

Expanding and Strengthening 2021 Annual Report

COMPARATIVE HIGHLIGHTS

(\$ in millions)							
Financial and Operations Data		2021		2020		2019	
Revenues	\$	126.6	\$	122.3	\$	233.1	
Cost of Goods Sold	\$	140.4	\$	104.2	\$	152.0	
Net (Loss) Income	\$	(50.7)	\$	38.0	\$	31.6	
Contribution Margin ⁽¹⁾	\$	10.5	\$	39.1	\$	106.5	
Adjusted EBITDA ⁽¹⁾	\$	(30.5)	\$	20.5	\$	87.1	
Free Cash Flow ⁽¹⁾	\$	21.2	\$	16.9	\$	19.1	
Volumes sold (thousands of tons)		3,189		1,886		2,462	
Balance Sheet Data							
Total Assets	\$	374.0	\$	427.7	\$	363.4	SmartSand.com SmartSand.com
Long-Term Debt	\$	15.4	\$	22.4	\$	28.2	
Total Liabilities	\$ 10078	132.9	\$	138.9	\$	117.5	
Total Stockholders' Equity	\$	241.1	\$	288.8	\$	245.6	
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OUR COMPANY

We are a fully integrated sand supply and services company, offering complete mine to wellsite proppant supply and logistics solutions to our customers. We produce low-cost, high quality Northern White sand, which is a premium proppant used to enhance hydrocarbon recovery rates in the hydraulic fracturing of oil and natural gas wells. Our sand is also a high-quality product used in a variety of industrial applications including glass, foundry, building products, filtration, geothermal, renewables, ceramics, turf & landscape, retail, recreation and more. We also offer logistics solutions to our customers through our network of in-basin transloading terminals and our SmartSystemsTM wellsite storage capabilities.

We market our products and services primarily to oil and natural gas exploration and production companies, oilfield service companies, and industrial manufacturers throughout North America. We sell our sand and provide wellsite storage solutions services and equipment under flexible arrangements tailored to meet our customers' needs.

(1) Contribution margin, Adjusted EBITDA and Free Cash Flow are "Non-GAAP Financial Measures". For an explanation of why we believe these financial measures are meaningful and reconciliations of these measures to the most directly comparable measures under generally accepted accounting principles, see the section entitled "Note regarding Non-GAAP Financial Measures" on page 54 of the Form 10-K included herewith.



"We sold a record 3.2 million tons of sand in 2021 and believe we are in the early stages of a multi-year upcycle for our business."



DEAR FELLOW STOCKHOLDERS,

In 2021, we saw our business begin to recover from the COVID-19 pandemic and we continued to execute our longterm strategy of providing sand and logistics services from the mine to the wellsite. We sold a record 3.2 million tons of sand in 2021 and believe we are in the early stages of a multi-year upcycle for our business. Our low leverage and financial discipline have allowed us to sustainably grow our business at a time when many of our peers were scaling back or reorganizing. As we move forward, we continue to center our business strategy around:

- Being a low-cost producer of high-quality Northern White sand;
- Maintaining prudent debt levels, and being one of the lowest leveraged companies in the frac sand supply and services industry;
- Integrating our recent acquisitions to drive profitable growth;
- Delivering efficient and sustainable supply chain logistics from the mine to the wellsite;
- Increasing utilization of our assets;
- Driving volume through our newly completed, unit train capable transloading facility in Waynesburg, Pennsylvania to expand market share in the Appalachian Basin;
- Diversifying our revenue streams by establishing and growing a less cyclically driven industrial products business;
- Working with customers to provide flexible solutions to meet their long-term sand needs; and
- Maintaining our commitments to safety, quality and community.

We believe that the quality of our offerings is what keeps our customers coming back to us over-and-over again.

FINANCIAL STRENGTH

Smart Sand remains focused on generating positive free cash flow and maintaining low debt levels. In 2021, we generated \$21 million in free cash flow, and reduced our debt by approximately \$7 million. Over the last three years, we have reduced our debt levels by approximately \$26 million. The recent downturn provided a harsh reminder of the need to prudently manage our cash flows and debt levels. As the market improves, we believe that we have sufficient working capital and liquidity to support business operations to the take advantage of the upcycle. We have not drawn from our ABL credit facility, and we continue to be one of the lowest levered companies in the frac sand industry. As we have said time and time again, we believe maintaining a strong balance sheet and prudent debt levels are essential to remaining successful and competitive in our industry.

WAYNESBURG TERMINAL

Our newly-constructed, unit train capable transloading terminal in Waynesburg, Pennsylvania is up and running. The terminal has more than four miles of track, is located on Norfolk Southern's Class 1 rail line and services the Marcellus shale in southwestern Pennsylvania, West Virginia and eastern Ohio. Our Waynesburg terminal can currently transload approximately one million tons of frac sand per year, and there are opportunities to expand the facility as we grow our market share in this area. The terminal will also serve as the new Northeastern hub for our SmartSystems last-mile wellsite storage solution. We look forward to our Waynesburg terminal driving incremental opportunities to grow our business, including our SmartSystems utilization, as we did with our Van Hook terminal in the Bakken. The new terminal is exciting for us not only because it expands our presence in the Appalachian basin, but also because it provides Environmental, Social and Governance ("ESG") benefits to our customers in the region by reducing trucking mileage and associated carbon emissions related to sand delivery. We believe that bulk commodities belong on rail and that sustainable logistics must include terminals close to our customers' drilling activity.

RECENT ACQUISITION

Our recent acquisition of the Blair, Wisconsin frac sand mine highlights our plan to add high quality assets at a reasonable price. This facility provides direct Canadian National Railway access and meets our requirements of logistics and operational efficiency with multi-unit train capability. Blair provides an additional source of 40/70 sand which is currently in high demand in the energy market and has annual capacity of approximately 2.8 million tons. While providing additional access to key U.S. basins, the Blair facility now provides us the ability to compete in the Canadian frac sand market.



"In 2021, we invested in both people and capital to start to build out our Industrial Product Solutions business... We are penetrating the glass, building products, foundry, and recreation markets throughout North America. "

INDUSTRIAL PRODUCT SOLUTIONS

The volatility of the oil and gas sector over the last few years has reinforced the importance of diversification into sectors with less variability. In 2021, we invested in both people and capital to create our Industrial Product Solutions business and have been pleased with the initial results. We began selling sand through our Industrial Product Solutions business in the fourth quarter of 2021 and are excited about our prospects in 2022. We are working toward penetrating the glass, building products, foundry, and recreational markets throughout North America. Further, we expect to broaden our service capabilities with blending/packaging as well as adding finer grade products in the second half of 2022.

GROWING OUR WELLSITE STORAGE SOLUTIONS BUSINESS

We remain committed to the continued development of our SmartSystems wellsite storage solutions. We believe this system provides the most efficient and sustainable solution for sand management at the wellsite. Also, consistent with our emphasis on safety, our SmartSystems include both active and passive dust suppression and are engineered to operate safely with minimal respirable silica. In 2021, we successfully deployed our proprietary SmartPathTM transloader, which provides fast and efficient unloading of frac sand while also allowing us to maintain the small footprint enjoyed by our customers. We believe the market's emphasis on more efficient, sustainable and environmentally responsible operations will lead to increased adoption of our SmartSystems solutions.

IMPROVING OUR STRONG SAFETY AND ENVIRONMENTAL PERFORMACE

We prioritize safety and environmental stewardship for the betterment of our employees and the communities in which we operate. With respect to safety, we work collaboratively with our employees to identify and minimize workspace hazards to contribute to a safe and healthy workplace. At Smart Sand, safety is our first priority. As to environment, we strive to reduce our impact on the land, air, waste, atmosphere, and the communities we operate in. We are members of the Wisconsin Green Tier program, a marquee public/private partnership, under which the Wisconsin Department of Natural Resources worked with us on a plan to meet applicable legal requirements and to improve our facility from an environmental perspective. In addition to documenting seven years of compliant operations, we have worked on protecting wetlands, reducing usage and impacts of heavy equipment, reducing fuel usage of equipment and vehicles and defining best practices for onsite water management. We undertake similar efforts at all of our facilities, including our transload operations in North Dakota and Pennsylvania, as well as our Utica, Illinois mining facility. Sustainability has always been part of the Smart Sand story and we continue to identify new opportunities for improvement.



We are proud of our performance in 2021 as we emerged from the pandemic into the early stages of an upcycle. Delivering record volumes just one year after a very sharp downturn was an extraordinary achievement. We strongly believe that our high-quality Northern White sand leads to better long-term well results and outperforms regional sand in nearly every measurable way, most importantly in crush strength and conductivity. Northern White sand continues to be the frac sand of choice in the Bakken, Marcellus and Utica basins and we believe that there remains a value proposition in the other operating basins, such as the Eagle Ford and Permian basins. We also believe that to reduce truck traffic, accidents and emissions, bulk commodities, like frac sand, should move by rail to terminals that are close to completions activity. Our assets are uniquely situated to accomplish this goal. By working with our railroad partners to deliver competitive shipping costs and continuously improving our SmartSystems wellsite storage solutions, we believe that our customers will look to us as the leader in providing sustainable, efficient and cost-effective sand and logistics services to deliver our product to the wellsite. Sand is an integral part of the completion process, and we are well positioned to continue to be a leading provider of high quality Northern White sand to the marketplace.

We will do this with the strong focus on safety and environmental awareness that we have built our reputation on over the years. While in 2021 we focused primarily on volume growth, we are now increasingly focused on improving returns to our stockholders. We are excited to be a low-cost producer with an unlevered balance sheet in the early stages of an upcycle. Our ability to manage our finances, reduce expenses, and increase efficiencies during the global pandemic allowed us to increase our footprint within the industry while many of our peers were pulling back. We believe we can continue to deliver positive long-term operating results while staying true to our core principles of safely and

efficiently providing and delivering high-quality Northern White sand to the market. We are excited for the future of Smart Sand and believe that we will continue to be the model for long-term success in our industry.

Sincerely,

Chur Ing

Charles E. Young Chief Executive Officer







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Mine to Wellsite Solutions



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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the Annual Period Ended December 31, 2021

OR

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

> For the Transition Period from to **Commission file number 001-37936**



smartsand

Mine to Wellsite Solutions

SMART SAND, INC.

(Exact name of registrant as specified in its

charter)

Delaware (State or other jurisdiction of incorporation or organization)

> 1725 Hughes Landing Blvd, Suite 800 The Woodlands, Texas 77380 (Address of principal executive offices)

45-2809926 (I.R.S. Employer Identification Number)

(Registrant's telephone number)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes 🗆 No 🗵 Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934. Yes 🗆 No 🗵 Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗵 No 🗆 Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes 🗵 No 🗆 Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer Accelerated Filer □ Non-accelerated Filer Smaller reporting company Emerging growth company

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

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

As of June 30, 2021, the last business day of the registrant's second fiscal quarter of 2021, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$72,489,178 based on the closing price of \$3.33 per share, as reported on NASDAQ on that date.

Number of shares of common shares outstanding, par value \$0.001 per share as of March 2, 2022 was 44,805,992.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for the 2022 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2021.

(281) 231-2660

Common Stock, par value \$0.001 per share

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SIGNATURES

Certain Definitions

The following definitions apply throughout this annual report unless the context requires otherwise:

The following definitions apply throughout this annual report unless the context requires otherwise:						
"We", "Us", "Company", "Smart Sand" or "Our"	Smart Sand, Inc., a company organized under the laws of Delaware, and its subsidiaries.					
"shares", "stock"	The common stock of Smart Sand, Inc., nominal value \$0.001 per share.					
"ABL Credit Facility", "ABL Credit Agreement", "ABL Security Agreement"	The five-year senior secured asset-based lending credit facility (the "ABL Credit Facility") pursuant to: (i) an ABL Credit Agreement, dated December 13, 2019, between the Company, and Jefferies Finance LLC (the "ABL Credit Agreement"); and (ii) a Guarantee and Collateral Agreement, dated December 13, 2019, between the Company and Jefferies Finance LLC, as agent (the "Security Agreement").					
"Oakdale Equipment Financing", "MLA"	The five-year Master Lease Agreement, dated December 13, 2019, between Nexseer Capital ("Nexseer") and related lease schedules in connection therewith (collectively, the "MLA"). The MLA is structured as a sale-leaseback of substantially all of the equipment at the Company's mining and processing facility located near Oakdale, Wisconsin. The Oakdale Equipment Financing is considered a lease under article 2A of the Uniform Commercial Code but is considered a financing arrangement (and not a lease) for accounting or financial reporting purposes.					
"Loan Agreement", "Acquisition Liquidity Support Facility"	In connection with the Company's acquisition of Eagle Oil and Gas Proppants Holdings LLC from Eagle Materials Inc., which acquisition was completed on September 18, 2020, the Company, as borrower, entered into a Loan and Security Agreement, dated September 18, 2020 (the "Loan Agreement"), with Eagle Materials Inc., as lender, secured by certain property rights and assets of the acquired business, whereby the Company may draw loans in an aggregate amount up to \$5.0 million during the twelve month period ending September 19, 2021 (the "Acquisition Liquidity Support Facility"). This facility was terminated on September 20, 2021.					
"Exchange Act"	The Securities Exchange Act of 1934, as amended.					
"Securities Act"	The Securities Act of 1933, as amended.					
"FASB", "ASU", "ASC", "GAAP"	Financial Accounting Standards Board, Accounting Standards Update, Accounting Standards Codification, Accounting Principles Generally Accepted in the United States, respectively.					

Disclaimer Regarding Forward-looking Statements and Risk Factor Summary

This Annual Report on Form 10-K contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical fact included in this Annual Report on Form 10-K are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "anticipate", "estimate", "expect", "project", "plan", "intend", "believe", "may", "will", "should", "can have", "likely" and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events. For example, all statements we make relating to our estimated and projected costs, expenditures, cash flows, growth rates and financial results, our plans and objectives for future operations, growth or initiatives, strategies or the expected outcome or impact of pending or threatened litigation are forward-looking statements. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those expected, including without limitation:

- fluctuations in demand for frac sand;
- the cyclical nature of our customers' businesses;
- operating risks that are beyond our control, such as changes in the price and availability of transportation, natural gas
 or electricity; unusual or unexpected geological formations or pressures; pit wall failures or rock falls: or
 unanticipated ground, grade or water conditions;
- our dependence on our Oakdale mine and processing facility for a significant portion of our current sales;
- the level of activity in the oil and natural gas industries;
- the development of either effective alternative proppants or new processes to replace hydraulic fracturing;
- increased competition from new or existing sources of frac sand supply, including frac sand mines in locations located close to, or within, the oil and gas basins;
- federal, state and local legislative and regulatory initiatives relating to hydraulic fracturing and the potential for related regulatory action or litigation affecting our customers' operations, including restrictions on oil and gas development and possible bans on hydraulic fracturing;
- potential negative litigation outcomes;
- scarcity of supplies necessary to run our business;
- actions by the Organization of the Petroleum Exporting Countries or Russia;
- our rights and ability to mine our properties and our renewal or receipt of the required permits and approvals from governmental authorities and other third parties;
- our ability to successfully compete in the frac sand market;
- loss of, or reduction in, business from our largest customers;
- increasing costs or a lack of dependability or availability of transportation services and transload network access or infrastructure;
- increases in the prices of, or interruptions in the supply of, natural gas, electricity, or any other energy sources;
- increases in the price of diesel fuel;
- loss of or diminished access to water;
- our ability to successfully complete acquisitions or integrate acquired businesses;
- our ability to fully protect our intellectual property rights;
- our ability to make capital expenditures to maintain, develop and increase our asset base and our ability to obtain needed capital or financing on satisfactory terms;

- restrictions imposed by our indebtedness on our current and future operations;
- border restrictions;
- global pandemics, including the ongoing coronavirus ("COVID-19") pandemic;
- contractual obligations that require us to deliver minimum amounts of frac sand or purchase minimum amounts of products or services;
- the accuracy of our estimates of mineral reserves and resource deposits;
- a shortage of skilled labor and rising costs in the frac sand mining and manufacturing industries;
- our ability to attract and retain key personnel;
- our ability to maintain satisfactory labor relations;
- our ability to maintain effective quality control systems at our mining, processing and production facilities;
- seasonal and severe weather conditions;
- the results of political and civil unrest;
- fluctuations in our sales and results of operations due to seasonality and other factors;
- interruptions or failures in our information technology systems, including cyber-attacks;
- the impact of international or domestic terrorism or an armed conflict;
- extensive and evolving environmental, mining, health and safety, licensing, reclamation and other regulation (and changes in their enforcement or interpretation);
- silica-related health issues and corresponding litigation;
- our ability to acquire, maintain or renew financial assurances related to the reclamation and restoration of mining property; and
- other factors disclosed in Item I A. "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

We derive many of our forward-looking statements from our operating budgets and forecasts, which are based on many assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. The risk factors summarized below could materially harm our business, operating results and/or financial condition, impair our future prospects and/or cause the price of our common stock to decline. These risks are discussed more fully under Item 1A, "Risk Factors" and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K. Material risks that may affect our business, operating results and financial condition include, but are not necessarily limited to, the following:

- our business and financial performance depend on the level of activity in the oil and natural gas industry;
- a material portion of our revenues have been generated under contracts with a limited number of customers;
- we are exposed to the credit risk of our customers;
- our proppant sales are subject to fluctuations in market pricing;
- we face significant competition that may cause us to lose market share;
- we may be required to make substantial capital expenditures to maintain and grow our asset base and we may not realize enough of a return on such capital expenditures to cover their costs;
- the inability to obtain needed capital or financing on satisfactory terms, or at all;
- inaccuracies in estimates of volumes and qualities of our sand reserves could result in lower than expected sales and higher than expected cost of production;

- if we are unable to make acquisitions on economically acceptable terms, our future growth would be limited;
- restrictions in our ABL Credit Facility may limit our ability to capitalize on potential acquisitions and other business opportunities;
- we face distribution and logistical challenges in our business;
- we may be adversely affected by decreased demand for frac sand due to the development of effective alternative proppants or new processes to replace hydraulic fracturing;
- an increase in the supply of frac sand having similar characteristics as the frac sand we produce could make it more difficult for us to renew or replace our existing contracts on favorable terms, or at all;
- our long-term take-or-pay contracts may preclude us from taking advantage of increasing prices for frac sand or mitigating the effect of increased operational costs during the term of those contracts;
- our operations are subject to operational hazards and unforeseen interruptions for which we may not be adequately insured;
- our business relies significantly on railroads to deliver our products, and any delays in rail transportation could adversely impact our business.
- increases in the price or a significant interruption in the supply of natural gas, electricity or any other energy sources of which our production process consumes large amounts;
- increases in the price of diesel fuel could adversely affect our transportation costs;
- a facility closure entails substantial costs, and if we close our facility sooner than anticipated, our results of operations may be adversely affected;
- our operations are dependent on our rights and ability to mine our properties and on our having renewed or received the required permits and approvals from governmental authorities and other third parties;
- a shortage of skilled labor together with rising labor costs in the excavation industry, which may further increase operating costs;
- our business may suffer if we lose, or are unable to attract and retain, key personnel;
- failure to maintain effective quality control systems at our mining, processing and production facilities;
- seasonal and severe weather conditions;
- our cash flow fluctuates on a seasonal basis;
- we do not own the land on which our Van Hook, North Dakota terminal facility is located;
- we do not own the land on which our Waynesburg, Pennsylvania terminal facility is located;
- a terrorist attack or armed conflict;
- diminished access to water;
- we may be subject to interruptions or failures in our information technology systems, including cyber-attacks;
- if we are unable to fully protect our intellectual property rights, we may suffer a loss in our competitive advantage;
- we may be adversely affected by disputes regarding intellectual property rights of third parties;
- we currently rely on a limited number of suppliers for certain equipment and materials to build our SmartSystems, and our reliance on a limited number of suppliers for such equipment and materials exposes us to risks including price and timing of delivery;
- unsatisfactory safety performance may negatively affect our customer relationships and cause us to fail to retain existing customers or attract new customers;

- we may be subject to legal claims, such as personal injury and property damage;
- a financial downturn could negatively us;
- our future results will suffer if we do not effectively manage our expanded operations;
- federal, state and local legislative and regulatory initiatives or mandates relating to hydraulic fracturing, such as oil and gas leasing moratoriums, 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 frac sand or restrict our ability to maximize profits;
- we and our customers are subject to extensive regulations, including environmental and occupational health and safety regulations, that impose, and will continue to impose, significant costs and liabilities, and future regulations, or more stringent enforcement of existing regulations, could increase those costs and liabilities;
- we are subject to the Federal Mine Safety and Health Act of 1977, which imposes stringent health and safety standards on numerous aspects of our operations;
- our inability to acquire, maintain or renew financial assurances related to the reclamation and restoration of mining property; and
- climate change legislation and regulatory initiatives could result in increased compliance costs for us and our customers.

All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by these cautionary statements as well as other cautionary statements that are made from time to time in our other filings with the Securities and Exchange Commission (the "SEC") and public communications. You should evaluate all forward-looking statements made in this Annual Report on Form 10-K in the context of these risks and uncertainties.

We caution users of the financial statements that the important factors referenced above may not contain all of the factors that may be important to every user. In addition, we cannot make assurances that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our operations in the way we expect. The forward-looking statements included in this Annual Report on Form 10-K are made only as of the date hereof. We undertake no obligation to update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

PART I ITEM 1. — BUSINESS

The Company

We are a fully integrated frac sand supply and services company, offering complete mine to wellsite proppant supply and logistics solutions to our customers. We produce low-cost, high quality Northern White frac sand, which is a premium proppant used to enhance hydrocarbon recovery rates in the hydraulic fracturing of oil and natural gas wells. We also offer proppant logistics solutions to our customers through our in-basin transloading terminals and our SmartSystemsTM wellsite proppant storage capabilities. We market our products and services to oil and natural gas exploration and production companies, oilfield service companies and industrial manufacturers, and sell our sand under a combination of long-term take-or-pay contracts and spot sales in the open market, and provide wellsite proppant storage solutions services and equipment under flexible contract terms custom tailored to meet customers' needs. We believe that, among other things, the size and favorable geologic characteristics of our sand reserves, the strategic location and logistical advantages of our facilities, our proprietary SmartDepotTM portable wellsite proppant storage silos, SmartPathTM transloader and the industry experience of our senior management team make us as a highly attractive provider of frac sand and proppant logistics services from the mine to the wellsite.

