such forfeitures.

(b) If the Participant experiences a Termination Event for any reason other than for Cause or as a result of death or Disability, then on the Termination Date, the Grantee shall forfeit to the Company without consideration all of the Unvested Restricted Units and all rights arising from such Unvested Restricted Units and from being a holder of such Unvested Restricted Units (including the rights to any Retained Distributions). The forfeiture of Unvested Restricted Units subject to the terms and conditions of this Section 5(b) shall occur immediately and without further action of the Company, the Participant, or any other person upon the termination giving rise to such forfeitures.

(c) If the Participant experiences a Termination Event for any reason other than for Cause, including as a result of death or Disability, then the Company or its designee shall have the right (but not the obligation) to repurchase, in accordance with Section 10.2 of the Plan, any or all of the Vested Restricted Units held by the Terminated Participant at a purchase price equal to the then Fair Value of such Class P Units on the Termination Date. Further, if a Termination Event for any reason other than Cause occurs, Employee shall receive one (1) year's salary and benefits payable commensurate with regular payroll practices, defined and calculated as of the date of termination.

(d) If a Participant engages in a Restricted Activity or otherwise violates any nonsolicitation or noncompetition provision of an agreement with the Company, in each case, whether on or before a Termination Event or at any time within two (2) years following the occurrence of a Termination Event, then all of such Participant's Restricted Units (including Restricted Units that remain Unvested Restricted Units and Restricted Units that have become Vested Restricted Units), and all rights arising from such Restricted Units and from being a holder of such Restricted Units (including the rights to any Retained Distributions), that have not previously been repurchased by the Company or its designee pursuant to Section 5(c) above may in the sole discretion of the Administrator be cancelled upon written notice to such Participant without consideration. The cancellation of Restricted Units subject to the terms and conditions of this Section 5(d) shall occur immediately and without further action of the Company, the Participant, or any other person upon written notice to the Participant.

6. **Representations and Warranties of the Participant and the Company**.

(a) The Participant represents and warrants to the Company as follows:

(i) Each of this Agreement, the Plan and the Company Agreement constitute legal, valid, and binding obligations of the Participant, enforceable in accordance with its respective terms, and that the execution, delivery, and performance of this Agreement, the Plan and the Company Agreement by the Participant do not and shall not conflict with, violate, or cause a breach of any agreement, contract, or instrument to which the Participant is a party or by which the Participant is bound or any judgment, order, or decree to which the Participant is subject.

(ii) The Participant has received all the information the Participant considers necessary in connection with the Participant's execution of this Agreement, that the Participant has had an adequate opportunity to ask questions and receive answers from the Company and the Participant's independent legal counsel regarding the terms, conditions, and limitations set forth in this Agreement, the Plan and the Company Agreement and the business, properties, prospects, and financial condition of the Company and to obtain additional information (to the extent the Company possesses such information or could acquire it without unreasonable effort or expense) necessary to verify the accuracy of any information furnished to the Participant or to which the Participant had access.

(iii) The Participant understands that the Restricted Units are not registered under the Securities Exchange Act of 1934, as amended (the "Securities Act"), on the ground that the grant provided for in this Agreement and the issuance of securities hereunder is exempt from registration under the Securities Act pursuant to Section 4(2) thereof or pursuant to Rule 701 promulgated thereunder and cannot be disposed of unless (A) they are subsequently registered or exempted from registration under the Securities Act and (B) such disposition is permitted under this Agreement, the Plan and the Company Agreement.

(iv) Neither the Company nor any of their Affiliates nor any of their respective managers, directors, officers, employees, or authorized representatives (including attorneys, accountants, consultants, bankers, lenders, prospective lenders, or financial representatives) has provided any tax or legal advice to the Participant regarding this Agreement, the Plan or the Company Agreement and the Participant has had an opportunity to receive sufficient tax and legal advice from advisors of the Participant's own choosing such that the Participant is entering into this Agreement with full understanding of the tax and legal implications thereof.

(v) The Participant acknowledges that Thompson & Knight LLP has not represented the Participant in connection with the preparation and negotiation of this Agreement, the Plan, the Company Agreement and the Company's other organizational documents, and neither such counsel shall owe any duties whatsoever to the Participant.