We own and operate a frac sand mine and related processing facility near Oakdale, Wisconsin, at which we have approximately 250 million tons of proven and probable recoverable sand reserves as of December 31, 2021. We incorporated in Delaware in July 2011 and began operations with 1.1 million tons of annual nameplate processing capacity in July 2012. After several expansions, our current annual processing capacity at our Oakdale facility is approximately 5.5 million tons of frac sand. Our integrated Oakdale facility, with on-site rail infrastructure and wet and dry sand processing facilities, has access to two Class I rail lines and enables us to process and cost-effectively deliver products to our customers.

In September 2020, we acquired from Eagle Materials Inc., a Delaware corporation ("Eagle"), all of the issued and outstanding interests in Eagle Oil and Gas Proppants Holdings LLC, a Delaware limited liability company and wholly-owned subsidiary of Eagle ("Eagle Proppants Holdings"). The primary assets of Eagle Proppants Holdings and its subsidiaries include two frac sand mines and related processing facilities. The Utica, Illinois mine has approximately 129 million tons of proven and probable recoverable reserves as of December 31, 2021, annual processing capacity of 1.6 million tons and access to the BNSF Class I rail line through the Peru, Illinois transload facility. We began operating the Utica, Illinois mine and Peru, Illinois transload facility in October 2020. The secondary asset acquired in the acquisition was the New Auburn, Wisconsin mine, which we are not currently using to produce sand. The acquisition also included rights to use a rail terminal located in El Reno, Oklahoma, which was idled at the time of the acquisition but has recently started operating again.

We operate a unit train capable transloading terminal in Van Hook, North Dakota to service the Bakken Formation in the Williston Basin. We operate this terminal under a long-term agreement with Canadian Pacific Railway to service the Van Hook terminal directly along with the other key oil and natural gas exploration and production basins of North America. The Van Hook terminal became operational in April 2018. Since operations commenced, we have been providing Northern White sand in-basin at this terminal to our contracted and spot sales customers. This terminal allows us to offer more efficient delivery options to customers operating in the Bakken Formation in the Williston Basin.

In September 2021, we acquired the rights to construct and operate another transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Waynesburg terminal became operational in January 2022. We believe the Waynesburg terminal will allow us to be one of the most efficient and lowcost sources of frac sand in the Appalachian Basin.

We also offer to our customers portable wellsite proppant storage and management solutions through our SmartSystems products and services. Our SmartSystems provide our customers with the capability to unload, store and deliver proppant at the wellsite, as well as the ability to rapidly set up, takedown and transport the entire system. This capability creates efficiencies, flexibility, enhanced safety and reliability for customers. We believe that our SmartSystems reduce trucking and related fuel consumption for our customers, helping them meet their goals to reduce their carbon footprint in their daily operations.

For the years ended December 31, 2021, 2020 and 2019, we generated net (loss) income of approximately \$(50.7) million, \$38.0 million and \$31.6 million, respectively, and Adjusted EBITDA of approximately \$(30.5) million, \$20.5 million and \$87.1 million, respectively. For the definition of Adjusted EBITDA and a reconciliation to its most directly comparable financial measure calculated and presented in accordance with U.S. GAAP, please read "Note Regarding Non-GAAP Financial Measures."

Acquisition subsequent to the year-ended December 31, 2021

On March 4, 2022, we entered into a Membership Interest Purchase Agreement (the "Purchase Agreement") with Hi-Crush Inc., a Delaware corporation ("HCR"), and Hi-Crush Blair LLC, a Delaware limited liability company and wholly-owned subsidiary of HCR ("Blair"), pursuant to which the Company acquired all of the issued and outstanding limited liability company interests of Blair from HCR for aggregate cash consideration of approximately \$6.5 million, subject to customary purchase price adjustments as set forth in the Purchase Agreement (the "Transaction"). Entities affiliated with Clearlake Capital Group, L.P. ("Clearlake"), who collectively own approximately 24% of the Company's outstanding common stock, also own a significant portion of the outstanding common stock of HCR, and representatives of Clearlake serve on our board of directors and HCR's board of directors.

The primary assets of Blair consist of an idle frac sand mine and related processing facility located in Blair, Wisconsin. The Blair facility has approximately 2.8 million tons of total annual processing capacity and contains an onsite, unit train capable rail terminal with access to the Class 1 Canadian National Railway.

We believe this acquisition broadens our mine to wellsite capabilities by adding high quality sand mining and processing assets coupled with enhanced logistics options that provide direct access to an additional Class I rail line. We believe these additional mining and logistics resources help secure our ability to be a leading provider of Northern White Sand in the proppants market. With this acquisition, we now have direct access to four Class I rail lines and the ability to access all Class 1 rail lines within the United States and Canada.

Market

In recent years, the increasing supply of sand, particularly in-basin sand, relative to demand, has led to a continued depression of frac sand prices. Demand was strong in the first half of 2019 before declining toward the end of 2019 as oil and gas companies exhausted their budgets and managed their capital spending to be in line with their expected operating cash flows. During most of 2020, demand for frac sand declined significantly as a result of reduced oil and natural gas drilling and completion activity due to the ongoing effects of the COVID-19 pandemic, which caused a global decrease in all means of travel, the closure of borders between countries and a general slowing of economic activity worldwide. Activity in the oil and gas industry began to rebound in the fourth quarter of 2020 and throughout the year ended 2021 as the global distribution of COVID-19 vaccines ramped up and travel restrictions lessened. We have seen an increase in the volume of sand sold as the global economy has begun to reopen. However, the prices for frac sand remained depressed in 2021 due to overbuilt capacity relative to current demand. Increased supply of sand coupled with volatility in oil demand resulted in lower prices for our products and led to reduced interest in long-term contracts as customers have instead trended toward purchasing their frac sand supply in the spot market at current market prices. However, we expect that the recent higher demand for frac sand could lead to better pricing opportunities, although we cannot predict when frac sand prices will increase or stabilize, if at all.

Northern White frac sand, which is found predominantly in Wisconsin and limited portions of Minnesota, Illinois, and Missouri, is considered a premium proppant due to its favorable physical characteristics. While we anticipate that regional sand will continue to affect the demand for Northern White sand in some of the oil and natural gas producing basins in which we operate, we believe there will continue to be demand for our high-quality Northern White frac sand. In particular, we believe that Northern White frac sand has logistical advantages in the Marcellus, Bakken, and western basins of Colorado and Wyoming. We expect demand for our frac sand to continue to be supported by customers who are focused on long-term well performance and ultimate recovery of reserves from the oil and natural gas wells they are completing as well as those interested in the efficiency of their logistics supply chain and delivery of sand to the wellsite. Additionally, we believe market trends continue to support increased proppant usage per well drilled due to operator focus on well efficiencies through increasing lengths of drilling laterals, use of simul-fracking techniques and other well enhancement strategies. Finally, we believe that the adoption of our SmartSystems provide improved efficiencies in shipping and storing sand at the wellsite through reduced trucking requirements, which removes traffic from the roads, lowers diesel fuel consumption, thereby providing incremental value to our customers by reducing their carbon emissions and meeting their ESG initiatives.

In late 2021, we expanded our product offering to provide Industrial Product Solutions ("IPS") for our customers. We expect to expand and diversify to serve the vital industrial markets throughout North America, including glass, foundry, building products, filtration, geothermal, renewables, ceramics, turf & landscape, retail, recreation and more.

Business Strategies

Our principal business objective is to be the premier provider of sustainable Northern White Sand supply and logistics solutions to our customers. We do this through supporting our existing customers, expanding our market share, being a low-cost

producer of high-quality Northern White Sand, maintaining low debt leverage and managing efficient and sustainable supply chain logistics from the mine to the wellsite. In late 2021, we began expanding our product line to offer IPS. We believe that by executing these business strategies, we will be able to increase long-term stockholder value. We expect to achieve this objective through the following business strategies:

- **Diversifying our customer base to include Industrial Product Solutions.** In late 2021, we expanded our product offering to provide IPS for industrial customers. We are in the early stages of the sales process for industrial sand and expect to expand and diversify to serve the vital industrial markets throughout North America, including glass, foundry, building products, filtration, geothermal, renewables, ceramics, turf & landscape, retail, recreation and more.
- Expanding and optimizing our existing logistics infrastructure and developing additional origination and destination points. We expect to continue to capitalize on our Oakdale facility's ability to ship on two Class I rail carriers to maximize our product shipment rates, increase our railcar utilization and lower our transportation costs. We have the ability to simultaneously accommodate multiple unit trains on-site with the Canadian Pacific rail network while also having the ability to ship our frac sand directly to our customers on a second Class I rail carrier through our transloading facility located on the Union Pacific rail network approximately three miles from our Oakdale facility. This access to two Class I rail carriers from Oakdale provides increased delivery options for our customers, greater competition between our rail carriers and potentially lower freight costs.

Our second mine at Utica, Illinois and related transloading terminal in Peru, Illinois added new origination and destination points to our existing capabilities and offers additional capability to ship products on a third Class I rail carrier, the BNSF.

On March 4, 2022, we entered into the Purchase Agreement with HCR to purchase their idled Blair frac sand mine and related processing facility located in Blair, Wisconsin, which contains an onsite, unit train capable rail terminal with access to the Class 1 Canadian National Railway. With this acquisition, we now have direct access to four Class I rail lines and the ability to access all Class 1 rail lines within the United States and Canada.

We operate a multi-unit train capable transloading terminal in Van Hook, North Dakota, which we believe allows us to be one of the most efficient and low-cost sources of frac sand in the Bakken Formation in the Williston Basin.

In September 2021, we acquired the rights to construct and operate another transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Waynesburg terminal became operational in January 2022. We believe the Waynesburg terminal will allow us to be one of the most efficient and low-cost sources of frac sand in the Appalachian Basin.

Additionally, our SmartSystem wellsite storage and proppant management systems allows us to offer expanded logistics services to our customers. We believe that our SmartSystems reduce trucking and related fuel consumption for our customers, helping them meet their goals to reduce their carbon footprint in their daily operations.

The benefits of our long-term growth strategy for in-basin delivery of sand include expanding our customer base by marketing through our own terminals, more opportunity for spot sales by forward deploying sand and the opportunity to capture incremental margin on the sale of sand farther down the supply chain by managing the cost of rail, terminal and wellsite storage operations. Additionally, having a presence in-basin gives us an opportunity to have a base of operations from which to market and support our SmartSystems wellsite proppant storage solutions. Through the expansion of our SmartSystems fleet and addition of new origination and destination options, we continue evaluating ways to reduce the landed cost of our products in-basin and to the wellsite for our customers while increasing our customized service offerings to provide our customers with additional delivery and pricing alternatives.

Focusing on organic growth by increasing the utilization of our mine and frac sand processing facilities. We intend to continue pursuing opportunities to maximize the value and the utilization of our Oakdale and Utica facilities through the addition of new customers and increased sales volumes. Despite the emergence of regional sand in oil and natural gas producing basins, we believe the proppant market continues to offer attractive long-term growth fundamentals for Northern White frac sand in the key operating basins we currently serve due to the logistics advantages in these basins and its superior well results compared to regional sand alternatives. We believe that coupling our premium proppant with long-term sustainable logistics supply services may mitigate the potential cost savings of using regional sand.

Demand for frac sand increased during 2021, from the all-time lows in 2020, following the decline in demand for oil driven primarily by reduced demand from the COVID-19 pandemic. However, frac sand prices have continued to be depressed due to overbuilt capacity relative to current demand. According to Spears and Associates, Inc. ("Spears"), North America proppant demand increased by 26% in 2021 compared to 2020, mirroring an improving hydraulic fracturing market. Oil and gas prices are currently expected to stay at elevated levels in 2022, relative to historical prices, which should translate into higher drilling and completions activity. These improved market fundamentals should lead to improved proppant demand over the course of 2022.

- Focusing on being a low-cost provider and continuing to make process improvements. We continue to focus on being a low-cost provider, which we believe will allow us to compete effectively for sales of frac sand and to achieve attractive operating margins. Our low-cost structure results from a number of key attributes, including, among others, our (i) relatively low royalty rates, (ii) majority of fine mineral reserve deposits, (iii) our facilities access to all Class I rail lines within the United States and Canada creates competition between railroads and other sand logistics infrastructure advantages, and (iv) our low levels of debt. We have strategically designed our operations to provide for low-cost production, including having dryers and wet plants enclosed in our Oakdale and Utica processing facilities that allow for year-round operation at both facilities. This allows us to more efficiently match our wet sand production with our drying capacity and to better utilize our workforce with a goal to reduce the overall cost of production. We continue to invest in capital projects and consider strategic acquisitions that increase efficiencies and offer the opportunity for a high return on investment. In addition, we seek to maximize our mining yields on an ongoing basis by targeting sales volumes that more closely match our reserve gradation in order to minimize waste in our processing. We also continue to evaluate other mining techniques to reduce the overall cost of our minimize operations.
- **Creating flexible sales activities.** We believe that demand for our products will remain strong in basins where regional sand is not an attractive alternative due to the logistics and performance advantages of Northern White Sand, such as the Bakken in North Dakota, the Marcellus and Utica formations in the Northeast region of the United States and the Colorado and Wyoming basins. We continue to have discussions with operators in these regions regarding new relationship and growth opportunities. We also believe that the long-term benefits of high quality Northern White sand outweighs the short-term cost savings provided by regional sand in the Permian, Eagle Ford and SCOOP/STACK basins. We believe there are additional opportunities for customers in the Permian and other basins, which have regional supply, who are focused on the long-term performance of their production and on the long-term efficiency of their logistics.

While we continue to look for long-term contract opportunities, we intend to increase focus on shorter term contracts and increase sales in the spot market given the reluctance of our customers to enter into long-term take-or-pay contracts in the current market environment. Having a greater portion of our activity on spot or short-term contracts allows us the opportunity to take advantage of pricing improvements quickly should market fundamentals improve.

Competitive Strengths

We believe that we will be able to successfully execute our business strategies because of the following competitive strengths:

• Long-lived, strategically located, high-quality reserve base. We believe our three frac sand mines in Oakdale, Wisconsin, Utica, Illinois and Blair, Wisconsin have a uniquely desirable combination of a large high-quality reserves of fine mesh sand that is contiguous to their production with either on-site or close proximity to primary rail loading facilities. As of December 31, 2021, we have an estimated life of mine of approximately 90 years at Oakdale and 161 years at Utica based on our current expected sales volumes. The Blair facility, which is currently idled, increased our total annual processing capacity to approximately 10.0 million tons.

We believe our reserve base positions us well to take advantage of current market trends of increasing demand for finer mesh frac sand. We also believe that having our mine, processing facilities and primary rail loading facilities in close proximity provides us with an overall low-cost structure, which enables us to compete effectively for sales of Northern White frac sand and to achieve attractive operating margins.

• *Intrinsic logistics advantage.* We believe that we are one of the few frac sand producers with a facility customdesigned for the specific purpose of delivering frac sand to all of the major U.S. oil and natural gas producing basins by an on-site rail facility that can simultaneously accommodate multiple unit trains. Our on-site transportation assets at Oakdale include approximately nine miles of rail track in a triple-loop configuration and four railcar loading facilities that are connected to a Class I rail line owned by Canadian Pacific. We believe our customized on-site logistical configuration yields lower operating and transportation costs compared to manifest train or single-unit train facilities as a result of our higher railcar utilization, more efficient use of locomotive power and more predictable movement of product between mine and destination. In addition, we have a transload facility on a Class I rail line owned by Union Pacific in Byron Township, Wisconsin, approximately three miles from the Oakdale facility. This transload facility, which is also capable of handling multiple unit trains simultaneously, allows us to ship sand directly from Oakdale to our customers on more than one Class I rail carrier. We believe that we are the only sand facility in Wisconsin that has dual-served rail capabilities, which should create competition between our rail carriers and allow us to provide more competitive logistics options for our customers.

Our Utica mine and related Peru transloading terminal in Illinois adds significant quality reserves and logistics assets that further increase our logistics advantage by providing access to another Class I rail line through our owned, multiple unit train capable Peru transload facility with direct access to the BNSF rail line. These additional logistics options give us greater access to operating basins in the Western United States allowing us to offer more competitive pricing to existing and new customers in these markets.

The addition of the Blair frac sand mine and related processing facility located in Blair, Wisconsin, which contains an onsite, unit train capable rail terminal with access to the Class 1 Canadian National Railway, has secured our access to provide sand on all Class I rail lines in the United States and Canada.

• *Expanded logistics solutions.* Our transloading terminal in Van Hook, North Dakota is capable of handling multiple unit trains simultaneously, and we have been providing in-basin sand at this terminal to our customers since operations began in 2018. This terminal has allowed us to expand our customer base and to offer more efficient delivery options to customers operating in the Bakken Formation in the Williston Basin.

In 2021, we acquired the rights to construct and operate another transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Waynesburg terminal became operational in January 2022. We believe Waynesburg terminal will allow us to be one of the most efficient and low-cost sources of frac sand in the Appalachian Basin.

We also have rights to operate a terminal located in El Reno, Oklahoma, which we acquired through the acquisition with Eagle. While this terminal was idled at the time of the acquisition, we have been selling sand in recent months to customers located in the area.

Our SmartSystems wellsite proppant storage and management products provide our customers with the capability to unload, store and deliver proppant at the wellsite, as well as the ability to rapidly set up, takedown and transport the entire system. This capability creates efficiencies, flexibility, enhanced safety and reliability for customers. Through our SmartSystems wellsite proppant storage solutions we offer the SmartDepot and SmartDepotXL silo systems, SmartPath transloader, and our rapid deployment trailers. We believe that our SmartSystems reduce trucking and related fuel consumption for our customers, helping them meet their goals to reduce their carbon footprint in their daily operations. We have also developed a proprietary software program, the SmartSystem Tracker, which allows our SmartSystems customers to monitor silo-specific information, including location, proppant type and proppant inventory.

We are capable of delivering sand to any onshore operating basin in the United States and Canada. We have direct access to four Class I rail lines in North America and access to all Class I rail lines, which gives us superior advantage over many of our competitors by allowing us to offer more competitive pricing and delivery options to our customers.

- Sufficient liquidity and financial flexibility. We believe we have sufficient liquidity to support our operations and pursue our growth initiatives. As of December 31, 2021, we had cash on hand of \$25.6 million. Further, we have a \$20 million senior secured asset-based lending credit facility with Jefferies Finance LLC, under which we had undrawn availability of \$14.9 million as of December 31, 2021 and no outstanding borrowings. The available borrowing amount under the ABL Credit Facility is based on the Company's eligible accounts receivable and inventory. The ABL Credit Facility matures on December 13, 2024. Our total available liquidity among cash and available borrowings was \$40.5 million as of December 31, 2021.
- *Experienced management team.* The members of our senior management team bring significant experience to the market environment in which we operate. Their expertise covers a range of disciplines, including industry-specific operating and technical knowledge and experience managing businesses in a variety of operating conditions.

• Focus on safety and environmental stewardship. We are committed to maintaining a culture that prioritizes safety, the environment and our relationship with the communities in which we operate, actions we believe are critical to the success of our business. We are a Tier 1 participant in The Wisconsin Department of Natural Resources' Green Tier program, which encourages, recognizes and rewards companies for voluntarily exceeding environmental, health and safety legal requirements. Since 2016, Smart Sand has maintained International Organization for Standardization ("ISO") ISO 9001 and ISO 14001 registrations for our quality management system and environmental management system programs, respectively, for our Oakdale facility. We also have attained Green Professional status in Wisconsin's Green Master sustainability recognition program. We are one of a select group of companies who are members of the Wisconsin Industrial Sand Association, which promotes safe and environmentally responsible sand mining standards.

Our Customers

Our core customers are oil and natural gas exploration and production and oilfield service companies. In late 2021, we began diversifying our sand sales to include IPS to customers. Sales of IPS to customers were immaterial during 2021, but we intend to increase our focus on IPS throughout 2022. We sell frac sand under long-term take-or-pay contracts as well as in the spot market, and provide proppant logistics solutions through our in-basin transloading terminals and SmartSystems wellsite proppant storage solutions and other logistics services.

Generally, customers under long-term take-or-pay contracts are required to take minimum volumes of sand or make shortfall payments for a specified period of time. We recognize revenue in our results of operations in the period in which the obligation becomes due.

In the current market, customers are disinclined to enter into long-term contracts for their frac sand supply and have instead trended toward purchasing their frac sand supply in the spot market or under short-term contractual arrangements at market prices. Should our customer base continue to limit their exposure to longer term contracts, we will continue to focus on shorter term contracts and increasing sales in the spot market.

Customers renting SmartSystems are able to tailor the contract, including adjusting the number of SmartDepot silos and SmartPath transloaders to be supplied, to meet their short-term and long-term needs. We recognize rental revenue when the equipment is made available for the customer to use or other obligations in the contract are met.

For the year ended December 31, 2021, EQT, Halliburton and Liberty accounted for 24.3%, 18.3%, and 14.8%, respectively, of total revenue, and the remainder of our revenues were from 20 customers. For the year ended December 31, 2020, Rice Energy (a subsidiary of EQT Corporation), Liberty and U.S. Well Services accounted for 28.1%, 21.7%, and 14.0%, respectively, of our total revenues, and the remainder of our revenues were from 20 customers. For the year ended December 31, 2019, Liberty, Rice Energy (a subsidiary of EQT Corporation), Hess Corporation, and U.S. Well Services accounted for 23.8%, 19.0%, 14.7%, and 15.5%, respectively, of our total revenues, and the remainder of our revenues were from 20 customers. Please read "Risk Factors—Risks Inherent in Our Business—A substantial majority of our revenues have been generated under contracts with a limited number of customers, and the loss of, material nonpayment or nonperformance by or significant reduction in purchases by any of them could adversely affect our business, results of operations and financial condition."

Capital Plans

We expect 2022 capital expenditures to be between \$25.0 million and \$30.0 million, consisting primarily of capital for efficiency projects at Oakdale and Utica, capital related to the Waynesburg terminal and acquisition and incremental capital to purchase the Blair mine and processing facility, acquired on March 4, 2022, and to bring it online over the course of the year. We expect to fund these capital expenditures with existing cash, cash generated from operations, or borrowings under the ABL Credit Facility or other financing sources, such as equipment finance providers.

Industry Trends Impacting Our Business

Unless otherwise indicated, the information set forth under this section, including all statistical data and related forecasts, is derived from Spears' "Proppant Market Report with Frac Market Overview - Q4 2021" published in the first quarter of 2022. While we are not aware of any misstatements regarding the proppant industry data presented herein, estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors."

Demand Trends

According to Spears, the North American proppant market, including frac sand, ceramic and resin-coated proppant, was approximately 73 million tons in 2021, which is approximately 26% increase from the 58 million tons Spears reported for 2020. Spears estimates that 2022 demand will increase to approximately 90 million tons, which is an approximate 23% increase over 2021.

Supply Trends

There has been consolidation activity including mergers, acquisitions, closures of mines and bankruptcy filings among our peers. Additional consolidation activity is expected in 2022 in the mining, transloading and logistics businesses.

Supplies of high-quality Northern White frac sand are limited to select areas, predominantly in western Wisconsin and limited areas of Minnesota and Illinois. We believe the ability to obtain large contiguous reserves in these areas is a key constraint and can be an important supply consideration when assessing the economic viability of a potential frac sand facility. Further constraining the supply and throughput of Northern White frac sand is that not all of the large reserve mines have on-site excavation, processing or logistics capabilities, which impact the long-term competitiveness of these mines due to lower efficiency and higher cost structures. Historically, much of the capital investment in Northern White frac sand mines was used for the development of coarser deposits in western Wisconsin, which is inconsistent with the increasing demand for finer mesh frac sand in recent years. As such, we've seen competitors in the Northern White frac sand market reduce their capacity by shuttering or idling operations as the shift to finer sands in hydraulic fracturing of oil and natural gas wells and to lower cost regional sand sources has eroded the ongoing economic viability of mines with coarser reserve deposits and inefficient mining and logistics facilities.

Environmental, Social & Governance

In 2020, we refined our scope of setting a Company objective of adopting a formal Environmental, Social & Governance ("ESG") program. Smart Sand already has a strong record of environmental performance. In 2014, we joined the Wisconsin Green Tier program, a marquee public/private partnership, under which the Wisconsin Department of Natural Resources worked with us on a plan to meet applicable legal requirements and to improve our facility from an environmental perspective. In addition to documenting seven years of compliant operations, we have worked on, among other things, protecting wetlands, reducing usage and impact of heavy equipment, reducing fuel usage of equipment and vehicles and defining best practices for onsite water management. We are also a member of Wisconsin's sustainability initiative, Green Masters. As part of this program, we have completed a detailed survey of our sustainability and social responsibility activities and started the process of a complete carbon inventory. As a mining company, we invest and plan for reclamation, ensuring that the land is returned to beneficial use. Smart Sand has held ISO 9001/14001-2015 environmental and quality management systems for the past five years. Smart Sand is also a member of the Wisconsin Industrial Sand Association, a select group of mining companies focused on safety, environmental and public policy.

One of the goals of the United Nations' Paris Agreement is a carbon neutral world by the year 2050. We believe that reducing our carbon footprint will lead to a better world. As a mining company, we are an energy consumer, and we have already seen that we can reduce greenhouse gas emissions by using the best technologies and taking a thoughtful approach to our energy choices. We know that energy consumption is only one part of ethical operations. For additional information regarding the United Nations' Paris Agreement, see "Item 1A Risk Factors-Risks Related to Environmental, Mining and Other Regulation-Climate change legislation and regulatory initiatives could result in increased compliance costs for us and our customers."

We provide social value through our excellent employment opportunities. Our first priority is keeping our employees safe, which we accomplish through daily training and inspections. Our business supports hundreds of families and we are proud to offer rewarding and interesting work with competitive compensation and benefits. We promote from within, provide continuous training, hire with a passion for diversity and provide every employee with the opportunity to participate in retirement plans and ownership of the Company. Smart Sand is an active charitable partner in the communities in which it operates, making both financial and time investments in those communities.

Sustainability has always been part of the Smart Sand story, but we are looking forward to evaluating what we have done and identifying improvement opportunities. We are embracing this growing movement and designing an area in our website to articulate our ESG goals and report on our performance.

Permits

We operate in a highly regulated environment overseen by many governmental regulatory and enforcement bodies at the local, state and federal levels. To conduct our operations, we are required to have obtained permits and approvals that address environmental, land use and safety issues at our operating facilities. Our current and planned areas for excavation at our mining facilities are permitted for extraction of our proven reserves. Portions of our facilities lie in areas designated as wetlands, which will require additional local, state and federal permits prior to mining and reclaiming those areas.

We also must meet requirements for certain international standards concerning safety, greenhouse gases and rail operations. We have voluntarily agreed to meet the standards of the Wisconsin Department of Natural Resources' Green Tier program, the National Industrial Sand Association ("NISA") and the Wisconsin Industrial Sand Association. Further, for Oakdale, we have agreed to meet the standards required to maintain our ISO 9001-2015 and ISO 14001-2015 quality/ environmental management system registrations. These voluntary requirements are tracked and managed along with our permits.

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 ensure 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.

Major Stockholder

Clearlake is an investment firm founded in 2006 operating integrated businesses across private equity, credit, and other related strategies. With a sector-focused approach, the firm seeks to partner with world-class management teams by providing long-term capital to businesses that can benefit from Clearlake's operational improvement approach, O.P.S.® The firm's core target sectors are industrials, technology, and consumer. Clearlake currently has over \$60 billion of assets under management and its senior investment principals have led or co-led over 300 investments.

Competition

The proppant industry is highly competitive. Please read "Risk Factors—Risks Inherent in Our Business—We face significant competition that may cause us to lose market share." There are numerous large and small producers in all sand producing regions of North America with whom we compete, many of which also offer solutions for unloading, storing and delivering proppant to the wellsite. Our main competitors include Badger Mining Corporation, Hi-Crush, Inc., Covia Holdings Corporation, U.S. Silica Holdings, Inc., Capital Sand Company and Solaris Oilfield Infrastructure, Inc.

Although some of our competitors may have greater financial or natural resources than we do, we believe that we are well-positioned competitively due to our low cost of sand production, low debt levels, logistics infrastructure and high-quality, balanced reserve profile and patented SmartSystems wellsite proppant storage solutions, which offer numerous benefits over our competition. The most important factors on which we compete are our service capabilities, product quality, proven performance, sand characteristics, transportation capabilities, reliability of supply, price, logistics services and the performance of patented SmartSystems wellsite proppant storage solutions technology. Demand for frac sand and logistics solutions and the prices that we will be able to obtain for our products, to the extent not subject to a fixed price or take-or-pay contract, are closely linked to proppant consumption patterns for the completion of oil and natural gas wells in North America. These consumption patterns are influenced by numerous factors, including, among other things, the price for oil and natural gas and hydraulic fracturing activity, including the number of stages completed and the amount of proppant used per stage. Further, these consumption patterns are also influenced by the location, quality, price and availability of frac sand and other types of proppants such as resin-coated sand and ceramic proppant.

Seasonality

Our business is affected to some extent by seasonal fluctuations in weather that impact the production levels for a portion of our wet sand processing capacity. While our dry plants are able to process finished product volumes evenly throughout the year, our excavation and our wet sand processing activities have historically been limited to primarily non-winter months. As a consequence, we have experienced lower cash operating costs in the first and fourth quarter of each calendar year, and higher cash operating costs in the second and third quarter of each calendar year when we overproduced wet sand to meet demand in the winter months. These higher cash operating costs are capitalized into inventory and expensed when these tons are sold, which can lead to us having higher overall costs in the first and fourth quarters of each calendar year as we expense inventory costs that were previously capitalized. However, we have enclosed, indoor wet plants at our Oakdale and Utica processing facilities, which allow us to produce wet sand inventory year-round to support a large portion of our dry sand processing capacity, which may reduce certain of the effects of this seasonality. We may also sell frac sand for use in oil and natural gas producing basins where severe weather conditions may curtail drilling activities and, as a result, our sales volumes to those areas may be reduced during such severe weather conditions could have a material adverse impact on our operations, please read "Risk Factors—Seasonal and severe weather conditions could have a material adverse impact on our business, results of operations and financial condition" and "Risk Factors—Our cash flow fluctuates on a seasonal basis."

Intellectual Property

Our intellectual property primarily consists of trade secrets, know-how and trademarks. We own patents and have patent applications pending related to our SmartSystems wellsite proppant storage solutions. All of the issued patents have an expiration date after July 2030. With respect to our other products, we principally rely on trade secrets, rather than patents, to protect our proprietary processes, methods, documentation and other technologies, as well as certain other business information. For a discussion of the impact of our intellectual property, please read "Risk Factors–If we are unable to fully protect our intellectual property rights, we may suffer a loss in our competitive advantage" and "Risk Factors–We may be adversely affected by disputes regarding intellectual property rights of third parties."

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, business interruption, environmental and pollution and other coverage, although coverage for environmental and pollution-related losses is subject to significant limitations. For additional discussion regarding our insurance, please read "Risk Factors–Our operations are subject to operational hazards and unforeseen interruptions for which we may not be adequately insured."

Environmental and Occupational Health and Safety Regulations

We are subject to stringent and complex federal, state, local and international laws and regulations governing the discharge of materials into the environment or otherwise relating to protection of worker health, safety and the environment. 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 is 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 a material adverse effect on our operations and financial position.

We do not believe that compliance by us with federal, state, local or international environmental laws and regulations will have a material adverse effect on our business, financial position or results of operations or cash flows. We cannot be

assured, however, that future events, such as changes in existing laws or enforcement policies, the 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 a material adverse effect on our business.

Air Emissions

Our operations are subject to the federal Clean Air Act ("CAA") and related state and local laws, which restrict the emission of air pollutants and impose permitting, monitoring and reporting requirements on various sources. Over the next several years, we may be required to incur certain capital expenditures for air pollution control equipment or to address other air emissions-related issues. Changing and increasingly stringent 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.

Climate Change

In recent years, the U.S. Congress has considered legislation to reduce emissions of greenhouse gases ("GHG"). We are unable to predict actions that may be taken by the Federal government however, 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 U.S. Environmental Protection Agency ("EPA") has adopted regulations controlling GHG emissions under its existing authority. Compliance with new legislation may require us to incur substantial costs or suspend or terminate our operations.

President Biden and the Democratic Party, which now controls Congress, have identified climate change as a priority, and it is likely that new executive orders, regulatory action, and/or legislation targeting GHG emissions, or prohibiting, delaying or restricting oil and gas development activities in certain areas, will be proposed and/or promulgated during the Biden Administration. For example, the acting Secretary of the Department of the Interior recently issued an order preventing staff from producing any new federal fossil fuel leases or permits without sign-off from a top political appointee, and President Biden recently announced a moratorium on new oil and gas leasing on federal lands and offshore waters pending completion of a comprehensive review and reconsideration of Federal oil and gas permitting and leasing practices. President Biden's order also established climate change as a primary foreign policy and national security consideration, affirms that achieving net-zero GHG emissions by or before midcentury is a critical priority, affirms the Biden Administration's desire to establish the United States as a leader in addressing climate change, generally further integrates climate change and environmental justice considerations into government agencies' decision-making, and eliminates fossil fuel subsidies, among other measures. President Biden also announced that the United States is taking steps to reenter the Paris Agreement.

Water Discharges

The Clean Water Act ("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 state waters or waters of the United States. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by the EPA or an analogous state agency. The CWA and regulations implemented thereunder also prohibit the discharge of dredge and fill material into regulated waters, including jurisdictional wetlands, unless authorized by the Army Corps of Engineers ("Corps") pursuant to an appropriately issued permit. 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. Compliance with new rules and legislation could require us to face increased costs and delays with respect to obtaining permits for expansion activities. 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.

Hydraulic Fracturing

We supply frac sand to hydraulic fracturing operators in the oil and natural gas industry. Hydraulic fracturing is an industry 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, proppants, 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 frac sand for use in their hydraulic fracturing activities.

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 frac sand.

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 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 a material adverse effect on our business.

Site Remediation

The Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA") and comparable state laws impose strict, joint and several liability without regard to fault or the legality of the original conduct on certain classes of persons that contributed to the release of a hazardous substance into the environment. 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 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 Endangered Species Act ("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. Harm under the ESA includes acts that actually kill or injure wildlife as well as significant habitat modification or degradation that significantly impairs essential behavioral patterns, including breeding, feeding or sheltering. Take prohibitions also protect migratory birds under the MBTA.

The dunes sagebrush lizard 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 dunes sagebrush lizard 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 frac sand facilities may be located. The United States Fish and Wildlife Service ("USFWS") is currently reviewing a petition from the Center for Biological Diversity and the Defenders of Wildlife to list the dunes sagebrush lizard as endangered or threatened under the ESA, and on July 16, 2020, issued a 90-day finding that the petition presents substantial information that listing may be warranted and the agency will conduct a more thorough review to determine whether listing may be warranted. On November 17, 2021, the Center for Biological Diversity filed a 60-day notice of intent to sue the U.S. Department of the Interior and USFWS for unlawfully delaying protection of the dunes sagebrush lizard under the ESA; as of March 4, 2022, no suit has been filed. If the dunes sagebrush lizard is listed as an endangered or threatened species, our operations and the operations of our customers in any area that is designated as the dunes sagebrush lizard's habitat may be limited, delayed or, in some circumstances, prohibited, and our and our customers could be required to comply with expensive conservation measures intended to protect the dunes sagebrush lizard and its habitat.

The USFWS has approved several Enhancement of Survival Permits that allow operations in designated habitats to continue if the dunes sagebrush lizard is listed provided that qualification criteria and conservation measures required by such permits are met. One such permit is referred to as the Texas Conservation Plan ("TCP"). The TCP was developed as a voluntary conservation plan for the dunes sagebrush lizard by the Texas Comptroller, which served as the permit holder until the transfer of the TCP to a new permit holder in September 2020. Smart Sand is a participant in the TCP and has enrolled 2,713-acres of its land in Winkler, County, Texas. The USFWS issued a second Enhancement of Survival Permit for operations in West Texas that may affect the dunes sagebrush lizard in January 2021. The permits cover incidental "take" of the dunes sagebrush lizard associated with oil and gas exploration and development, sand mining, renewable energy development and operations, pipeline construction and operations, local government activities, agricultural activities, and general construction

activities within the CCAA permit area that could affect suitable habitat. Smart Sand's enrollment in the TCP minimizes the potential that new or more stringent conservation measures or land, water, or resource use restrictions beyond the measures and restrictions in the TCP may be required for that property.

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, we could experience increased costs arising from species protection measures and delays or limitations in our or our customers' performance of operations, which could adversely affect or reduce demand for our frac sand.

Mining and Workplace Safety

Our sand mining operations are subject to mining safety regulation. The U.S. Mining Safety and Health Administration ("MSHA") is the primary regulatory organization governing frac sand 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.

OSHA has promulgated new rules for workplace exposure to respirable silica for several other industries. Respirable silica is a known health hazard for workers exposed over long periods. MSHA is expected to adopt similar rules as part of its "Long Term Items" for rulemaking, and in August 2019 published a formal request for information and data on feasible, best practices to protect miners' health from exposure to silica in respirable dust. Airborne respirable silica is associated with work areas at our site and is monitored closely through routine testing and MSHA inspection. If the workplace exposure limit is lowered significantly, we may be required to incur certain capital expenditures for equipment to reduce this exposure. Smart Sand also adheres to the NISA's respiratory protection program, and ensures that workers are provided with fitted respirators and ongoing radiological monitoring.

Environmental Reviews

Our 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 mining operation, 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. In January 2020, the White House Council on Environmental Quality ("CEQ") published a Notice of Proposed Rulemaking that would revise NEPA's implementing regulations, with the stated purpose of facilitating more efficient and timely NEPA reviews. CEQ is currently soliciting public comments on its proposal through March 10, 2020. At this time we cannot predict what revisions, if any, will be made to NEPA's implementing regulations, and what impacts, if any, they will have on our operations.

State and Local Regulation

We are subject to a variety of state and local environmental review and permitting requirements. Some states, including Wisconsin where our current projects are located, have state laws similar to NEPA; thus, our development of a new site or the expansion of an existing site may be subject to comprehensive state environmental reviews even if it is not subject to NEPA. 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. Wisconsin has specific permitting and review processes for commercial silica mining operations, and state agencies may impose different or additional monitoring or mitigation requirements than federal agencies. 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 frac sand in the oil and natural gas industry drove a significant increase in the production of frac sand. 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 mining activities, provide compensation to local residents for potential impacts of mining activities and, in some cases, ban issuance of new permits for mining activities. To date, we have not experienced any material impact to our existing mining operations or planned capacity expansions as a result of these types of concerns. We would expect this trend to continue as oil and natural gas production increases.

In August 2014, we were accepted as a Tier 1 participant in Wisconsin's voluntary Green Tier program, which encourages, recognizes and rewards companies for voluntarily exceeding environmental, health and safety legal requirements. Successful Tier 1 participants are required to demonstrate a strong record of environmental compliance, develop and implement an environmental management system meeting certain criteria, conduct and submit annual performance reviews to the Wisconsin Department of Natural Resources, promptly correct any findings of non-compliance discovered during these annual performance reviews, and make certain commitments regarding future environmental program improvements. Our most recent annual report required under the Tier 1 protocol was submitted to the Green Tier Program contact on August 1, 2019.

Employees

As of December 31, 2021, we employed 239 people, of which 43 were employed under collective bargaining agreements. We offer competitive salaries and a comprehensive package of employee benefits, including bonuses, retirement savings plans, medical, dental, life and disability coverage. We consider our employee relations to be good.

Executive Officers of the Registrant

Charles E. Young

Charles E. Young was named Chief Executive Officer in July 2014. Mr. Young has also served as a director since September 2011. Mr. Young founded Smart Sand, LLC (our predecessor) and served as its President from November 2009 to August 2011. Mr. Young served as our President and Secretary from September 2011 to July 2014. Mr. Young has over 25 years of executive and entrepreneurial experience in the high-technology, telecommunications and renewable energy industries. He previously served as the President and Founder of Premier Building Systems, a construction, solar, geothermal and energy audit company in Pennsylvania and New Jersey from 2006 to 2011. Mr. Young serves as a director for Gravity Oilfield Services, Inc., a privately-held company. Mr. Young received a B.A. in Political Science from Miami University. Mr. Young is the brother of William John Young, our Chief Operating Officer, and James D. Young, our Executive Vice President, General Counsel and Secretary. We believe that Mr. Young's industry experience and deep knowledge of our business makes him well suited to serve as Chief Executive Officer and Director.

Lee E. Beckelman

Lee E. Beckelman was named Chief Financial Officer in August 2014. From December 2009 to February 2014, Mr. Beckelman served as Executive Vice President and Chief Financial Officer of Hilcorp Energy Company, an exploration and production company. From February 2008 to October 2009, he served as the Executive Vice President and Chief Financial Officer of Price Gregory Services, Incorporated, a crude oil and natural gas pipeline construction firm until its sale to Quanta Services. Prior thereto, Mr. Beckelman served in various roles from 2002 to 2007 at Hanover Compressor Company, an international oilfield service company, until its merger with Universal Compression to form Externan Holdings. Mr. Beckelman received his BBA in Finance with High Honors from the University of Texas at Austin.

William John Young

William John Young was named Chief Operating Officer in April 2018. Prior to that time, he served as Executive Vice President of Sales and Logistics from October 2016 to April 2018. Mr. Young served as Vice President of Sales and Logistics from May 2014 to September 2016 and Director of Sales from November 2011 to April 2014. Prior to joining us, Mr. Young was a Director of Sales for Concast Corporation from 2002 to 2011. Mr. Young brings over 25 years of experience in the mining, commercial telecommunications and broadband industries. Mr. Young received a BSc in Biology from Dalhousie University. Mr. Young is the brother of Charles E. Young, our Chief Executive Officer and member of our board of directors, and James D. Young, our Executive Vice President, General Counsel and Secretary.

Robert Kiszka

Robert Kiszka was named Executive Vice President of Operations in May 2014. Previously, Mr. Kiszka served as the Vice President of Operations from September 2011 to May 2014. Mr. Kiszka has over 25 years of construction, real estate, renewable energy and mining experience. Mr. Kiszka has been the owner of A-1 Bracket Group Inc. since 2005 and was a member of Premier Building Systems LLC from 2010 to 2011. Mr. Kiszka attended Pedagogical University in Krakow, Poland and Rutgers University.

Ronald P. Whelan

Ronald P. Whelan was named Executive Vice President of Sales in June 2018. Prior to that time, he served as Executive Vice President of Business Development from April 2017 to June 2018, Vice President of Business Development from September 2016 to March 2017 and as Director of Business Development from April 2014 to August 2016. Prior to being named Director of Business Development, Mr. Whelan was the Operations Manager responsible for the design, development and production of the Oakdale facility from November 2011 to April 2014. Before joining Smart Sand, Mr. Whelan ran his own software design company from 2004 to 2011 and was a member of Premier Building Systems LLC from 2008 to 2009. Mr. Whelan has over 20 years of entrepreneurial experience in mining, technology and renewable energy industries. Mr. Whelan received a B.A. in Marketing from Bloomsburg University and M.S. in Instructional Technology from Bloomsburg University.