(vi) The representations and warranties of the Participant set forth in this Agreement and in the Company Agreement are true and correct.

(b) The Company represents and warrants to the Participant that this Agreement, the Plan and the Company Agreement constitute legal, valid, and binding obligations of the Company, enforceable in accordance with their respective terms, and that the execution, delivery, and performance of this Agreement, the Plan and the Company Agreement by the Company do not and will not conflict with, violate, or cause a breach of any agreement, contract, or instrument to which the Company is a party or by which the Company is bound or any judgment, order, or decree to which the Company is subject.

7. **General Provisions**.

(a) **Notices**. For purposes of this Agreement, notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or sent by facsimile transmission to the number, if applicable, set forth below, or sent by internationally recognized overnight or second-day courier service with proof of receipt maintained, at the following address(es) (or any other address(es) that any party may designate by written notice to the other party, in accordance herewith, except that such notice shall be effective only upon receipt):

If to the Company to:

Atlas Sand Management Company, LLC
5914 W. Courtyard Drive, Suite 200
Austin, Texas 78730-4918

Attn: John Turner

If to the Participant to:

[_____]

Any such notice shall, if delivered personally, be deemed received upon delivery; and shall, if delivered by internationally recognized overnight or second-day courier service, be deemed received on the second Business Day after being sent.

(b) **Governing Law; Venue**. THIS AGREEMENT IS GOVERNED BY AND SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE, WITHOUT REGARD TO THE CONFLICTS OF LAW PRINCIPLES OF SUCH STATE. The parties hereby irrevocably consent to the binding and exclusive venue for any legal claim between them or their affiliates arising out of or related to this Agreement being in the state or federal court of competent jurisdiction that regularly conducts proceedings in Dallas County, Texas. Nothing in this Agreement, however, precludes any party from seeking to remove a civil action from any state court to federal court.

(c) **Amendment and Waiver**. Notwithstanding any provision herein to the contrary, no amendment, alteration, suspension or termination of this Agreement shall be made, without the consent of the Participant, if such action would diminish any of the rights of the Participant hereunder. The provisions of this Agreement may be amended or modified only with the prior written consent of the Company and the Participant. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No course of conduct or failure or delay in enforcing the provisions of this Agreement shall be construed as a waiver of such provisions or affect the validity, binding effect, or enforceability of this Agreement or any provision hereof.

(d) **Severability**. The provisions of this Agreement are severable; if any provision of this Agreement is determined by a court of competent jurisdiction to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability shall not affect or impair the remainder of this Agreement, and this Agreement shall remain in full force and effect without such invalid, illegal, or unenforceable provision. In addition, any invalid, illegal, or unenforceable provisions shall be, and are, automatically reformed by such court to the maximum limitations permitted by applicable law.

(e) **Entire Agreement**. The Agreement, the Plan and the Company Agreement embody the complete agreement and understanding among the parties with respect to the subject matter of this Agreement and supersede and preempt any prior understandings, agreements, or representations by or among the parties, written or oral, which may have related to the subject matter hereof in any way. To the extent of any conflict between the provisions of this Agreement, the Plan and the Company Agreement, the provisions of this Agreement shall control.

(f) **Counterparts**. This Agreement may be executed in one or more counterparts (including portable document format (.pdf) and facsimile counterparts), each of which shall be deemed to be an original, but all of which together shall constitute one and the same agreement.

(g) **Gender and Plurals**. Whenever the context may require, any pronouns used herein shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural and vice versa.

(h) **Successors and Permitted Assigns**. Except as otherwise provided herein, this Agreement shall bind and inure to the benefit of and be enforceable by and against the Participant, the Company, and their respective successors, permitted assigns, and representatives, as the case may be (including subsequent holders of Restricted Units); *provided* that the rights and obligations of the Participant under this Agreement shall not be assignable except in connection with a transfer of the Restricted Units permitted under the Plan, the Company Agreement and this Agreement. Notwithstanding any other provision of this Agreement or in the Plan or the Company Agreement (i) each Restricted Unit shall remain subject to the terms of the Plan, the Company Agreement and this Agreement (including Sections 4 and 5, which shall be applied based on the Participant's employment status rather than that of any holder of the Restricted Unit), regardless of who holds such Restricted Unit, and (ii) the effect that the employment of the Participant by the Company or its Affiliates or events related to such employment have on the rights of and restrictions on the Restricted Units, including vesting and the rights of the Company with regard to the Restricted Units under this Agreement, the Plan and the Company Agreement, shall not be altered by any transfer of the Restricted Units. For the avoidance of doubt, each family member of the Participant or any other transferee pursuant to a transfer made in accordance with this Agreement, the Plan and the Company Agreement who acquires Restricted Units from the Participant shall be subject to the provisions of this Agreement as if such family member(s) or other transferee or transferees were a party or parties to this Agreement.