James D. Young

James D. Young was named Executive Vice President, General Counsel and Secretary in June 2017. Prior to joining us, Mr. Young was a partner of the law firm Fox Rothschild LLP, where he worked for thirteen years and served as our outside general counsel. Mr. Young received a J.D. from Rutgers University School of Law and a B.A. in History and Political Science from the University of Toronto. Mr. Young is the brother of Charles E. Young, our Chief Executive Officer and member of our board of directors, and William John Young, our Chief Operating Officer.

Richard Shearer

Richard Shearer was named President – Industrial Products in September 2021. Before joining Smart Sand, Mr. Shearer was the Chief Executive Officer for Emerge Energy Services LP from 2012 until 2020. Before that, he was the President and Chief Executive Officer of Superior Silica Sands and of Black Bull Resources. He was also President and COO of U.S. Silica. Mr. Shearer was the founding Chairman of the Industrial Minerals Association of North America (IMA-NA). Mr. Shearer received an M.B.A from Eastern Michigan University and a B.A.Sc. in Business Administration from Alderson Broaddus University.

Available Information

Our website address is <u>www.smartsand.com</u>. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports are available on our website, without charge, as soon as reasonably practicable after they are filed electronically with the SEC. The SEC also maintains a website that contains reports, proxy and information statements and other information statements and other information regarding issuers who file electronically with the SEC. The SEC. The SEC's website address is <u>www.sec.gov</u>.

ITEM 1A. - RISK FACTORS

Risks Inherent in Our Business

Our business and financial performance depend on the level of activity in the oil and natural gas industry.

Substantially all of our revenues are derived from sales to companies in the oil and natural gas industry. As a result, our operations are dependent on the levels of activity in oil and natural gas exploration, development and production and prevailing oil and natural gas prices. More specifically, the demand for the proppants we produce and our wellsite storage solutions is closely related to the number of oil and natural gas wells completed in geological formations where sand-based proppants are used in fracturing activities. These activity levels are affected by both short- and long-term trends in oil and natural gas prices, among other factors.

Oil and natural gas prices and, therefore, the level of exploration, development and production activity, have experienced a high level of volatility leading to sustained declines from the highs in the latter half of 2014 to the lows that have continued

through 2020. Oil and natural gas prices have increased during 2021, however drilling and completions activity has remained below 2019 levels.

A prolonged reduction in oil and natural gas prices or a sustained lack of key resources that affect drilling activity would generally depress the level of oil and natural gas exploration, development, production and well completion activity and would result in a corresponding decline in the demand for the proppants we produce and our wellsite proppant storage solutions. Such a decline would have a material adverse effect on our business, results of operation and financial condition. The commercial development of economically viable alternative energy sources (such as wind, solar, geothermal, tidal, fuel cells and biofuels) could have a similar effect. In addition, certain U.S. federal income tax deductions currently available with respect to oil and natural gas reserves are discovered or developed, whether due to the passage of legislation, increased governmental regulation leading to limitations, or prohibitions on exploration and drilling activity, including hydraulic fracturing, or other factors, could have a material adverse effect on our business and financial condition, even in a stronger oil and natural gas price environment.

A significant portion of our revenues have been generated with a limited number of customers, and the loss of, material nonpayment or nonperformance by or significant reduction in purchases by any of them could adversely affect our business, results of operations and financial condition.

A material portion of our revenues are generated from a limited number of customers. The ability or willingness of each of our customers to maintain their purchases from us will depend on a number of factors that are beyond our control and may include, among other things, the overall operations and financial condition of the counterparty, the condition of the U.S. oil and natural gas exploration and production industry, continuing use of frac sand in hydraulic fracturing operations and general economic conditions. In addition, in depressed market conditions, our customers may reduce the amount of frac sand they purchase from us or they may be able to obtain comparable products at a lower price. If our customers with long-term contracts experience a significant downturn in their business or financial condition, they may attempt to renegotiate our contracts. For example, certain of our existing contracts were adjusted in 2020 resulting in a combination of reduced average selling prices per ton, adjustments to take-or-pay volumes and length of contract. If any of our major customers substantially reduces or altogether ceases purchasing our frac sand and we are not able to generate replacement sales of frac sand into the market, our business, financial condition and results of operations could be adversely affected until such time as we generate replacement sales in the market. In addition, as contracts expire, depending on market conditions at the time, our contracted customers may choose not to extend these contracts which could lead to a significant reduction of sales volumes and corresponding revenues, cash flows and financial condition if we are not able to replace these contracts with new sales volumes. Additionally, even if we were to replace any lost volumes, lower prices for our product could materially reduce our revenues, cash flow and financial condition.

We are exposed to the credit risk of our customers, and any material nonpayment or nonperformance by our customers could adversely affect our business, results of operations and financial condition.

We are subject to the risk of loss resulting from nonpayment or nonperformance by our customers. 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 a material adverse effect on our business, results of operations and financial condition. A decline in natural gas and crude oil 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.

We face significant competition that may cause us to lose market share.

The proppant industry is highly competitive. The proppant market is characterized by a small number of large, national producers and a larger number of small, regional or local producers. Competition in this industry is based on price, consistency and quality of product, site location, distribution and logistics capabilities, customer service, reliability of supply, breadth of product offering (including wellsite storage products and services) and technical support.

Some of our competitors have greater financial and natural other resources than we do. Also, certain of our competitors have recently emerged from bankruptcy and may be able to offer more attractive pricing as a result of lower debt obligations. In addition, our larger competitors may develop technology superior to ours or may have production facilities that offer lower-cost transportation to certain customer locations than we do. When the demand for hydraulic fracturing services decreases or the

supply of proppant available in the market increases, prices in the frac sand market can materially decrease. 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 frac sand reserves to fulfill their proppant requirements, and these other market participants may expand their existing frac sand production capacity, all of which would negatively impact demand for our frac sand. 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. For example, supplies of regional frac sand from our competitors became available in 2018, primarily in the Permian Basin of West Texas. These supplies have had a negative impact on our ability to sell our Northern White Sand in the Permian Basin or other markets in close proximity to these new mines. The reduced ability to sell sand in operating basins with regional sand supply has led to increased competition among our competitors in other basins and could lead to pressure to reduce prices to compete effectively.

We may be required to make substantial capital expenditures to maintain and grow our asset base. We may not realize enough of a return on such capital expenditures to cover their costs. Also, the inability to obtain needed capital or financing on satisfactory terms, or at all, could have an adverse effect on our business, results of operations and financial condition.

We rely on cash generated from our operations and the availability of credit to fund our capital expenditures. We have made significant capital expenditures, and expect to make additional capital expenditures in the future, particularly as it pertains to growing our SmartSystems last mile storage solution. We cannot provide any assurance that we will receive an adequate return on such capital expenditures.

In addition, our ability to maintain existing debt 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, the covenants or borrowing base restrictions contained in our ABL Credit Facility or other current or future debt agreements, 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 business, results of operations and financial condition.

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 level of indebtedness could restrict our ability to fund future development and acquisition activities. In addition, the issuance of additional equity interests may result in significant dilution to our existing common stockholders.

Inaccuracies in estimates of volumes and qualities of our sand reserves could result in lower than expected sales and higher than expected cost of production.

We rely on our independent reserve engineers' prepared estimates of our reserves based on engineering, economic and geological data assembled and analyzed by our engineers and geologists. However, frac sand reserve estimates are by nature imprecise and depend to some extent on statistical inferences drawn from available data, which may prove unreliable. There are numerous uncertainties inherent in estimating quantities and qualities of reserves and non-reserve frac sand deposits and costs to mine recoverable reserves, including many factors beyond our control. Estimates of economically recoverable frac sand reserves necessarily depend on a number of factors and assumptions, all of which may vary considerably from actual results, such as:

- geological and mining conditions and/or effects from prior mining that may not be fully identified by available data or that may differ from experience;
- 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 wetland mitigation requirements, the issuance of required permits and the assessment of taxes by governmental agencies.

Any inaccuracy in our independent reserve engineer's estimates related to our frac sand reserves or non-reserve frac sand deposits could result in lower than expected sales or higher than expected costs. For example, estimates of our proven and probable recoverable sand reserves assume that our revenue and cost structure will remain relatively constant over the life of our reserves. If these assumptions prove to be inaccurate, some or all of our reserves may not be economically mineable, which could have a material adverse effect on our results of operations and cash flows. In addition, our current customer contracts require us to deliver frac sand that meets certain API and ISO specifications. If estimates of the quality of our reserves, including the volumes of the various specifications of those reserves, prove to be inaccurate, we may incur significantly higher excavation costs without corresponding increases in revenues, we may not be able to meet our contractual obligations, or our facilities may have a shorter than expected reserve life, any of which could have a material adverse effect on our results of operations and cash flows.

Our sand is generated at two facilities and our sales are dependent on delivery by railroads. Any adverse developments at our production facilities, rail terminals, or on any rail line could have a material adverse effect on our business, financial condition and results of operations.

All of our sand sales are currently derived from our facilities near Oakdale, Wisconsin and Utica, Illinois. We also ship a substantial portion of our sand through our rail terminals. Any adverse development at these facilities, our rail terminals, or on any of the rail lines we use to deliver our sand due to catastrophic events or weather, or any other event that would cause us to curtail, suspend or terminate operations at such facilities or terminals, could result in us being unable to meet our contracted sand deliveries. Although we have access to more than one Class I rail line, we may not be able to facilitate all shipments of product from one facility. We maintain insurance coverage to cover a portion of these types of risks; however, there are 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 a loss. Downtime or other delays or interruptions to our operations that are not covered by insurance could have a material adverse effect on our business, results of operations and financial condition. In addition, under our long-term take-or-pay contracts, if we are unable to deliver contracted volumes and a customer arranges for delivery from a third party at a higher price, we may be required to pay that customer the difference between our contract price and the price of the third-party product.

If we are unable to make acquisitions on economically acceptable terms, our future growth would be limited.

A portion of our strategy to grow our business is dependent on our ability to make acquisitions. If we are unable to make acquisitions from third parties because we are unable to identify attractive acquisition candidates or negotiate acceptable purchase contracts, we are unable to obtain financing for these acquisitions on economically acceptable terms or we are outbid by competitors, our future growth may be limited. Any acquisition involves potential risks, some of which are beyond our control, including, among other things:

- mistaken assumptions about revenues and costs, including synergies;
- inability to integrate successfully the businesses we acquire;
- inability to hire, train or retain qualified personnel to manage and operate our business and newly acquired assets;
- the assumption of unknown liabilities;
- limitations on rights to indemnity from the seller;
- mistaken assumptions about the overall costs of equity or debt;
- diversion of management's attention from other business concerns;
- unforeseen difficulties operating in new product areas or new geographic areas; and
- customer or key employee losses at the acquired businesses.

If we consummate any future acquisitions, our capitalization and results of operations may change significantly, and common stockholders will not have the opportunity to evaluate the economic, financial and other relevant information that we will consider in determining the application of these funds and other resources.

Restrictions in our ABL Credit Facility may limit our ability to capitalize on potential acquisition and other business opportunities.

The operating and financial restrictions and covenants in our ABL Credit Facility could restrict our ability to finance future operations or capital needs or to expand or pursue our business activities. For example, our ABL Credit Facility restricts or limits our ability to:

- grant liens;
- incur additional indebtedness;
- engage in a merger, consolidation or dissolution;
- enter into transactions with affiliates;
- sell or otherwise dispose of assets, businesses and operations;

- materially alter the character of our business as conducted at the time of filing of this annual report; and
- make acquisitions, investments and capital expenditures.

Furthermore, the borrowing base under our ABL Credit Facility is recalculated from time to time based on our eligible accounts receivable and inventory. Decreases in our eligible accounts receivable and inventory may limit our available borrowing levels and may require us to comply with certain financial ratios.

We face distribution and logistical challenges in our business.

Transportation and logistical operating expenses comprise a significant portion of the costs incurred by our customers to deliver frac sand to the wellhead, which could favor suppliers located in close proximity to the customer. As oil and natural gas prices fluctuate, our customers may shift their focus to different resource plays, some of which may be located in geographic areas that do not have well-developed transportation and distribution infrastructure systems, or seek contracts with additional delivery and pricing alternatives including contracts that sell product on an "as-delivered" basis at the target shale basin. Serving our customers in these less-developed areas presents distribution and other operational challenges that may affect our sales and negatively impact our operating costs and any delays we experience in optimizing our logistics infrastructure or developing additional origination and destination points may adversely affect our ability to renew existing contracts with customers seeking additional delivery and pricing alternatives. Disruptions in transportation services, including shortages of railcars, lack of developed infrastructure, weather-related problems, flooding, drought, accidents, mechanical difficulties, strikes, lockouts, bottlenecks or other events could affect our ability to timely and cost effectively deliver to our customers and could temporarily impair the ability of our customers to take delivery and, in certain circumstances, constitute a force majeure event under our customer contracts, permitting our customers to suspend taking delivery of and paying for our frac sand (and in some cases terminating the agreement after a period of time). Additionally, increases in the price of transportation costs, including freight charges, fuel surcharges, transloading fees, terminal switch fees and demurrage costs, could negatively impact operating costs if we are unable to pass those increased costs along to our customers. Accordingly, because we are so dependent on rail infrastructure, if there are disruptions of the rail transportation services utilized by us or our customers, and we or our customers are unable to find alternative transportation providers to transport our products, our business and results of operations could be adversely affected. Further, declining volumes could result in railcar over-capacity, which would lead to railcar storage fees while, at the same time, we would continue to incur lease costs for those railcars in storage. 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.

We may be adversely affected by decreased demand for frac sand due to the development of effective alternative proppants or new processes to replace hydraulic fracturing.

Frac sand is a proppant used in the completion and re-completion of oil and natural gas wells to stimulate and maintain oil and natural gas production through the process of hydraulic fracturing. Frac sand is the most commonly used proppant and is less expensive than other proppants, such as resin-coated sand and manufactured ceramics. A significant shift in demand from frac sand to other proppants, or the development of new processes to make hydraulic fracturing more efficient could replace it altogether, could cause a decline in the demand for the frac sand we produce and result in a material adverse effect on our business, results of operations and financial condition.

An increase in the supply of frac sand having similar characteristics as the frac sand we produce could make it more difficult for us to maintain sales with existing customers or obtain new customers on favorable terms, or at all.

If significant new reserves of frac sand are discovered and developed, and those frac sands have similar characteristics to the frac sand we produce, we may be unable to maintain sales with our existing customers, obtain new customers on favorable terms, or at all. Specifically, if frac sand is oversupplied, our customers may reduce their sales volumes, may not be willing to purchase sand fron us, may demand lower prices, any one or combination of the preceding could have a material adverse effect on our business, results of operations and financial condition. For example, new supplies of regional frac sand from our competitors became available in 2018, primarily in the Permian Basin of West Texas. These new supplies have had a negative impact on our ability to sell our Northern White Sand in the Permian Basin or other markets in close proximity to these new mines. Similarly, the COVID-19 pandemic has caused a historic slowdown in oil and gas activity, which has led to an increase in available proppant supply relative to the reduced demand. The foregoing led to increased competition among our competitors and created pressure to reduce prices to compete effectively, which could continue and lead to further price reductions to compete effectively.

Our operations are subject to operational hazards and unforeseen interruptions for which we may not be adequately insured.

Our operations are exposed to potential natural disasters, including blizzards, tornadoes, storms, floods, other adverse weather conditions and earthquakes. In addition, our employees could be subject to a COVID-19 outbreak at one or more of our facilities. If any of these events were to occur, we could incur substantial losses because of operational downtime, personal injury or loss of life, severe damage to and destruction of property and equipment, and pollution or other environmental damage resulting in curtailment or suspension of our operations.

We are not fully insured against all risks incident to our business, including the risk of our operations being interrupted due to severe weather and natural disasters. Furthermore, we may be unable to maintain or obtain insurance of the type and amount we desire at reasonable rates. As a result of market conditions, premiums and deductibles for certain of our insurance policies have increased and could escalate further. In addition, sub-limits have been imposed for certain risks. In some instances, certain insurance could become unavailable or available only for reduced amounts of coverage. If we were to incur a significant liability for which we are not fully insured, it could have a material adverse effect on our business, results of operations and financial condition.

Our production process consumes 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 a material adverse effect on our business, results of operations and financial condition.

Energy costs, primarily natural gas and electricity, represented approximately 6.9% of our total cost of goods sold for the year ended December 31, 2021. Natural gas is currently the primary fuel source used for drying in our frac sand production process. As a result, our profitability will be impacted by the price and availability of natural gas we purchase from third parties. Because we have not contracted for the provision of all of our natural gas usage on a fixed-price basis, our costs and profitability will be impacted by fluctuations in prices for natural gas. The price and supply of natural gas is unpredictable and can fluctuate significantly based on international, political and economic circumstances, as well as other events outside our control, such as changes in supply and demand due to weather conditions, actions by OPEC, governmental sanctions, and other oil and natural gas producers, regional production patterns, security threats and environmental concerns. In addition, 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. In order to manage the risk of volatile natural gas prices, we may hedge natural gas prices through the use of derivative financial instruments, such as forwards, swaps and futures. However, these measures carry risk (including nonperformance by counterparties) and do not in any event entirely eliminate the risk of decreased margins as a result of propane or natural gas price increases. We further attempt to mitigate these risks by including in our sales contracts fuel surcharges based on natural gas prices exceeding certain benchmarks. A significant increase in the price of energy that is not recovered through an increase in the price of our products or covered through our hedging arrangements or an extended interruption in the supply of natural gas or electricity to our production facilities could have a material adverse effect on our business, results of operations and financial condition.

Increases in the price of diesel fuel may adversely affect our business, results of operations and financial condition.

Diesel fuel costs generally fluctuate with increasing and decreasing world crude oil prices and, accordingly, are subject to political, economic and market factors that are outside of our control. Our operations are dependent on earthmoving equipment, locomotives and tractor trailers, and diesel fuel costs are a significant component of the operating expense of these vehicles. Accordingly, increased diesel fuel costs could have an adverse effect on our business, results of operations and financial condition.

A 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 facilities on detailed studies that we perform from time to time, but our studies and assumptions may not prove to be accurate. If we close any of our operating facilities sooner than expected, sales may decline. The closure of our operating facilities would involve significant fixed closure costs, including accelerated employment legacy costs, severance-related obligations, reclamation and other environmental costs and the costs of terminating long-term obligations, including energy contracts and equipment leases. We accrue for the costs of reclaiming open pits, stockpiles, non-saleable sand, ponds, roads and other mining support areas over the estimated mining life of our property. If we were to reduce the estimated life of our operating facilities, the fixed facility closure costs would be applied to a shorter period of production, which would increase the cost of production per ton produced and could materially and adversely affect our business, results of operations and financial condition. Applicable statutes and regulations require that mining property be reclaimed following a mine closure in accordance with specified standards and an approved reclamation plan. The plan addresses matters such as removal of facilities and equipment, regrading, prevention of erosion and other forms of water pollution, re-vegetation and post-mining land use. We may be required to post a surety bond or other form of financial assurance equal to the cost of reclamation as set forth in the approved reclamation plan. The establishment of the final mine closure reclamation liability is based on estimated costs and requires various estimates and assumptions. If our accruals for expected reclamation and other costs associated with facility closures for which we will be responsible were later determined to be insufficient, our business, results of operations and financial condition may be adversely affected.

Our operations are dependent on our rights and ability to mine our properties and on our having renewed or received the required permits and approvals from governmental authorities and other third parties.

We hold numerous governmental, environmental, mining and other permits, water rights and approvals authorizing operations at our mining and operating facilities. For our extraction and processing in Wisconsin and Illinois, the permitting process is subject to federal, state and local authority. For example, on the federal level, a *Mine Identification Request (MSHA Form 7000-51)* must be filed and obtained before mining commences. If wetlands are impacted, a *U.S. Army Corps of Engineers Wetland Permit* is required. At the state level, a series of permits are required related to air quality, wetlands, water quality (waste water, storm water), grading permits, endangered species, archeological assessments and high capacity wells in addition to others depending upon site specific factors and operational detail. At the local level, zoning, building, storm water, erosion control, wellhead protection, road usage and access are all regulated and require permitting to some degree. A nonmetallic mining reclamation permit is required. A decision by a governmental agency or other third party to deny or delay issuing a new or renewed permit or approval, or to revoke or substantially modify an existing permit or approval, could have a material adverse effect on our business, results of operations and financial condition.

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 our property or lack appropriate water rights could cause us to lose any rights to explore, develop and extract minerals, without compensation for our prior expenditures relating to such property. Our business may suffer a material adverse effect in the event we have title deficiencies.

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.

The manufacturing and maintenance of our SmartSystems equipment requires skilled and experienced personnel who can perform physically demanding work. Our ability to operate the manufacturing facility in Saskatoon depends upon our ability to have access to the services of skilled workers. The demand for skilled workers is high, and the supply is limited. As a result, competition for experienced personnel is intense, and a significant increase in the wages paid by competing employers could result in a reduction of our skilled labor force, increases in the rates that we must pay or both. If either of these events were to occur, there could be an adverse impact on our business, results of operations and financial condition.

Our business may suffer if we lose, or are unable to attract and retain, key personnel.

We depend to a large extent on the services of our senior management team and other key personnel. Members of our senior management and other key employees bring significant experience to the market environment in which we operate. 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 a material 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 key personnel. We do not maintain key-man life insurance with respect to any of our employees. Our success is dependent on our ability to continue to attract, employ and retain highly skilled personnel.

Our profitability could be negatively affected if we fail to maintain satisfactory labor relations.

As of December 31, 2021, 43 employees in our Illinois facility operated under a collective bargaining agreement. If we are unable to renegotiate acceptable collective bargaining agreements with these employees in the future, we could experience, among other things, strikes, work stoppages or other slowdowns by our workers and increased operating costs as a result of

higher wages, health care costs or benefits paid to our employees. An inability to maintain good relations with our workforce could cause a material adverse effect on our business, financial condition, and results of operations.

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

The performance and quality 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, depends 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 our quality control policies and guidelines. Any significant failure or deterioration of our quality control systems could have a material adverse effect on our business, results of operations and financial condition.

Seasonal and severe weather conditions could have a material adverse impact on our business, results of operations and financial condition.

Our business could be materially adversely affected by severe weather conditions. Severe weather conditions may affect our customers' operations, thus reducing their need for our products, impact our operations by resulting in weather-related damage to our facilities and equipment and impact our customers' ability to take delivery of our products at our plant site. Any weather-related interference with our operations could force us to delay or curtail services and potentially breach our contractual obligations to deliver minimum volumes or result in a loss of productivity and an increase in our operating costs.

In addition, winter weather conditions impact our operations by causing us to reduce our excavation and wet plant related production activities during the winter months. During non-winter months, we excavate excess sand to build a stockpile that will feed the dry plants (along with the sand provided by our year-round wet plant), which continue to operate during the winter months. Unexpected winter conditions (such as winter arriving earlier than expected or lasting longer than expected) may result in us not having a sufficient sand stockpile to operate our dry plants during winter months, which could result in us being unable to deliver our contracted sand amounts during such time and lead to a material adverse effect on our business, results of operations and financial condition.

Our cash flow fluctuates on a seasonal basis.

Our cash flow is affected by a variety of factors, including weather conditions and seasonal periods. Seasonal fluctuations in weather impact the production levels at our wet processing plant. While our sales and finished product production levels are contracted evenly throughout the year, our mining and wet sand processing activities are reduced during winter months. As a consequence, we experience lower cash costs in the first and fourth quarter of each calendar year.

We do not own the land on which our Van Hook, North Dakota and Waynesburg, Pennsylvania transload terminals are located, which could disrupt our operations.

We do not own the land on which our Van Hook, North Dakota and Waynesburg, Pennsylvania terminals are located and instead own a leasehold interest and right-of-way for the operation of these facilities. Upon expiration, termination or other lapse of our current leasehold terms, we may be unable to renew our existing leases or rights-of-way on terms favorable to us, or at all. Any renegotiation on less favorable terms or inability to enter into new leases on economically acceptable terms upon the expiration, termination or other lapse of our current leases or rights-of-way could cause us to cease operations on the affected land, increase costs related to continuing operations elsewhere and have a material adverse effect on our business, financial condition and results of operations.

A terrorist attack or armed conflict could harm our business.

Global and domestic terrorist activities, anti-terrorist efforts and other armed conflicts 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 frac sand. 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.

Diminished access to water may adversely affect our operations or the operations of our customers.

The mining and processing activities at our facilities require significant amounts of water. Additionally, the development of oil and natural gas properties through fracture stimulation likewise requires significant water use. We have obtained water

rights that we currently use to service the activities at our operating facilities, and we plan to obtain all required water rights to service other properties we may develop or acquire in the future. However, the amount of water that we and our customers are entitled to use pursuant to water rights must be determined by the appropriate regulatory authorities in the jurisdictions in which we and our customers operate. Such regulatory authorities may amend the regulations regarding such water rights, increase the cost of maintaining such water rights or eliminate our current water rights, and we and our customers may be unable to retain all or a portion of such water rights. These new regulations, which could also affect local municipalities and other industrial operations, could have a material adverse effect on our operating costs and effectiveness if implemented. Such changes in laws, regulations or government policy and related interpretations pertaining to water rights may alter the environment in which we and our customers do business, which may negatively affect our financial condition and results of operations.

We may be subject to interruptions or failures in our information technology systems, including cyber-attacks.

We rely on sophisticated information technology systems and infrastructure to support our business, including process control technology. Any of these systems may be susceptible to outages due to fire, floods, power loss, telecommunication failures, usage errors by employees, computer viruses, cyber-attacks or other security breaches, or similar events. If our information technology systems are damaged or cease to function properly, we may have 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 may be the target of attempted cyber-attacks, computer viruses, malicious code, phishing attacks, denial of service attacks and other information security threats. To date, cyber-attacks have not had a material impact on our financial condition, results or business; however, we could suffer material financial or other losses in the future and we are not able to predict the severity of these attacks. The occurrence of a cyber-attack, breach, unauthorized access, misuse, computer virus or other malicious code or other cyber security event could jeopardize 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. The occurrence of such an event could also result in damage to our software, computers or systems, or otherwise cause interruptions or malfunctions in our, our customers', our counterparties' or third parties' operations. This 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.

The reliability and capacity of our information technology systems is critical to our operations. Any material disruption in our information technology systems, or delays or difficulties in implementing or integrating new systems or enhancing current systems, could have an adverse effect on our business, and results of operations.

If we are unable to fully protect our intellectual property rights, we may suffer a loss in our competitive advantage.

The commercial success of our SmartSystems wellsite proppant storage solutions depends on patented and proprietary information and technologies, know-how and other intellectual property. Because of the technical nature of this business, we rely on a combination of patent, copyright, trademark and trade secret laws, and restrictions on disclosure to protect our intellectual property. As of December 31, 2021, we had several patents related to our SmartSystems, including patents related to our silo storage system and patents related to lifting and lowering our storage silos. We customarily enter into confidentiality or license agreements with our employees, consultants and corporate partners and control access to and distribution of our design information, documentation and other patented and proprietary information. In addition, in the future we may develop or acquire additional patents or patent portfolios, which could require significant cash expenditures. However, third parties may knowingly or unknowingly infringe our patent or other proprietary rights, or challenge patents or proprietary rights held by us, and pending and future trademark and patent applications may not be approved. Failure to protect, monitor and control the use of our existing intellectual property rights could cause us to lose our competitive advantage and incur significant expenses. It is possible that our competitors or others could independently develop the same or similar technologies or otherwise obtain access to our unpatented technologies. In such case, our trade secrets would not prevent third parties from competing with us. Consequently, our results of operations may be adversely affected. Furthermore, third parties or our employees may infringe or misappropriate our patented or proprietary technologies or other intellectual property rights, which could also harm our business and results of operations. Policing unauthorized use of intellectual property rights can be difficult and expensive, and adequate remedies may not be available.

We may be adversely affected by disputes regarding intellectual property rights of third parties.

Third parties from time to time may initiate litigation against us by asserting that the conduct of our business infringes, misappropriates or otherwise violates intellectual property rights. We may not prevail in any such legal proceedings related to such claims, and our storage systems and related items may be found to infringe, impair, misappropriate, dilute or otherwise violate the intellectual property rights of others. If we are sued for infringement and lose, we could be required to pay

substantial damages and/or be enjoined from using or selling the infringing products or technology. Any legal proceeding concerning intellectual property could be protracted and costly regardless of the merits of any claim and is inherently unpredictable and could have a material adverse effect on our financial condition, regardless of its outcome.

If we were to discover that our technologies or products infringe valid intellectual property rights of third parties, we may need to obtain licenses from these parties or substantially re-engineer our products in order to avoid infringement. We may not be able to obtain the necessary licenses on acceptable terms, or at all, or be able to re-engineer our products successfully. If our inability to obtain required licenses for our technologies or products prevents us from selling our products, that could adversely impact our financial condition and results of operations.

We currently rely on a limited number of suppliers for certain equipment and materials to build our SmartSystems, and our reliance on a limited number of suppliers for such equipment and materials exposes us to risks including price and timing of delivery.

We currently rely on a limited number of suppliers for equipment and materials to build our SmartSystems. If demand for our systems or the components necessary to build such systems increases or suppliers of equipment face financial distress or bankruptcy, our suppliers may not be able to provide such equipment on schedule at the current price or at all. In particular, steel is the principal raw material used in the manufacture of our systems, and the price of steel has historically fluctuated on a cyclical basis and will depend on a variety of factors over which we have no control, including trade tariffs. Additionally, we depend on a limited number of suppliers for certain mechanical and electrical components that we use in our systems which may not have direct replacements available from alternate suppliers. If our suppliers are unable to provide the raw materials and components needed to build and operate our systems, which may adversely affect our revenues or increase our costs. Any inability to find alternative components at prices or with quality specifications similar to those deployed today could result in delays or a loss of customers.

Unsatisfactory safety performance may negatively affect our customer relationships and, to the extent we fail to retain existing customers or attract new customers, adversely impact our revenues.

Our ability to retain existing customers and attract new business is dependent on many factors, including our ability to demonstrate that we can reliably and safely operate all aspects of our business in a manner that is consistent with applicable laws, rules and permits, which legal requirements are subject to change. In addition, certain customers require compliance with their internal safety protocols. Existing and potential customers consider the safety record of their third-party service providers to be of high importance in their decision to engage such providers. If one or more accidents were to occur in connection with our business, the affected customer may seek to terminate, cancel or substantially reduce its business with us, which could cause us to lose substantial revenues. Furthermore, our ability to attract new customers may be impaired if such potential customers elect not to engage us because they view our safety record as unacceptable. In addition, it is possible that we will experience multiple or particularly severe accidents in the future, causing our safety record to deteriorate. This may be more likely as we continue to grow, if we experience high employee turnover or labor shortage, or if we hire inexperienced personnel to bolster our staffing needs.

We may be subject to legal claims, such as personal injury and property damage, which could materially adversely affect our financial condition, prospects and results of operations.

As we focus on growing our business, particularly as it relates to our SmartSystems offerings, our business may become increasingly subject to inherent risks that can cause personal injury or loss of life, damage to or destruction of property, equipment or the environment or the suspension of our operations. In addition, we may be subject to legal proceedings with our customers or suppliers, particularly as it relates to contract disputes. Regardless of the merit of particular claims, litigation may be expensive, time consuming, disruptive to our operations and distracting to management.

The outcome of litigation is inherently uncertain. If one or more legal matters were resolved against us or an indemnified third party in a reporting period for amounts in excess of management's expectations, our financial condition and operating results for that reporting period could be materially adversely affected. Further, such an outcome could result in significant compensatory, punitive or trebled monetary damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief against us that could materially adversely affect our financial condition and operating results. We maintain what we believe is customary and reasonable insurance to protect our business against these potential losses, but such insurance may not be adequate to cover our liabilities, and we are not fully insured against all risks.

A financial downturn could negatively affect our business, results of operations, financial condition and liquidity.

Actual or anticipated declines in domestic or foreign economic growth rates, regional or worldwide increases in tariffs or other trade restrictions, turmoil affecting the U.S. or global financial systems and markets and a severe economic contraction either regionally or worldwide, in each case resulting from current efforts to contain the COVID-19 pandemic or other factors, could materially affect our business and financial condition. These events could impact our ability to finance operations by worsening the actual or anticipated future drop in worldwide oil demand, negatively impacting the price we receive for our products and services, compressing the level of available funding under our ABL Credit Facility, inhibiting our lenders from funding borrowings under our ABL Credit Facility or resulting in our lenders reducing the borrowing base under our ABL Credit Facility. Negative economic conditions could also adversely affect the collectability of our trade receivables or performance by our vendors and suppliers.

Risks Related to our Recent Expansion Activity

Our acquisition of the Blair facility may not achieve its intended results, and we may be unable to successfully integrate the operations of the Blair facility.

On March 4, 2022, we entered into the Purchase Agreement with HCR and Blair, pursuant to which the Company acquired all of the issued and outstanding limited liability company interests of Blair from HCR for aggregate cash consideration of approximately \$6.5 million, subject to customary purchase price adjustments as set forth in the Purchase Agreement. Entities affiliated with Clearlake, who collectively own approximately 24% of the Company's outstanding common stock, also own a significant portion of the outstanding common stock of HCR, and representatives of Clearlake serve on our board of directors and HCR's board of directors.

We believe this acquisition broadens our mine to wellsite capabilities by adding high quality sand mining and processing assets coupled with enhanced logistics options that provide direct access to an additional Class I rail line. We believe these additional mining and logistics resources help secure our ability to be a leading provider of Northern White Sand in the proppants market.

We expect that the acquisition of Blair will result in various benefits, including, among other things, expanding our asset base. Achieving the anticipated benefits of the acquisition is subject to a number of uncertainties, including whether we can integrate the business of Blair in an efficient and effective manner.

Our results of operations could be adversely affected by any issues attributable to Blair operations that arise from or are based on events or actions that occurred prior to the closing of the acquisition, including unknown liabilities of Blair or its subsidiaries. The integration process is subject to a number of uncertainties, and no assurance can be given whether anticipated benefits will be realized or, if realized, the timing of their realization. Failure to achieve these anticipated benefits could result in increased costs or decreases in the amount of expected revenues and could adversely affect our future business, financial condition, operating results, and prospects.

Our future results will suffer if we do not effectively manage our expanded operations.

With completion of the Blair acquisition and the acquisition of the Waynesburg terminal, our operations and the size of our business has expanded. Our future operating results depend, in part, on our ability to manage this expansion and growth successfully, which poses substantial challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. We cannot assure you that we will be successful or that we will realize the expected operating efficiencies, cost savings, and other benefits from the acquisition that we currently anticipate. A failure to manage our growth effectively could materially and adversely affect our profitability.

Risks Related to Environmental, Mining and Other Regulation

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 frac sand and negatively impact our business, results of operations and financial condition.

We supply frac sand 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, proppants, 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 frac sand 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 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 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 frac sand. 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 frac sand, have a material 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 regulatory environmental requirements affecting the mining and mineral processing industry, including among others, those relating to employee health and safety, environmental permitting and licensing, air and water emissions, water pollution, waste management, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, hazardous materials, and natural resources. Some environmental laws impose substantial penalties for noncompliance, and others, such as the federal CERCLA, may impose strict, retroactive, and joint and several liabilities for the remediation of releases of hazardous substances. Liability under CERCLA, or similar state and local laws, may be imposed as a result of conduct that was lawful at the time it occurred or for the conduct of, or conditions caused by, prior operators or other third parties. Failure to properly handle, transport, store, or dispose of hazardous materials or otherwise conduct our operations in compliance with environmental laws could expose us to liability for governmental penalties, cleanup costs, and civil or criminal liability associated with releases of such materials into the environment, damages to property, natural resources and other damages, as well as potentially impair our ability to conduct our operations. In addition, 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. Future events, including adoption of new, or changes in any existing environmental requirements (or their interpretation or enforcement) and the costs associated with complying with such requirements, could have a material adverse effect on us.

Any failure by us 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:

- issuance of administrative, civil, or criminal penalties;
- denial, modification, or revocation of permits or other authorizations;

- occurrence of delays in permitting or performance of projects;
- 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.

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

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 a material 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.

Silica-related legislation, health issues and litigation could have a material adverse effect on our business, reputation or results of operations.

We are subject to laws and regulations relating to human exposure to crystalline silica. Several federal and state regulatory authorities, including MSHA, 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. 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 a material 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 the lung disease silicosis. There is 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 proppant industry. Concerns over silicosis and other potential adverse health effects, as well as concerns regarding potential liability from the use of frac sand, may have the effect of discouraging our customers' use of our frac sand. The actual or perceived health risks of mining, processing and handling proppants could materially and adversely affect proppant producers, including us, through reduced use of frac sand, 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 frac sand industry.

We are subject to the Federal Mine Safety and Health Act of 1977, which imposes stringent health and safety standards on numerous aspects of our operations.

Our operations are subject to the Federal Mine Safety and Health Act of 1977, 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 failure to comply with such standards, or changes in such standards or the interpretation or enforcement thereof, could have a material adverse effect on our business and financial condition or otherwise impose significant restrictions on our ability to conduct mineral extraction and processing 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 frac sand 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 materially 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 frac sand. Such current or future regulations could have a material adverse effect on our business, and we may not be able to obtain or renew permits in the future.

Our inability to acquire, maintain or renew financial assurances related to the reclamation and restoration of mining property could have a material adverse effect on our business, financial condition and results of operations.

We are generally obligated to restore property in accordance with regulatory standards and our approved reclamation plan after it has been mined. We are required under federal, state, and local laws to maintain financial assurances, such as surety bonds, to secure such obligations. The inability to acquire, maintain or renew such assurances, as required by federal, state, and local laws, could subject us to fines and penalties as well as the revocation of our operating permits. Such inability could result from a variety of factors, including:

- the lack of availability, higher expense, or unreasonable terms of such financial assurances;
- the ability of current and future financial assurance counterparties to increase required collateral; and
- the exercise by financial assurance counterparties of any rights to refuse to renew the financial assurance instruments.

Our inability to acquire, maintain, or renew necessary financial assurances related to the reclamation and restoration of mining property could have a material adverse effect on our business, financial condition, and results of operations.

Climate change legislation and regulatory initiatives could result in increased compliance costs for us and our customers.

In recent years, the U.S. Congress has considered legislation to reduce emissions of 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. 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 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. In addition, in December 2015, over 190 countries, including the United States, reached an agreement to reduce global GHG emissions, also known as the Paris Agreement. The Paris Agreement entered into force in November 2016 after more than 170 nations, including the United States, ratified or otherwise indicated their intent to be bound by the agreement. However, in June 2017, President Trump announced that the United States intends to withdraw from the Paris Agreement and to seek negotiations either to reenter the Paris Agreement on different terms or enter into a separate agreement. In August 2017, the U.S. Department of State officially informed the United Nations of the United States' intent to withdraw from the Paris Agreement, and in November 2019 formally initiated the withdrawal process. In November 2020, the United States' previously-announced withdrawal from the Paris Agreement became effective. On January 20, 2021, President Biden announced that the United States would be reentering the Paris Agreement. This reentry became effective on February 19, 2021. 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. It is not possible at this time to predict the timing and effects of climate change or to predict the timing or effect of rejoining the Paris Agreement or whether additional climate-related legislation, regulations or other measures will be adopted at the local, state, regional, national and international levels. To the extent that the United States and other countries implement the Paris Agreement or local, state, regional, national or international governments impose other climate change regulations on the oil and natural gas industry, it could have an adverse effect on our business because substantial limitations on GHG emissions could adversely affect demand for the oil and natural gas that is produced by our customers. Finally, many scientists have concluded that increasing concentrations of GHGs in the Earth's atmosphere may produce climate changes that

have significant physical effects, such as increased frequency and severity of storms, floods and other climatic events; if any such effects were to occur, they could have an adverse effect on our operations and our customers' exploration and production operations.

Risks Related to Ownership of Our Common Stock

Our stock price could be volatile, and you may not be able to resell shares of your common stock at or above the price you paid.

The stock markets generally 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 common stock. Volatility in the market price of our common stock may prevent you from being able to sell your 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. 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.

In addition to the risks described in this section, the market price of our common stock may fluctuate significantly in response to a number of factors, most of which we cannot control, including:

- our operating and financial performance;
- quarterly variations in the rate of growth of our financial indicators, such as revenues, EBITDA, Adjusted EBITDA, contribution margin, free cash flow, net income, and net income per share;
- the public reaction to our press releases, our other public announcements, and our filings with the SEC;
- 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;
- speculation in the press or investment community;
- the failure of research analysts to cover our common stock;
- sales of our common stock by us or our 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 proppants, or industrial and recreational sand-based products;
- · domestic and international economic, legal and regulatory factors unrelated to our performance; and
- the realization of any risks described under this "Risk Factors" section.

We are subject to certain requirements of Section 404 of the Sarbanes-Oxley Act. If we are unable to timely comply with Section 404 or if the costs related to compliance are significant, our profitability, stock price, results of operations and financial condition could be materially adversely affected.

We are required to comply with certain provisions of Section 404 of the Sarbanes-Oxley Act. Section 404 requires that we document and test our internal control over financial reporting and issue management's assessment of our internal control over financial reporting. This section also requires that our independent registered public accounting firm opine on those internal controls upon our public float exceeding a certain threshold as set forth in the SEC rules. We are evaluating our existing controls against the standards adopted by the Committee of Sponsoring Organizations of the Treadway Commission. During the course of our ongoing evaluation and integration of the internal control over financial reporting, we may identify

areas requiring improvement, and we may have to design enhanced processes and controls to address issues identified through this review.

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 the Sarbanes-Oxley Act 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 materially 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 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 a material adverse effect on our business, results of operations and financial condition.

The concentration of our capital stock ownership among our largest stockholders and their affiliates will limit your ability to influence corporate matters.

As of December 31, 2021, Clearlake beneficially owns approximately 24.0% of our outstanding common stock and our Chief Executive Officer beneficially owns approximately 15.4% of our outstanding common stock. Consequently, Clearlake and our Chief Executive Officer (each of whom we sometimes refer to as a "Principal Stockholder") will continue to have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Additionally, we are party to a stockholders' agreement pursuant to which, so long as either Principal Stockholder maintains certain beneficial ownership levels of our common stock, each Principal Stockholder will have certain rights, including board of directors and committee designation rights and consent rights, including the right to consent to change in control transactions. For additional information, please read "Certain Relationships and Related Party Transactions—Stockholders Agreement" in the prospectus included in our Registration Statement on Form S-1 (Registration No. 333-215554), initially filed with the SEC on January 13, 2017. This concentration of ownership and the rights of our Principal Stockholders agreement, will limit your ability to influence corporate matters, and as a result, actions may be taken that you may not view as beneficial.

Furthermore, conflicts of interest could arise in the future between us and Clearlake and its affiliates, including its portfolio companies, concerning among other things, potential competitive business activities or business opportunities. Clearlake is a private equity firm in the business of making investments in entities in a variety of industries. As a result, Clearlake's existing and future portfolio companies which it controls may compete with us for investment or business opportunities. These conflicts of interest may not be resolved in our favor.

The price of our common stock may fluctuate significantly, and you could lose all or part of your investment.