(i) **No Guarantee of Employment**. Nothing in this Agreement shall confer upon the Participant any right to continue in the employ or service of the Company or its Affiliate or interfere in any way with the right of the Company or its Affiliate to terminate Participant's employment or service at any time and for any reason.

(j) **Rights of Third Parties**. Nothing expressed or implied in this Agreement is intended or shall be construed to confer upon or give any Person, other than the parties to this Agreement and the estate, legal representative, or guardian of any individual party hereto, any rights or remedies under or by reason of this Agreement.

(k) **Headings; References; Interpretation**. All Section headings in this Agreement are for convenience only and shall not be deemed to control or affect the meaning or construction of any of the provisions hereof. The words "hereof," "herein" and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole, including all Exhibits attached hereto, and not to any particular provision of this Agreement. All references herein to Sections and Exhibits shall, unless the context requires a different construction, be deemed to be references to the Sections of this Agreement and the Exhibits attached hereto, and all such Exhibits attached hereto are hereby incorporated herein and made a part hereof for all purposes. The use herein of the word "including" following any general statement, term or matter shall not be construed to limit such statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation", "but not limited to", or words of similar import) is used with reference thereto, but rather shall be deemed to refer to all other

items or matters that could reasonably fall within the broadest possible scope of such general statement, term or matter. The word "or" as used herein is not exclusive and shall be deemed to have the meaning "and/or". Unless the context requires otherwise, all references herein to an agreement, instrument or other document shall be deemed to refer to such agreement, instrument or other document as amended, supplemented, modified and restated from time to time to the extent permitted by the provisions thereof. Neither this Agreement nor any uncertainty or ambiguity herein shall be construed or resolved against any party hereto, whether under any rule of construction or otherwise. On the contrary, this Agreement has been reviewed by each of the parties hereto and shall be construed and interpreted according to the ordinary meaning of the words used so as to fairly accomplish the purposes and intentions of the parties hereto.

(l) **Survival of Representations, Warranties and Agreements**. All representations, warranties, and agreements contained in this Agreement shall survive the consummation of the transactions contemplated hereby and the termination of this Agreement.

(m) **Deemed Resignations**. Unless otherwise agreed to in writing by the Company and the Participant, any termination of the Participant's employment with the Company or its Affiliate shall constitute an automatic resignation of the Participant as an officer of the Company and its Affiliates (if applicable), and an automatic resignation of the Participant from the board of managers (or similar governing body) of the Company and from the board of managers (or similar governing body) of all Affiliates of the Company (if applicable) and from the board of directors (or similar governing body) of any corporation, limited liability company, or other entity in which the Company holds a direct or indirect equity interest and with respect to which board (or similar governing body) the Participant serves as the designee or other representative of the Company or any of its Affiliates.

(n) **WAIVER OF JURY TRIAL**. NOTWITHSTANDING ANY OTHER PROVISION IN THIS AGREEMENT, EACH PARTY SHALL, AND HEREBY DOES, IRREVOCABLY WAIVES TO THE FULLEST EXTENT ALLOWED BY LAW THE RIGHT TO TRIAL BY JURY WITH RESPECT TO ANY CLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT.

(o) **WAIVER OF PUNITIVE AND EXEMPLARY DAMAGE CLAIMS**. EACH PARTY, BY EXECUTING THIS AGREEMENT, WAIVES, TO THE FULLEST EXTENT ALLOWED BY LAW, ANY CLAIMS TO RECOVER PUNITIVE, CONSEQUENTIAL, EXEMPLARY, OR SIMILAR DAMAGES NOT MEASURED BY THE PREVAILING PARTY'S ACTUAL DAMAGES IN ANY DISPUTE OR CONTROVERSY ARISING UNDER, RELATING TO OR IN CONNECTION WITH THIS AGREEMENT, INCLUDING ANY ARBITRATION PROCEEDING.