As of December 31, 2021, there were 21,768,522 publicly traded shares of common stock held by our public common stockholders. Although our common stock is listed on the NASDAQ, we do not know whether an active trading market will continue to develop or how liquid that market might be. You may not be able to resell your common stock at or above the public offering price. Additionally, the lack of liquidity may result in wide bid-ask spreads, contribute to significant fluctuations in the market price of the common stock and limit the number of investors who are able to buy the common stock.

Our amended and restated certificate of incorporation contains a provision renouncing our interest and expectancy in certain corporate opportunities.

Our amended and restated certificate of incorporation provides for the allocation of certain corporate opportunities between us and Clearlake. Under these provisions, neither Clearlake, its affiliates and investment funds, nor any of their respective principals, officers, members, managers and/or employees, including any of the foregoing who serve as our officers or directors, will have any duty to refrain from engaging, directly or indirectly, in the same business activities or similar business activities or lines of business in which we operate. For instance, a director of our company who also serves or is a principal, officer, member, manager and/or employee of Clearlake or any of its affiliates or investment funds may pursue certain acquisitions or other opportunities that may be complementary to our business and, as a result, such acquisition or other opportunities may not be available to us. These potential conflicts of interest could have a material adverse effect on our business, financial condition and results of operations if attractive corporate opportunities are allocated by Clearlake to itself or its affiliates or investment funds instead of to us. The terms of our amended and restated certificate of incorporation are more fully described in "Description of Capital Stock" in the prospectus included in our Registration Statement on Form S-3 (Registration No. 333-251915), initially filed with the SEC on January 6, 2021.

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 common stock could decline.

The trading market for our 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 common stock and other securities and their trading volume to decline.

Our amended and restated certificate of incorporation and amended and restated bylaws, as well as Delaware law, contain provisions that could discourage acquisition bids or merger proposals, which may adversely affect the market price of our common stock.

Our amended and restated certificate of incorporation authorizes our board of directors to issue preferred stock without stockholder approval. If our board of directors elects to issue preferred stock, it could be more difficult for a third party to acquire us. In addition, some provisions of our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for a third party to acquire control of us, even if the change of control would be beneficial to our stockholders, including:

- advance notice provisions for stockholder proposals and nominations for elections to the board of directors to be acted upon at meetings of stockholders;
- provisions that divide our board of directors into three classes of directors, with the classes to be as nearly equal in number as possible;
- provisions that prohibit stockholder action by written consent after the date on which our Principal Stockholders collectively cease to beneficially own at least 50% of the voting power of the outstanding shares of our stock entitled to vote;
- provisions that provide that special meetings of stockholders may be called only by the board of directors or, for so long as a Principal Stockholder continues to beneficially own at least 20% of the voting power of the outstanding shares of our stock, such Principal Stockholder;
- provisions that provide that our stockholders may only amend our certificate of incorporation or bylaws with the approval of at least 66 2/3% of the voting power of the outstanding shares of our stock entitled to vote, or for so long as our Principal Stockholders collectively continue to beneficially own at least 50% of the voting power of the outstanding shares of our stock entitled to vote, with the approval of a majority of the voting power of the outstanding shares of our stock entitled to vote;
- provisions that provide that the board of directors is expressly authorized to adopt, or to alter or repeal our bylaws; and
- provisions that establish advance notice and certain information requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

We do not currently pay dividends on our common stock, and our debt agreements place certain restrictions on our ability to do so. Consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.

We do not currently pay dividends on shares of our common stock in the foreseeable future. Additionally, our ABL Credit Facility places certain restrictions on our ability to pay cash dividends. Consequently, unless we revise our dividend policy, your only opportunity to achieve a return on your investment in us will be if you sell your common stock at a price greater than you paid for it. There is no guarantee that the price of our common stock that will prevail in the market will ever exceed the price that you previously paid.

Future sales of our common stock in the public market could reduce our stock price, and the sale or issuance of equity or convertible securities may dilute your ownership in us.

We may sell additional shares of common stock in subsequent public offerings. We may also issue additional shares of common stock or convertible securities. As of December 31, 2021, we have outstanding 44,941,742 shares of common stock. Clearlake beneficially owns 10,800,369 shares of our common stock, or approximately 24.0% of our total outstanding shares

and our Chief Executive Officer beneficially owns 6,923,370 shares of our common stock, or approximately 15.4% of our total outstanding shares.

On November 9, 2021, we entered into an Open Market Sale Agreement (the "Sale Agreement") with Clearlake Capital Partners II (Master), L.P., an affiliate of Clearlake (the "Selling Stockholder"), and Jefferies LLC (the "Sales Agent"). Pursuant to the terms of the Sale Agreement, (i) we may sell, from time to time, shares of its common stock having an aggregate value of up to \$25,000,000 and (ii) the Selling Stockholder may sell, from time to time, up to 10,920,445 shares of our common stock. The sales, if any, of shares of our common stock made under the Sale Agreement may be made in sales deemed to be "at-the-market" offerings as defined in Rule 415 under the Securities Act, including sales made directly on the Nasdaq Global Select Market, on any other existing trading market for our common stock, or to or through a market maker. Sales of shares of our common stock may also be made by any method permitted by law, including, but not limited to, in privately negotiated transactions.

In connection with our initial public offering, we filed a registration statement with the SEC on Form S-8 providing for the registration of shares of our common stock issued or reserved for issuance under our equity incentive plans. Subject to the satisfaction of vesting conditions and the requirements of Rule 144, shares registered under the registration statement on Form S-8 will be available for resale immediately in the public market without restriction.

We have provided certain registration rights for the sale of common stock by certain existing stockholders in the future. The sale of these shares could have an adverse impact on the price of our common stock or on any trading market that may develop.

We cannot predict the size of future issuances of our common stock or securities convertible into common stock or the effect, if any, that future issuances and sales of shares of our common stock will have on the market price of our common stock. Sales of substantial amounts of our 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 common stock.

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

Our amended and restated certificate of incorporation authorizes 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 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 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 common stock.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware 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 provides that unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will, to the fullest extent permitted by applicable law, be the sole and exclusive forum for (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 directors, officers, employees or agents 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, or (iv) any action asserting a claim against us that is governed by the internal affairs doctrine, in each such case subject to such Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein. 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.

ITEM 1B. — UNRESOLVED STAFF COMMENTS

None.

ITEM 2. — PROPERTIES

As of December 31, 2021, our operating facilities include two frac sand mines and related processing facilities in Oakdale, Wisconsin and Utica, Illinois. Also, in addition to the onsite transloading capabilities at our Oakdale mine, we have nearby transloading facilities to each of our mines and three in-basin transload facilities in Van Hook, North Dakota, Waynesburg, Pennsylvania, and El Reno, Oklahoma.

The following table provides key characteristics of our Oakdale, Wisconsin facility as of December 31, 2021:

Facility Characteristic	Description
Site geography	Approximately 1,256 contiguous acres, with on-site processing and rail loading facilities.
Proven and probable recoverable	
reserves	250 million tons.
Deposits	Sand reserves of up to 200 feet; grade mesh sizes 20/40, 30/50, 40/70 and 100 mesh.
Proven reserve mix	Approximately 19% of 20/40 and coarser substrate, 41% of finer 40/70 mesh substrate and approximately 40% of fine 100 mesh substrate. Our 30/50 gradation is a derivative of the 20/40 and 40/70 blends.
Excavation technique	Generally shallow overburden allowing for surface excavation.
Annual processing capacity	5.5 million tons.
Logistics capabilities	Dual served rail line logistics capabilities. On-site transportation infrastructure capable of simultaneously accommodating multiple unit trains and connected to the Canadian Pacific rail network. Additional unit train capable transload facility located approximately three miles from the Oakdale facility in Byron Township that provides access to the Union Pacific rail network.
Royalties	\$0.50 per ton sold of 70 mesh and coarser substrate.

The following table provides key characteristics of our Utica, Illinois facility as of December 31, 2021:

Facility Characteristic	Description
Site geography	Approximately 1,176 acres, with on-site processing and truck loadout facilities.
Proven and probable recoverable reserves	129 million tons.
Deposits	Sand reserves of up to 100 feet; grade mesh sizes 20/40, 30/50, 40/70 and 100 mesh.
Proven and probable reserve mix	Approximately 29% of 20/40 and coarser substrate, 58% of finer 40/70 mesh substrate and approximately 13% of fine 70/100 mesh substrate. Our 30/50 gradation is a derivative of the 20/40 and 40/70 blends.
Excavation technique	Average overburden of approximately 66ft allowing for surface excavation.
Annual processing capacity	1.6 million tons
Logistics capabilities	Unit train capable transload facility located approximately seven miles from the Utica facility in Peru, Illinois that provides access to the BNSF rail network.
Royalties	None

In addition to these currently operating facilities, we also recently acquired an idled mine and processing facility in New Auburn, Wisconsin as part of the Eagle Proppants Holdings acquisition, which contains a higher concentration of coarser sand deposits. We have no immediate plans to resume processing frac sand operations at this facility, though its administrative facilities and proximity to our Oakdale facility allow us to utilize the property to create synergies with our existing operations in Wisconsin.

We also own approximately 959 acres in Jackson County, Wisconsin ("Hixton"). The Hixton site is fully permitted to initiate operations and is available for future development. As of December 31, 2021, our Hixton site had approximately 141 million tons of measured resources. We have no immediate plans to further develop this site.

We have two long-term surface mining leases for properties located in the Permian Basin in Texas that are available for future development. The first site consists of 1,772 acres in Winkler County, Texas. This location is adjacent to the Texas & New Mexico Railway (TXN) short line with direct access to State Highway 18. The second site consists of 2,447 acres in Crane County, Texas. This location has direct access to Interstate Highway 20. Based on our preliminary testing, we believe there are sufficient quantities on these sites to establish reserves in the future. We have no immediate plans to further develop these sites and have fully impaired capitalized improvements and development costs at these locations as of December 31, 2020.

We lease a 56,000 square foot facility in Saskatoon, Saskatchewan, Canada where we manufacture our SmartSystems wellsite proppant storage solutions.

Our Reserves

We believe that our strategically-located mining sites provide us with a large and high-quality mineral reserves base. Mineral resources and reserves are typically classified by confidence (reliability) levels based on the level of exploration, consistency and assurance of geologic knowledge of the deposit. This classification system considers different levels of geoscientific knowledge and varying degrees of technical and economic evaluation. Mineral reserves are derived from in situ resources through application of modifying factors, such as mining, analytical, economic, marketing, legal, environmental, social and governmental factors, relative to mining methods, processing techniques, economics and markets. In estimating our reserves, we do not classify a resource as a reserve unless that resource can be demonstrated to have reasonable certainty to be recovered economically in accordance with the modifying factors listed above. "Reserves" are defined by SEC Industry Guide 7 as that part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination. Industry Guide 7 defines "proven (measured) reserves" as 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. Industry Guide 7 defines "probable (indicated) reserves" as 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.

In estimating our reserves, as listed in the tables above, we categorize our reserves as proven or probable recoverable in accordance with these SEC definitions. The quantity and nature of the sand reserves at our mining locations were estimated by third-party geologists and mining engineers for the year ended December 31, 2021.

Our Oakdale reserves are located on 1,256 contiguous acres in Monroe County, Wisconsin. We own our Monroe County acreage in fee and acquired surface and mineral rights on all of such acreage from multiple landowners in separate transactions. Our mineral rights are subject to an aggregate non-participating royalty interest of \$0.50 per ton sold of coarser than 70 mesh, which we believe is significantly lower than many of our competitors.

Our Hixton site that is on approximately 959 acres in Jackson County, Wisconsin. The Hixton site is fully permitted and available for future development. We own our Jackson County acreage in fee and acquired surface and mineral rights on all of such acreage from multiple landowners in separate transactions. Our mineral rights are subject to an aggregate non-participating royalty interest of \$0.50 per ton sold of coarser than 70 mesh, which we believe is significantly lower than many of our competitors.

Our Utica mine is approximately 1,400 acres in LaSalle County, Illinois. The Utica site is a fully owned including all mineral rights.

To opine as to the economic viability of our reserves, independent experts reviewed our financial cost and revenue per ton data at the time of the reserve determination. Historical mineral prices are considered in the context of market supply and demand dynamics to further assess the long-term economic viability of the mineral reserve assets that were evaluated over a thirty year measurement period. A range of average sales price assumptions was considered to estimate proven reserves in accordance with the Commission's definitions. For our Oakdale location, the assumed average sales price was \$20 per ton for the life of mine over 90 years. For our Utica location, the assumed average sales price was \$20 per ton for the life of mine over 90 years. The reserve estimates are updated annually based on a variety of factors, including sales, changes to mineral properties, changes in mine plan, current pricing forecasts and other business strategies. The recovery percentage following processing is also an important criterion in determining economic viability of our mineral reserves. An estimated average processing recovery of approximately 82% was used for our Oakdale and Hixton locations and 81% for our Utica location.

Based on their review of our cost structure and their extensive experience with similar operations, John T. Boyd concluded that it is reasonable to assume that we will operate under a similar cost structure over the remaining life of our reserves. John T. Boyd further assumed that if our revenue per ton remained relatively constant over the life of the reserves, our current operating margins are sufficient to expect continued profitability throughout the life of our reserves.

ITEM 3. — 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. The disclosure called for by Part I, Item 3 regarding our legal proceedings is incorporated by reference herein from Part II, Item 8. Note 18 - Commitments and Contingencies - Litigation of the notes to the consolidated financial statements in this Form 10-K for the year ended December 31, 2021.

ITEM 4. — MINE SAFETY DISCLOSURES

We are committed to maintaining a culture that prioritizes mine safety. We believe that our commitment to safety, the environment and the communities in which we operate is critical to the success of our business. Our sand mining operations are subject to mining safety regulation. The U.S. Mining Safety and Health Administration ("MSHA") is the primary regulatory organization governing frac sand 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.

We are also subject to regulations by the U.S. Occupational Safety and Health Administration ("OSHA") which has promulgated rules for workplace exposure to respirable silica for several other industries. Respirable silica is a known health hazard for workers exposed over long periods. MSHA is expected to adopt similar rules as part of its "Long Term Items" for rulemaking. Airborne respirable silica is associated with work areas at our site and is monitored closely through routine testing and MSHA inspection. If the workplace exposure limit is lowered significantly, we may be required to incur certain capital expenditures for equipment to reduce this exposure. We also adhere to NISA's respiratory protection program, and ensures that workers are provided with fitted respirators and ongoing radiological monitoring.

Our operations are subject to the Federal Mine Safety and Health Act of 1977, 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 failure to comply with such standards, or changes in such standards or the interpretation or enforcement thereof, could have a material adverse effect on our business and financial condition or otherwise impose significant restrictions on our ability to conduct mineral extraction and processing operations. Following passage of The Mine Improvement and New Emergency Response Act of 2006, MSHA significantly increased the numbers of citations and orders charged against mining operations. The dollar penalties assessed for citations issued has also increased in recent years. Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95.1 to this Report.

PART II

ITEM 5. — MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Shares of our common stock, traded publicly under the symbol, "SND," have been publicly traded since November 4, 2016, when our common stock was listed and began trading on the NASDAQ Global Select Market ("NASDAQ"). Prior to that date, there was no public market for our stock.

Holders of Record

On March 2, 2022, there were 44,745,796 shares of our common stock outstanding, which were held by approximately 27 stockholders of record. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

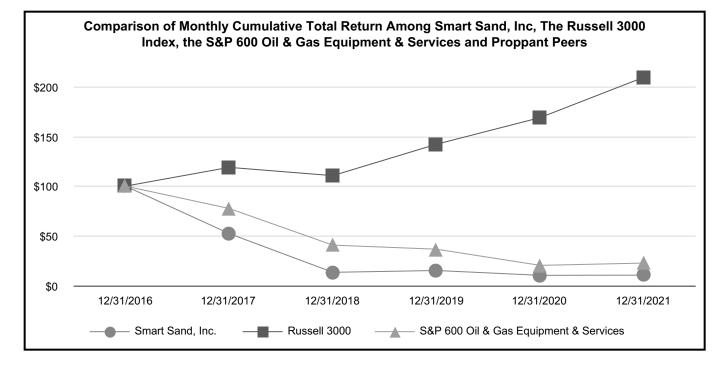
Dividends

Our ability to pay dividends is governed by (i) the provisions of Delaware corporate law, (ii) our Certificate of Incorporation and Bylaws, and (iii) our ABL Credit Facility. To date, we have not paid or declared any dividends on our common stock and there is no assurance that we will pay any cash dividends on our common stock in the future. The future payment of cash dividends on our common stock, if any, is within the discretion of our board of directors and will depend on our earnings, capital requirements, financial condition, and other relevant factors.

Smart Sand, Inc. Comparative Stock Performance Graph

The graph below compares the cumulative total stockholder return on our common stock, the cumulative total return on the Russell 3000 Index and the Standard and Poor's Small Cap 600 GICS Oil & Gas Equipment & Services Sub-Industry for the last five years.

The graph assumes \$100 was invested on December 31, 2016, in our common stock, the Russell 3000, and the Standard and Poor's Small Cap 600 GICS Oil & Gas Equipment & Services Sub-Industry Index. The cumulative total return assumes the reinvestment of all dividends.



The information contained in this Smart Sand, Inc. Comparative Stock Performance Graph section shall not be deemed to be "soliciting material" or "filed" or incorporated by reference in future filings with the SEC, or subject to the liabilities of Section 18 of the Exchange Act, except to the extent that we specifically incorporate it by reference into a document filed under the Securities Act or the Exchange Act.

Unregistered Sales of Equity Securities and Use of Proceeds

During the year ended December 31 2021, no shares were sold by the Company without registration under the Securities Act of 1933.

ITEM 6. — RESERVED

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

ITEM 7. — MANAGEMENT'S DISCUSSION AND ANALYSIS FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

The following discussion and analysis of our financial condition and results of operations should be read together with Item 1, "Business," and the Consolidated Financial Statements and the related notes in Item 8 of this Annual Report on Form 10-K.

This discussion contains forward-looking statements as a result of many factors, including those set forth under Item 1, "Business—Forward-Looking Statements" and Item 1A, "Risk Factors," and elsewhere in this report. These statements are based on current expectations and assumptions that are subject to risks and uncertainties. Actual results could differ materially from those discussed in or implied by forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, particularly in Item 1A, "Risk Factors."

We use contribution margin, EBITDA, Adjusted EBITDA and free cash flow herein as non-GAAP measures of our financial performance. For further discussion of contribution margin, EBITDA, Adjusted EBITDA and free cash flow, see the section entitled "Non-GAAP Financial Measures." in Item 7 of this Annual Report on Form 10-K. We define various terms to simplify the presentation of information in this Report. All share amounts are presented in thousands.

Factors Impacting Comparability of Our Financial Results

Our historical results of operations and cash flows are not indicative of results of operations and cash flows to be expected in the future, principally for the following reasons:

- *Litigation settlement*. We entered into a Settlement Agreement with U.S. Well Services pursuant to which U.S. Well Services paid us a \$35.0 million cash payment to settle \$54.6 million of outstanding accounts receivable. The difference between the cash received and the outstanding accounts receivable balance was recorded as bad debt expense in the amount of \$19.6 million during the year ended December 31, 2021.
- Impairment loss. In 2021, we recorded an inventory impairment loss of \$2.2 million related to the write down of
 inventory driven by expected yield. In 2020, we recorded an impairment loss of \$5.1 million to fully write down the
 value of our long-lived assets in the Permian basin as we have no intentions to develop these properties in the
 foreseeable future. In 2019, we recorded impairment losses of \$15.5 million, of which \$7.6 million related to our
 finite-lived developed technology intangible assets and \$7.9 million relates to our Hixton, Wisconsin property.
 These amounts were recorded as an operating expense on the consolidated statements of operations. See our
 discussion in the section entitled "GAAP Results of Operations" for additional information regarding these
 transactions.
- Market Trends. In recent years, the increasing supply of sand, particularly in-basin sand, relative to demand, has led to a continued depression of frac sand prices. Demand was strong in the first half of 2019 before declining toward the end of 2019 as oil and gas companies exhausted their budgets and managed their capital spending to be in line with their expected operating cash flows. During most of 2020, demand for frac sand declined significantly due to decreased demand for oil and natural gas as a result of the ongoing effects of the COVID-19 pandemic, which caused a global decrease in all means of travel, the closure of borders between countries and a general slowing of economic activity worldwide. Activity in the oil and gas industry began to rebound in the fourth quarter of 2020 and through the year ended 2021 as the global distribution of COVID-19 vaccines ramped up and travel restrictions lessened. We have seen an increase in the volume of sand sold since the global economy began reopening, however the prices of frac sand have continued to be depressed due to overbuilt capacity. Increased supply of sand coupled with volatility in oil demand has resulted in lower prices for our products and has led to reduced interest in long-term contracts as customers have instead trended toward purchasing their frac sand supply in the spot market at current market prices. However, we expect that the recent higher demand for frac sand could lead to better pricing opportunities, although we cannot predict when frac sand prices will increase or stabilize, if at all.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

Overview

We are a fully integrated frac sand supply and services company, offering complete mine to wellsite proppant supply and logistics solutions to our customers. We produce low-cost, high quality Northern White frac sand, which is a premium proppant used to enhance hydrocarbon recovery rates in the hydraulic fracturing of oil and natural gas wells. We also offer proppant logistics solutions to our customers through our in-basin transloading terminals and our SmartSystemsTM wellsite proppant storage capabilities. We market our products and services to oil and natural gas exploration and production companies, oilfield service companies and industrial manufacturers, and sell our sand under a combination of long-term take-or-pay contracts and spot sales in the open market, and provide wellsite proppant storage solutions services and equipment under flexible contract terms custom tailored to meet customers' needs. We believe that, among other things, the size and favorable geologic characteristics of our sand reserves, the strategic location and logistical advantages of our facilities, our proprietary SmartDepotTM portable wellsite proppant storage silos, SmartPathTM transloader and the industry experience of our senior management team make us as a highly attractive provider of frac sand and proppant logistics services from the mine to the wellsite.

We own and operate a frac sand mine and related processing facility near Oakdale, Wisconsin, at which we have approximately 250 million tons of proven and probable recoverable sand reserves as of December 31, 2021. We incorporated in Delaware in July 2011 and began operations with 1.1 million tons of annual nameplate processing capacity in July 2012. After several expansions, our current annual processing capacity at our Oakdale facility is approximately 5.5 million tons of frac sand. Our integrated Oakdale facility, with on-site rail infrastructure and wet and dry sand processing facilities, has access to two Class I rail lines and enables us to process and cost-effectively deliver products to our customers.

In September 2020, we acquired from Eagle all of the issued and outstanding interests in Eagle Proppants Holdings. The primary assets of Eagle Proppants Holdings and its subsidiaries include two frac sand mines and related processing facilities in Utica, Illinois and New Auburn, Wisconsin. The Utica mine has approximately 129 million tons of proven and probable reserves and 1.6 million tons of annual processing capacity with access to the BNSF Class I rail line through the Peru, Illinois transload facility. We began operating the Utica, Illinois mine and Peru, Illinois transload facility in October 2020. We currently have no intention of operating the New Auburn, Wisconsin mine for the foreseeable future. The acquisition also included rights to use a rail terminal located in El Reno, Oklahoma, which was idled at the time of the acquisition but has recently started operating again.

We operate a unit train capable transloading terminal in Van Hook, North Dakota to service the Bakken Formation in the Williston Basin. We operate this terminal under a long-term agreement with Canadian Pacific Railway to service the Van Hook terminal directly along with the other key oil and natural gas exploration and production basins of North America. The Van Hook terminal became operational in April 2018. Since operations commenced, we have been providing Northern White sand in-basin at this terminal to our contracted and spot sales customers. This terminal allows us to offer more efficient delivery options to customers operating in the Bakken Formation in the Williston Basin.

In September 2021, we acquired the rights to construct and operate another transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Waynesburg terminal became operational in January 2022. We believe the Waynesburg terminal will allow us to be one of the most efficient and lowcost sources of frac sand in the Appalachian Basin.

We also offer to our customers portable wellsite proppant storage and management solutions through our SmartSystems products and services. Our SmartSystems provide our customers with the capability to unload, store and deliver proppant at the wellsite, as well as the ability to rapidly set up, takedown and transport the entire system. This capability creates flexibility in how the units are utilized at the wellsite, enhanced safety and reliability for customers and efficiencies in the delivery of frac sand to the wellsite which allows customers to reduce trucking requirements and diesel fuel consumption of their field operations.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

Recent Developments

Waynesburg Transload Terminal

In September 2021, we acquired the rights to construct and operate a transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Waynesburg terminal became operational in January 2022. We believe our Waynesburg terminal will allow us to be one of the most efficient and low-cost sources of frac sand in the Appalachian Basin.

Blair Mine and Processing Facility

On March 4, 2022, we entered into the Purchase Agreement with HCR and Blair, pursuant to which the Company acquired all of the issued and outstanding limited liability company interests of Blair from HCR for aggregate cash consideration of approximately \$6.5 million, subject to customary purchase price adjustments as set forth in the Purchase Agreement. Entities affiliated with Clearlake Capital ("Clearlake"), who collectively own approximately 24% of the Company's outstanding common stock, also own a significant portion of the outstanding common stock of Hi-Crush, and representatives of Clearlake serve on our board of directors and HCR's board of directors.

The primary assets of Blair consist of an idle frac sand mine and related processing facility located in Blair, Wisconsin. The Blair facility has approximately 2.8 million tons of total annual processing capacity and contains an onsite, unit train capable rail terminal with access to the Class 1 Canadian National Railway.

We believe this acquisition broadens our mine to wellsite capabilities by adding high quality sand mining and processing assets coupled with enhanced logistics options that provide direct access to an additional Class I rail line. We believe these additional mining and logistics resources help secure our ability to be the preferred provider of Northern White Sand in the proppants market. With this acquisition, we now have direct access to four Class I rail lines and the ability to access all Class 1 rail lines within the United States and Canada.

Assets and Operations

Oakdale, Wisconsin

Our sand reserves in Oakdale include a balanced concentration of coarse sand, (19% 20/40 and coarser), finer sand (41% of 40/70 mesh) and fine sand (40% 60/140 gradation, which we refer to in this annual report as "100 mesh"). Our 30/50 gradation is a derivative of the 20/40 and 40/70 blends. We believe that this mix of coarse and fine sand reserves, combined with contractual demand for our products across a range of mesh sizes, provides us with relatively higher mining yields and lower processing costs than frac sand mines with predominantly coarse sand reserves. We have approximately 250 million tons of proven and probable recoverable reserves, which brings our estimated life of mine to approximately 90 years, based on current volumes. This long reserve life enables us to better serve demand for different types of frac sand as compared to mines with shorter reserve lives.

Our Oakdale facility is purpose-built to exploit the reserve profile in place and produce high-quality frac sand. Unlike some of our competitors, our primary processing and rail loading facilities are located in close proximity to the mine site, which limits the need for us to truck sand on public roads between the mine and the production facility or between wet and dry processing facilities. Our on-site transportation assets include approximately nine miles of rail track in a triple-loop configuration and four railcar loading facilities that are connected to a Class I rail line owned by Canadian Pacific. This enables us to simultaneously accommodate multiple unit trains and significantly increases our efficiency in meeting our customers' frac sand transportation needs. Our unit train capable transload facility approximately three miles from the Oakdale facility in Byron Township, Wisconsin, provides us with the ability to ship sand to our customers on the Union Pacific rail network. We believe that we are the only sand facility in Wisconsin that has dual served rail capabilities, which should create competition among our rail carriers and allow us to provide more competitive logistics options for our customers.

Utica & Peru, Illinois

Our Utica facility also has a large high-quality reserve base of primarily fine-mesh sand that is contiguous to the production facility and in close proximity to our Peru transload facility located on the BNSF railway. We have approximately

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

129 million tons of proven and probable reserves, which gives us an estimated life of mine of approximately 161 years, based on current volumes. Our Utica facility provides us with significant logistics assets that further increases our logistics advantage, including access to BNSF, a Class I rail line, through our owned Peru transload facility. Additionally, the CSX and NS rail lines are available within short trucking distances. This facility is also capable of handling multiple unit trains simultaneously. These additional logistics options give us greater access to operating basins in the Western United States allowing us to offer more competitive pricing to existing and new customers in these markets.

Logistics

Through our transloading terminal in Van Hook, North Dakota, we provide one of the most efficient and lowest-cost sources of Northern White sand in-basin to customers operating in the Bakken Formation in the Williston Basin. With the addition of our Waynesburg terminal in the Appalachian Basin in 2021, we are now able to also provide one of the most efficient and lowest-cost sources of Northern White sand in-basin to customers operating in the Marcellus and Utica Formations. We also acquired a rail terminal from the Eagle acquisition located in El Reno, Oklahoma, which allows us to economically provide frac sand to customers operating nearby, including customers using our SmartSystems last mile equipment.

Through our SmartSystems offering, we have the technology, production capacity and management team to compete further in the frac sand supply chain for our customers by offering logistics services from the mine all the way to the wellsite. Our SmartSystems consist of our SmartDepot proppant storage silos, our SmartPath transloader and our rapid deployment trailer system.

We believe our patented SmartDepot silos will outperform our competitors in that they can be set up or taken down rapidly, they include industry-leading passive and active dust suppression technology, they have the capability of gravity-fed operation and they can be filled by both pneumatic and gravity dump trailers. Our trailers detach, which reduces their footprint on the wellsite. In 2020, we developed a self-contained SmartPath transloader, which is a mobile sand transloading system designed to work with bottom dump trailers and features a drive over conveyor, surge bin, and dust collection system, and we believe the system has the ability to keep up with any hydraulic fracturing operation. Our rapid deployment trailers are designed for quick setup, takedown and transportation of the entire SmartSystem, and they detach from the wellsite equipment, which allows for removal from the wellsite during operation. We have also developed a proprietary software program, the SmartSystem TrackerTM, which allows our SmartSystems customers to monitor silo-specific information, including location, proppant type and proppant inventory.

Through the expansion of our SmartSystems fleet and other logistics options, we continue evaluating ways to reduce the landed cost of our products in-basin and to the wellsite for our customers while increasing our customized service offerings to provide additional delivery and pricing alternatives, including selling product on an "as-delivered" basis to the wellsite. We believe that our SmartSystems reduce trucking and related fuel consumption for our customers, helping them meet their goals to reduce their carbon footprint in their daily operations.

In 2020, we significantly expanded our existing logistics infrastructure through the acquisition of Eagle Proppants Holdings by adding new origination and destination points to our existing capabilities. We expect to continue to capitalize on our Oakdale facility's ability to simultaneously accommodate multiple unit trains on-site with the Canadian Pacific rail network and ship on two Class I rail carriers to maximize our product shipment rates, increase our railcar utilization and lower our transportation costs. Through our transloading facility located on the Union Pacific rail network approximately three miles from our Oakdale facility, we have the ability to ship our frac sand directly to our customers on a second Class I rail carrier. Our newly acquired Peru transload terminal, located just minutes away from our Utica mine and frac sand processing facility, offers additional capability to ship products on a third Class I rail carrier, the BNSF.

How We Generate Revenue

We generate revenue by excavating and processing frac sand, which we sell to our customers under long-term price agreements or as spot sales at prevailing market rates. In some instances, revenues also include a charge for transportation services provided to customers. Our transportation revenue fluctuates based on a number of factors, including the volume of product transported and the distance between the plant and our customers. Our long-term price agreements typically contain a minimum volume purchase requirement and provide for delivery of frac sand from one of our processing facilities, transloading terminals or another location specified by our customers. Revenue is generally recognized as products are delivered in accordance with the contract.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

We generate revenue on our SmartSystems by renting equipment to our customers under contract terms tailored to meet the short-term or long-term needs with any number of SmartDepots, SmartPaths or trailers they require. We recognize rental revenue when the equipment is made available for the customer to use or other obligations in the contract are met.

In the fourth quarter of 2021, we expanded our product line to begin offering sand through IPS. Though sales of IPS were immaterial in 2021, we expect to expand and diversify to serve the major industrial markets throughout North America, including glass, foundry, building products, filtration, geothermal, renewables, ceramics, turf & landscape, retail, recreation and more in 2022.

Costs of Conducting Our Business

The principal direct costs involved in operating our business are freight charges, which consist of transportation, railcar rental and storage, and production costs, which consists of labor, maintenance, utilities, equipment, excavation and depreciation of our property, plant and equipment. We incur labor costs associated with employees at our processing facilities which represent the most significant cost of converting sand to finished products. Our sand processing and logistics facilities undergo maintenance to minimize unscheduled downtime and ensure the ongoing quality of our sand and ability to meet customer demands. We incur utility costs in connection with the operation of our processing and logistics facilities, primarily electricity and natural gas, which are both susceptible to market fluctuations. We lease equipment in many areas of our operations including our mining and hauling equipment and logistics services. Excavation costs relate to the blasting and excavation of sand and other materials in order to retrieve desirable sand products. In addition, other costs including processing costs, overhead allocation, depreciation and depletion are capitalized as a component of inventory and are reflected in cost of goods sold when inventory is sold.

Overall Trends and Outlook

Demand Trends

According to Spears, the North American proppant market, including frac sand, ceramic and resin-coated proppant, was approximately 73 million tons in 2021, which is approximately 26% increase from the 58 million tons Spears reported for 2020. Spears estimates that 2022 demand will increase to 90 million tons, which is approximately 23% increase over 2021.

Supply Trends

There has been consolidation activity including mergers, acquisitions, closures of mines and bankruptcy filings among our peers. Additional consolidation activity could occur in 2022 in the mining, transloading and logistics businesses. Many large oil and natural gas exploration and production companies have continued to integrate vertically by sourcing their own proppant and some own their own sand mines.

Supplies of high-quality Northern White frac sand are limited to select areas, predominantly in western Wisconsin and limited areas of Minnesota and Illinois. We believe the ability to obtain large contiguous reserves in these areas is a key constraint and can be an important supply consideration when assessing the economic viability of a potential frac sand facility. Further constraining the supply and throughput of Northern White frac sand is that not all of the large reserve mines have on-site excavation, processing or logistics capabilities. Historically, much of the capital investment in Northern White frac sand mines was used for the development of coarser deposits in western Wisconsin, which is inconsistent with the increasing demand for finer mesh frac sand in recent years. As such, we've seen competitors in the Northern White frac sand market reduce their capacity by shuttering or idling operations as the shift to finer sands in hydraulic fracturing of oil and natural gas wells erodes the ongoing economic viability of producing coarser grades of sand.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

Management's Outlook

In 2021, we started several strategic initiatives to take advantage of the current market downturn and set ourselves up for success in 2022. In the fourth quarter of 2021 we expanded our product line to begin offering IPS. Though sales to IPS customers were immaterial in 2021, we expect to expand and diversify our customer base to serve the major industrial markets throughout North America, including glass, foundry, building products, filtration, geothermal, renewables, ceramics, turf & landscape, retail and recreation beginning in 2022. In 2021, we also acquired the rights to construct and operate a transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Waynesburg terminal became operational in January 2022. We believe Waynesburg terminal will allow us to be one of the most efficient and low-cost sources of frac sand in the Appalachian Basin. In March 2022, we entered into a Purchase Agreement with HCR to Purchase its Blair facility. The primary assets of Blair consist of a frac sand mine and related processing facility located in Blair, Wisconsin, which has approximately 2.8 million tons of total annual processing capacity and contains an onsite, unit train capable rail terminal with access to the Class 1 Canadian National Railway. With this acquisition, we now have direct access to four Class I rail lines and the ability to access all Class 1 rail lines within the United States and Canada.

We expect the demand to improve for frac sand in 2022. We believe higher demand driven by increased drilling and completion activity should also lead to the opportunity for price improvement for frac sand over the course of 2022. Demand for both frac sand and our SmartSystems is influenced by the volume of oil and natural gas well drilling and completion activity, as well as the types of wells that are completed. We expect the Bakken and Marcellus formations to continue to be key markets for us and we look to expand our market share in these key areas through our current strategic initiatives.

The industry trends continue towards drilling and completing wells with longer laterals and more frac stages per lateral foot drilled. This trend is leading to higher volumes of sand per well and the need for oil and natural gas exploration companies to manage larger volumes of sand at the wellsite. We believe these trends support continued demand for frac sand and increased demand for SmartSystems as customers look to create synergies in the time and cost of managing their sand needs at the wellsite.

We generally expect the price of frac sand to fluctuate based on the level of drilling and completions activity for oil and natural gas as well as overall supply for frac sand relative to demand. In recent years, an increasing supply of sand has kept prices depressed. We believe the supply of sand to be stabilizing or contracting as consolidation in the industry continues. The willingness of exploration and production companies to engage in new drilling is determined by a number of factors, the most important of which are the prevailing and projected prices of oil and natural gas, the cost to drill, complete and operate a well, the availability and cost of capital and environmental and government regulations, as well as their ability to source sand delivered to the wellsite. We generally expect the level of drilling to correlate with long-term trends in commodity prices. Similarly, oil and natural gas production levels nationally and regionally generally tend to correlate with drilling activity.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

GAAP Results of Operations

Year Ended December 31, 2021 compared to the Year Ended December 31, 2020:

	Year Ended December 31,				Change			
	2021		2020		Dollars	Percentage		
		(in thousands, except percentage change)						
Revenues:								
Sand sales revenue	\$ 117,402	\$	70,902	\$	46,500	66 %		
Shortfall revenue	4,421		23,281		(18,860)	(81)%		
Logistics revenue	 4,825		28,157		(23,332)	(83)%		
Total revenue	126,648		122,340		4,308	4 %		
Cost of goods sold	140,384		104,221		36,163	35 %		
Inventory impairment loss	2,170				2,170	Not meaningful		
Gross profit	(15,906)		18,119		(34,025)	(188)%		
Operating expenses:								
Salaries, benefits and payroll taxes	11,258		9,993		1,265	13 %		
Depreciation and amortization	1,980		1,911		69	4 %		
Selling, general and administrative	14,749		15,527		(778)	(5)%		
Bad debt expense	19,592		_		19,592	Not meaningful		
Change in the estimated fair value of contingent consideration			(1,410)		1,410	(100)%		
Impairment loss			5,115		(5,115)	(100)%		
Total operating expenses	 47,579		31,136		16,443	53 %		
Operating (loss) income	 (63,485)		(13,017)		(50,468)	388 %		
Other income (expenses):								
Gain on bargain purchase	_		39,600		(39,600)	(100)%		
Interest expense, net	(1,979)		(2,091)		112	(5)%		
Other income	5,773		482		5,291	1098 %		
Total other income (expenses), net	3,794		37,991		(34,197)	(90)%		
(Loss) income before income tax (benefit) expense	(59,691)		24,974		(84,665)	(339)%		
Income tax (benefit) expense	(9,017)		(12,980)		3,963	(31)%		
Net (loss) income	\$ (50,674)	\$	37,954	\$	(88,628)	(234)%		

Revenue

Revenue was \$126.6 million for the year ended December 31, 2021, during which we sold approximately 3,189,000 tons of sand. Revenue for the year ended December 31, 2020 was \$122.3 million, during which we sold approximately 1,886,000 tons of sand. The key factors contributing to the increase in revenues for the year ended December 31, 2021 as compared to the year ended December 31, 2020 were as follows:

- Sand sales revenue increased from \$70.9 million for the year ended December 31, 2020 to \$117.4 million for the year ended December 31, 2021, as a result of higher total volumes sold. The volumes sold in 2020 were negatively impacted by depressed oil prices driven by continued oversupply relative to the decreased demand due to the COVID-19 pandemic. Sand volumes increased by 69% from 2020 to 2021, however, due to lower average sand prices, total revenue did not increase at the same rate.
- We had \$4.4 million of contractual shortfall revenue for the year ended December 31, 2021 and \$23.3 million for the year ended December 31, 2020, respectively. We recognize revenue to the extent of the unfulfilled minimum

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

contracted quantity at the shortfall price per ton as stated in the contract. Shortfall revenue of \$14.0 million in 2020 was from a customer with which we settled litigation.

Logistics revenue, which includes freight for certain mine gate sand sales, railcar usage, logistics services and SmartSystems rentals, was \$4.8 million for the year ended December 31, 2021, a decrease of \$23.3 million when compared to logistics revenue of \$28.2 million for the year ended December 31, 2020. The decrease in logistics revenue was due to the shift from mine gate sales to in-basin sales, which include transportation and any other handling services.

Cost of Goods Sold

Cost of goods sold was \$140.4 million and \$104.2 million, for the years ended December 31, 2021 and December 31, 2020, respectively. The increase was primarily due to higher volumes sold and increased freight cost due to the shift of sales to more in-basin deliveries in 2021. During 2020, headcount reductions and other cost savings measures were implemented as a result of the onset of COVID-19. Headcount and production costs increased in 2021 to support increased sales activity, though we remain focused on other cost-saving measures.

Gross Profit

Gross profit was \$(15.9) million and \$18.1 million for the years ended December 31, 2021 and December 31, 2020, respectively. The decline in gross profit for the year ended December 31, 2021 was primarily due to decreased shortfall revenue and low average sales price of our sand relative to the cost to produce and deliver products to our customers. Gross profit for the year ended December 31, 2021 included \$2.2 million related to a write-down of inventory based on expected yield.

Operating Expenses

Operating expenses were \$47.6 million and \$31.1 million for the years ended December 31, 2021 and December 31, 2020, respectively. In 2021, we recorded \$19.6 million as non-cash bad debt expense, which is the difference between the \$54.6 million accounts receivable balance that was subject to litigation and the \$35.0 million cash payment received under the Settlement Agreement. Salaries, benefits and payroll taxes increased to \$11.3 million for the year ended December 31, 2021, as compared to \$10.0 million for the year ended December 31, 2020, respectively, as we increased headcount to support higher levels of production activity and restored the variable compensation in 2021. Depreciation and amortization was largely consistent in 2021 as compared to 2020. Selling, general and administrative expenses decreased from \$15.5 million for the year ended December 31, 2021, primarily as a result of decreased professional fees in 2021 as we settled our ongoing litigation with U.S. Well Services. December 31, 2020 included an impairment charge of \$5.1 million related to the full impairment of long-lived assets in the Permian basin as we have no intentions to develop these properties in the foreseeable future.

Other Income

We qualified for federal government assistance through employee retention credit provisions of the Consolidated Appropriations Act of 2021. During the year ended December 31, 2021, we recorded \$5.0 million of employee retention credits. The calculation of the credit is based on employees continued employment and represents a portion of the wages paid to them. For income tax purposes, the credit will result in decreased expense related to the wages it offsets in the period received. For the year ended December 31, 2020, we recorded a gain on bargain purchase of \$39.6 million related to our acquisition of Eagle Proppants Holdings. The gain was a result of the total fair value of net assets acquired in the transaction of \$41.7 million, which exceeded the total consideration of \$2.1 million paid to Eagle for such assets.

Interest Expense

We incurred \$2.0 million and \$2.1 million of net interest expense for the years ended December 31, 2021 and 2020, respectively. We continue to reduce debt levels and decrease interest expense through scheduled amortizing payments.