(p) **Section 409A of the Code**. The issuance of the Restricted Units is intended to be the grant of a profits interest rather than a deferral of compensation pursuant to Section 409A of the Internal Revenue Code and this Agreement and the issuance of the Restricted Units hereunder shall be construed and interpreted in accordance with such intent. Any action required by either of the parties pursuant to this Agreement will be performed in such a manner that the Restricted Units do not become subject to the provisions of Section 409A of the Internal Revenue Code or the Treasury regulations and other interpretive guidance issued thereunder.

(q) **Specific Performance**. The Participant acknowledges that the covenants and agreements in this Agreement are of a special nature and that any actual or threatened breach, violation, or evasion of the terms of this Agreement by him will (i) result in damages to the Company in amounts difficult to ascertain, and (ii) give rise to irreparable injury to the Company. Accordingly, the Participant agrees that the Company shall have the right to sue and is entitled to equitable relief, including without limitation injunctive relief (in the form of a temporary restraining order, temporary injunction, and permanent injunction) and specific performance, without the necessity of proof of actual damage or posting a bond, against the actual or threatened breach, violation, or evasion of this Agreement by the Participant in any proceeding that such Company may bring to enforce any provision of this Agreement, including with respect to the enforcement of the subject matter contained in Section 5. The remedies described in this paragraph shall not be deemed to be the exclusive remedies available to the Company for a breach by the Participant of this Agreement, but shall be in addition to all other remedies available at law or equity.

(r) **Spousal Provisions**.

(i) If the Participant is married on the Effective Date, then the Participant shall cause his spouse to execute a spousal consent in the form set forth on Exhibit A (the "Spousal Consent") to evidence such spouse's agreement and consent to be bound by the terms and conditions of this Agreement, the Plan and the Company Agreement as to such spouse's interest, whether as community property or otherwise, if any, in the Restricted Units held by the Participant. Notwithstanding the execution and delivery thereof, such Spousal Consent shall not be deemed to confer or convey to such spouse any rights in the Participant's Restricted Units that do not otherwise exist by operation of law or by agreement of the parties. If the Participant should marry or remarry subsequent to the Effective Date, the Participant shall, within 30 days thereafter, obtain his new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement, the Plan and the Company Agreement by causing such spouse to execute and deliver a Spousal Consent. If any spouse of the Participant fails to execute the Spousal Consent as required hereunder, until such time as the Spousal Consent is duly executed by such spouse, the Participant's economic rights associated with the Restricted Units will be suspended and not subject to recovery.

(ii) In the event of a property settlement or separation agreement between the Participant and his spouse, to the extent any interest in or with respect to the Restricted Units is assigned to the Participant's spouse or former spouse, the Participant shall use his best efforts to assign to such spouse or former spouse only the right to share in profits and losses, to receive distributions, and to receive allocations of income, gain, loss, deduction or credit or similar item to which the Participant was entitled with respect to the Restricted Units.

* * * * * * * * *

[Remainder of this page left intentionally blank]

IN WITNESS WHEREOF, the parties hereto have executed this Participant Agreement as of the date first written above.

ATLAS SAND MANAGEMENT COMPANY, LLC

By: _____
Ben M. Brigham, Manager

PARTICIPANT

_____

EXHIBIT A

JOINDER AGREEMENT

[Intentionally Omitted.]

EXHIBIT B

SECTION 83(B) ELECTION FORM

[Intentionally Omitted.]

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated February 15, 2023, with respect to the balance sheets of Atlas Energy Solutions Inc. included in Amendment No. 3 to the Registration Statement on Form S-1 (No. 333-269488) and related Prospectus of Atlas Energy Solutions Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

Austin, Texas
February 24, 2023

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated February 15, 2023, with respect to the consolidated financial statements of Atlas Sand Company, LLC included in Amendment No. 3 to the Registration Statement on Form S-1 (No. 333-269488) and related Prospectus of Atlas Energy Solutions Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

Austin, Texas
February 24, 2023