Income Tax (Benefit) Expense

Income tax benefit was \$9.0 million for the year ended December 31, 2021 compared to income tax expense of \$13.0 million for the year ended December 31, 2020. For the years ended December 31, 2021 and 2020, our effective tax rate was approximately 15.1% and (52.0)%, respectively, based on the annual effective tax rate net of discrete federal and state taxes.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

The computation of the effective tax rate for the years ended December 31, 2021 and 2020 included modifications from the statutory rate such as income tax credits, depletion deductions, carrybacks as a result of the Coronavirus Aid, Relief and Economic Security Act, and state apportionment changes, among other items. The bargain purchase gain related to our acquisition of Eagle Proppants Holdings that we recorded during the third quarter of 2020 is not taxable.

Net (Loss) Income

Net loss was \$(50.7) million for year ended December 31, 2021 compared to net income of \$38.0 million for the year ended December 31, 2020. The net loss in 2021 was primarily due to reduced gross profit on our sand sales and non-cash bad debt expense of \$19.6 million related to our settlement with U.S. Well Services. Net income in 2020 was primarily due to shortfall revenue and the gain on bargain purchase related to our acquisition of Eagle Proppants Holdings.

Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019:

	Year Ended	ear Ended December 31,			Char	ıge
	 2020		2019		Dollars	Percentage
		(in the	ousands, excep			
Revenues:						
Sand sales revenue	\$ 70,902	\$	109,621	\$	(38,719)	(35)%
Shortfall revenue	23,281		49,259		(25,978)	(53)%
Logistics revenue	 28,157		74,193		(46,036)	(62)%
Total revenue	122,340		233,073		(110,733)	(48)%
Cost of goods sold	104,221		152,021		(47,800)	(31)%
Gross profit	18,119		81,052		(62,933)	(78)%
Operating expenses:						
Salaries, benefits and payroll taxes	9,993		11,560		(1,567)	(14)%
Depreciation and amortization	1,911		2,411		(500)	(21)%
Selling, general and administrative	15,527		11,328		4,199	37 %
Change in the estimated fair value of contingent consideration	(1,410)		(3,272)		1,862	(57)%
Impairment loss	5,115		15,542		(10,427)	(67)%
Total operating expenses	 31,136		37,569		(6,433)	(17)%
Operating (loss) income	 (13,017)		43,483		(56,500)	(130)%
Other income (expenses):						
Gain on bargain purchase	39,600				39,600	Not meaningful
Interest expense, net	(2,091)		(3,621)		1,530	(42)%
Loss on extinguishment of debt	_		(561)		561	(100)%
Other income	482		131		351	268 %
Total other income (expenses), net	37,991		(4,051)		42,042	(1038)%
(Loss) income before income tax (benefit) expense	24,974		39,432		(14,458)	(37)%
Income tax (benefit) expense	(12,980)		7,809		(20,789)	(266)%
Net (loss) income	\$ 37,954	\$	31,623	\$	6,331	20 %

Revenue

Revenue was \$122.3 million for the year ended December 31, 2020, during which we sold approximately 1,886,000 tons of sand. Revenue for the year ended December 31, 2019 was \$233.1 million, during which we sold approximately 2,462,000 tons of sand. The key factors contributing to the decrease in revenues for the year ended December 31, 2020 as compared to the year ended December 31, 2019 were as follows.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

- Sand sales revenue decreased from \$109.6 million for the year ended December 31, 2019 to \$70.9 million for the year ended December 31, 2020, as a result of lower total volumes sold. The volumes sold in 2020 were negatively impacted by depressed oil prices driven by continued oversupply relative to the decreased demand due to the COVID-19 pandemic.
- We had \$23.3 million of contractual shortfall revenue for the year ended December 31, 2020 and \$49.3 million for the year ended December 31, 2019, respectively. We recognize revenue to the extent of the unfulfilled minimum contracted quantity at the shortfall price per ton as stated in the contract.
- Logistics revenue, which includes freight for certain mine gate sand sales, railcar usage, logistics services and SmartSystems rentals, was \$28.2 million for the year ended December 31, 2020, a decrease of \$46 million when compared to logistics revenue of \$74.2 million for the year ended December 31, 2019. The decrease in logistics revenue was due primarily to lower in basin sales due to the drop in demand caused by the COVID-19 pandemic.

Cost of Goods Sold

Cost of goods sold was \$104.2 million and \$152.0 million, for the years ended December 31, 2020 and December 31, 2019, respectively. Cost of goods sold decreased primarily due to expense reduction efforts put in place and due to lower production costs and freight expense from lower sales volumes due to lower demand caused by the COVID-19 pandemic.

Gross Profit

Gross profit was \$18.1 million and \$81.1 million for the years ended December 31, 2020 and 2019, respectively. The decrease in gross profit for the year ended December 31, 2020 was primarily due to lower total sales volumes and reduced shortfall revenue.

Operating Expenses

Operating expenses were \$31.1 million and \$37.6 million for the years ended December 31, 2020 and 2019, respectively. Salaries, benefits and payroll taxes were reduced to \$10.0 million for the year ended December 31, 2020, as compared to \$11.6 million for the year ended December 31, 2019, respectively, as we reduced headcount and suspended certain variable cash compensation programs for all employees. Depreciation and amortization decreased from \$2.4 million for the year ended December 31, 2019 to \$1.9 million for the year ended December 31, 2020, primarily as a result of reduced amortization of certain intangible assets that were previously impaired in 2019. Selling, general and administrative expenses increased from \$11.3 million for the year ended December 31, 2019 to \$15.5 million for the year ended December 31, 2020, primarily as a result of increased professional fees related to litigation, acquisition costs related to our purchase of Eagle Proppants Holdings in the amount of \$0.9 million and settlement of a multi-year sales tax audit in the amount of \$1.3 million.

Operating expenses for the year ended December 31, 2020 included an impairment charge of \$5.1 million related to the full impairment of long-lived assets in the Permian basin as we have no intentions to develop these properties in the foreseeable future. Operating expenses for year ended December 31, 2019 include an impairment charge of \$7.6 million related to the Quickload system that we acquired in connection with our acquisition of Quickthree in 2018 and \$7.9 million related to our Hixton, Wisconsin property in property, plant and equipment, net on the balance sheet. We had no plans to actively market the Quickload system, which resulted in the impairment charge. All developed technology intangible assets related to the Quickload system have been impaired of as of December 31, 2019.

Gain on Bargain Purchase

For the year ended December 31, 2020, we recorded a gain on bargain purchase of \$39.6 million related to our acquisition of Eagle Proppants Holdings. The gain was a result of the total fair value of net assets acquired in the transaction of \$41.7 million, which exceeded the total consideration of \$2.1 million paid to Eagle for such assets.

Interest Expense

We incurred \$2.1 million and \$3.6 million of net interest expense for the years ended December 31, 2020 and 2019, respectively. The decrease in net interest expense for the year ended December 31, 2021 was primarily due to reduced interest rates on lower average total debt outstanding.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

In 2019, we also recognized \$0.6 million of costs due to the extinguishment of the Former Credit Facility. Our borrowings and total debt were reduced late in 2019 as a result of the payment in full and termination of the Former Credit Facility and our entry into the ABL Credit Facility.

Income Tax (Benefit) Expense

Income tax expense was \$13.0 million for the year ended December 31, 2020 compared to income tax expense of \$7.8 million for the year ended December 31, 2019. For the years ended December 31, 2020 and 2019, our effective tax rate was approximately (52.0)% and 19.8%, respectively, based on the annual effective tax rate net of discrete federal and state taxes. The computation of the effective tax rate for the year ended December 31, 2020 and 2019 included modifications from the statutory rate such as income tax credits, depletion deductions, carrybacks as a result of the Coronavirus Aid, Relief and Economic Security Act, and state apportionment changes, among other items. The bargain purchase gain related to our acquisition of Eagle Proppants Holdings that we recorded during the third quarter of 2020 is not taxable.

Net Income

Net income was \$38.0 million for year ended December 31, 2020 compared to \$31.6 million for the year ended December 31, 2019. The increase in net income was primarily due to the gain on bargain purchase related to our acquisition of Eagle Proppants Holdings, current year income tax benefit and the impairment of intangible assets in the prior period, offset by the lower tons sold during 2020 driven largely by the COVID-19 pandemic.

Non-GAAP Financial Measures

Contribution margin, EBITDA, Adjusted EBITDA and free cash flow are not financial measures presented in accordance with GAAP. We believe that the presentation of these non-GAAP financial measures will provide useful information to investors in assessing our financial condition and results of operations. Gross profit is the GAAP measure most directly comparable to contribution margin, net income is the GAAP measure most directly comparable to EBITDA and Adjusted EBITDA and net cash provided by operating activities is the GAAP measure most directly comparable to free cash flow. Our non-GAAP financial measures should not be considered as alternatives to the most directly comparable GAAP financial measures. Each of these non-GAAP financial measures has important limitations as analytical tools because they exclude some but not all items that affect the most directly comparable GAAP financial measures. You should not consider contribution margin, EBITDA or free cash flow in isolation or as substitutes for an analysis of our results as reported under GAAP. Because contribution margin, EBITDA, Adjusted EBITDA, Adjusted EBITDA and free cash flow may be defined differently by other companies in our industry, our definitions of these non-GAAP financial measures may not be comparable to similarly titled measures of other companies, thereby diminishing their utility.

Contribution Margin

We use contribution margin, which we define as total revenues less costs of goods sold excluding depreciation, depletion and accretion of asset retirement obligations, to measure our financial and operating performance. Contribution margin excludes other operating expenses and income, including costs not directly associated with the operations of our business such as accounting, human resources, information technology, legal, sales and other administrative activities.

Gross profit is the GAAP measure most directly comparable to contribution margin. Contribution margin should not be considered an alternative to gross profit presented in accordance with GAAP. Because contribution margin may be defined differently by other companies in our industry, our definition of contribution margin may not be comparable to similarly titled measures of other companies, thereby diminishing its utility. The following table presents a reconciliation of contribution margin to gross profit.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

	Year Ended December 31,						
	2021		2020			2019	
	(in thousands)						
Revenue	\$	126,648	\$	122,340	\$	233,073	
Cost of goods sold		140,384		104,221		152,021	
Gross profit		(13,736)		18,119		81,052	
Depreciation, depletion, and accretion of asset retirement obligations included in cost of goods sold		24,258		21,022		25,412	
Contribution margin	\$	10,522	\$	39,141	\$	106,464	
Contribution margin per ton	\$	3.30	\$	20.75	\$	43.24	
Total tons sold		3,189		1,886		2,462	

Contribution margin was \$10.5 million, or \$3.30 per ton sold, for the year ended December 31, 2021 compared to \$39.1 million, or \$20.75 per ton sold, for the year ended December 31, 2020. The decrease in overall contribution margin and contribution margin per ton sold for the year ended December 31, 2021, as compared to the prior year, was primarily due to \$18.9 million higher shortfall revenue in the prior period and low average sale price relative to our cost to produce and deliver sand to our customers in the current period.

Contribution margin was \$39.1 million, or \$20.75 per ton sold, for the year ended December 31, 2020 compared to \$106.5 million, or \$43.24 per ton sold, for the year ended December 31, 2019. The decrease in overall contribution margin and contribution margin per ton sold for the year ended December 31, 2020, as compared to the prior year, was primarily due to lower volumes sold during the period and decreased shortfall revenue.

EBITDA and Adjusted EBITDA

We define EBITDA as net income, plus: (i) depreciation, depletion and amortization expense; (ii) income tax expense (benefit); (iii) interest expense; and (iv) franchise taxes. We define Adjusted EBITDA as EBITDA, plus: (i) gain or loss on sale of fixed assets or discontinued operations; (ii) integration and transition costs associated with specified transactions; (iii) equity compensation; (iv) acquisition and development costs; (v) non-recurring cash charges related to restructuring, retention and other similar actions; (vi) earn-out, contingent consideration obligations and other acquisition and development costs; and (vii) non-cash charges and unusual or non-recurring charges. Adjusted EBITDA is used as a supplemental financial measure by management and by external users of our financial statements, such as investors and commercial banks, to assess:

- the financial performance of our assets without regard to the impact of financing methods, capital structure or historical cost basis of our assets;
- the viability of capital expenditure projects and the overall rates of return on alternative investment opportunities;
- our ability to incur and service debt and fund capital expenditures;
- our operating performance as compared to those of other companies in our industry without regard to the impact of financing methods or capital structure; and
- our debt covenant compliance, as Adjusted EBITDA is a key component of critical covenants to the ABL Credit Facility.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

We believe that our presentation of EBITDA and Adjusted EBITDA will provide useful information to investors in assessing our financial condition and results of operations. Net income is the GAAP measure most directly comparable to EBITDA and Adjusted EBITDA and Adjusted EBITDA should not be considered alternatives to net income presented in accordance with GAAP. Because EBITDA and Adjusted EBITDA may be defined differently by other companies in our industry, our definitions of EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures of other companies, thereby diminishing their utility. The following table presents a reconciliation of EBITDA and Adjusted EBITDA to net income for each of the periods indicated.

	Year Ended December 31,						
		2021		2020		2019	
			(in	thousands)			
Net (loss) income	\$	(50,674)	\$	37,954	\$	31,623	
Depreciation, depletion and amortization		25,495		22,536		27,135	
Income tax (benefit) expense		(9,017)		(12,980)		7,809	
Interest expense		2,014		2,129		3,626	
Franchise taxes		290		275		285	
EBITDA	\$	(31,892)	\$	49,914	\$	70,478	
Loss (gain) on sale of fixed assets		555		237		(42)	
Equity compensation ⁽¹⁾		2,933		3,431		2,755	
Employee retention credit ⁽²⁾		(5,026)				_	
Acquisition and development costs (3)		28		(369)		(3,047)	
Gain on bargain purchase		—		(39,600)		—	
Non-cash impairments ⁽⁴⁾		2,170		5,115		15,542	
Cash charges related to restructuring and retention		9		82		137	
Accretion of asset retirement obligations		740		396		687	
Loss on extinguishment of debt						561	
Sales tax audit settlement	\$		\$	1,250	\$		
Adjusted EBITDA	\$	(30,483)	\$	20,456	\$	87,071	

(1) Represents the non-cash expenses for stock-based awards issued to our employees and employee stock purchase plan compensation expense.

(2) Employee retention credit is part of the Consolidated Appropriations Act of 2021 and is recorded in other income on the statements of operations for the year ended December 31, 2021.

(3) Represents costs incurred related to the business combinations and current development project activities. The year ended December 31, 2020 includes \$891 of costs related to the acquisition of Eagle Proppants Holdings and \$1,410 decrease in the estimated fair value of our contingent consideration related to the acquisition of Quickthree. The year ended December 31, 2019 includes \$3,272 decrease in the estimated fair value of our contingent consideration related to the acquisition of Quickthree and \$225 of development project activities.

(4) The year ended December 31, 2021 represents a write-down of our inventory based on expected yield. December 31, 2020 represents a \$5,115 full impairment of long-lived assets in the Permian basin. The year ended December 31, 2019 includes an impairment charge of \$7,628 related to the Quickload system and \$7,914 related to our Hixton Wisconsin property.

Adjusted EBITDA was \$(30.5) million for the year ended December 31, 2021 compared to \$20.5 million for the year ended December 31, 2020. The decrease in Adjusted EBITDA for the year ended December 31, 2021, as compared to the prior year, was primarily due to \$18.9 million less shortfall revenue in the current period, non-cash bad debt expense of \$19.6 million related to our settlement with U.S. Well Services, and low average sale prices of our sand relative to the cost to produce and deliver it despite having higher overall volumes in the current period.

Adjusted EBITDA was \$20.5 million for the year ended December 31, 2020 compared to \$87.1 million for the year ended December 31, 2019. The decrease in Adjusted EBITDA for the year ended December 31, 2020, as compared to the prior year, was primarily due to lower total volumes sold and decreased shortfall revenue in 2020 than in 2019.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

Free Cash Flow

Free cash flow, which we define as net cash provided by operating activities less purchases of property, plant and equipment, is used as a supplemental financial measure by our management and by external users of our financial statements, such as investors and commercial banks, to measure the liquidity of our business.

Net cash provided by operating activities is the GAAP measure most directly comparable to free cash flows. Free cash flows should not be considered an alternative to net cash provided by operating activities presented in accordance with GAAP. Because free cash flows may be defined differently by other companies in our industry, our definition of free cash flows may not be comparable to similarly titled measures of other companies, thereby diminishing its utility. The following table presents a reconciliation of free cash flows to net cash provided by operating activities.

	 Year Ended December 31,						
	2021		2020		2020 201		2019
	 (in t						
Net cash provided by operating activities	\$ 32,438	\$	25,541	\$	44,632		
Purchases of property, plant and equipment	 (11,220)		(8,620)		(25,525)		
Free cash flow	\$ 21,218	\$	16,921	\$	19,107		

Free cash flow was \$21.2 million for the year ended December 31, 2021 compared to \$16.9 million for the year ended December 31, 2020. The increase in free cash flow was primarily attributable to a slightly longer cash collection cycle on strong fourth quarter 2021 sales volumes and lower average sales prices of our sand, partially offset by \$35.0 million cash payment received under the Settlement Agreement in 2021 as compared to 2020. Capital expenditures for the year ended December 31, 2021 were \$11.2 million compared to \$8.6 million for the year ended December 31, 2020.

Free cash flow was \$16.9 million for the year ended December 31, 2020 compared to \$19.1 million for the year ended December 31, 2019. The decrease in free cash flow was attributable to lower total volumes sold as a result of the decreased demand due to the COVID-19 pandemic. This decrease was offset by our reduction in our 2020 capital expenditure budget to align with slowdown of well completion activities by the exploration and production companies and oilfield service companies during 2020.

Liquidity and Capital Resources

Our primary sources of liquidity are cash flow generated from operations and availability under our ABL Credit Facility and other equipment financing sources. As of December 31, 2021, cash on hand was \$25.6 million and we had \$14.9 million in undrawn availability on our ABL Credit Facility.

Based on our balance sheet, cash flows, current market conditions, including the COVID-19 pandemic, and information available to us at this time, we believe that we have sufficient liquidity and other available capital resources, to meet our cash needs for the next twelve months, including continued investment in our SmartSystems wellsite proppant storage solutions and other capital projects.

Material Cash Requirements

Capital Requirements

We expect 2022 capital expenditures to be between \$25.0 million and \$30.0 million, consisting primarily of capital for efficiency projects at Oakdale and Utica, capital related to the Waynesburg terminal and acquisition and incremental capital to purchase the Blair mine and processing facility, acquired on March 4, 2022, and to bring it online over the course of the year. We expect to fund these capital expenditures with existing cash, cash generated from operations, or borrowings under the ABL Credit Facility or other financing sources, such as equipment finance providers.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

Indebtedness

We have several debt facilities including the Oakdale Equipment Financing, various notes payable and our ABL Credit Facility. Our Oakdale Equipment Financing is secured by substantially all of the assets at our Oakdale facility. The balance on this facility as of December 31, 2021 was \$15.4 million. Minimum cash payments on this facility in 2022 are \$4.6 million. Our various notes payable are primarily secured by our manufactured SmartSystems equipment. Total debt under these notes payable as of December 31, 2021 was \$6.7 million. Minimum cash payments on these notes payable in 2022 are \$3.6 million. There were no borrowings outstanding out our ABL Credit Facility as of December 31, 2021.

Operating Leases

We use leases primarily to procure certain office space, railcars and heavy equipment as part of its operations. The majority of our lease payments are fixed and determinable. Our operating lease liabilities as of December 31, 2021 were \$32.7 million. Minimum cash payments on operating leases in 2022 are \$10.7 million.

Mineral Rights Property

The Company is obligated under certain contracts for minimum payments for the right to use land for extractive activities. The annual minimum payments under these contracts is approximately \$2.5 million per year for the next 15 years.

Off-Balance Sheet Arrangements

We had \$8.6 million and \$10.0 million of outstanding performance bonds as of each of the years ended December 31, 2021 and 2020, respectively. These performance bonds assure our performance under our reclamation plan, maintenance and restoration of public roadways.

Environmental Matters

We are subject to various federal, state and local laws and regulations governing, among other things, hazardous materials, air and water emissions, environmental contamination and reclamation and the protection of the environment 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.

Seasonality

Our business is affected to some extent by seasonal fluctuations in weather that impact the production levels for a portion of our wet sand processing capacity. While our dry plants are able to process finished product volumes evenly throughout the year, our excavation and our wet sand processing activities have historically been limited to primarily non-winter months. As a consequence, we have experienced lower cash operating costs in the first and fourth quarter of each calendar year, and higher cash operating costs in the second and third quarter of each calendar year when we overproduced to meet demand in the winter months. These higher cash operating costs were capitalized into inventory and expensed when these tons are sold, which can lead to us having higher overall cost of production in the first and fourth quarters of each calendar year as we expense inventory costs that were previously capitalized. We have indoor wet processing facilities at each of our plant locations which allow us to produce wet sand inventory year-round to support a portion of our dry sand processing capacity, which may reduce certain of the effects of this seasonality. We may also sell frac sand for use in oil and natural gas producing basins where severe weather conditions may curtail drilling activities and, as a result, our sales volumes to those areas may be reduced during such severe weather periods.

Customer Concentration

For the year ended December 31, 2021, Rice Energy (a subsidiary of EQT Corporation), Halliburton, and Liberty accounted for 24.3%, 18.3%, and 14.8%, respectively, of total revenue. For the year ended December 31, 2020, Rice Energy (a subsidiary of EQT Corporation), Liberty, and U.S. Well Services accounted for 28.1%, 21.7%, and 14.0%, respectively, of total revenue. For the year ended December 31, 2019, Liberty, Rice Energy (a subsidiary of EQT Corporation), Hess Corporation, and U.S. Well Services accounted for 23.8%, 19.0%, 15.5%, and 14.7%, respectively, of total revenue.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported revenues and expenses during the reporting periods. We evaluate these estimates and assumptions on an ongoing basis and base our estimates on historical experience, current conditions and various other assumptions that we believe to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Our actual results may materially differ from these estimates.

Listed below are the accounting estimates that we believe are critical to our financial statements due to the degree of uncertainty regarding the estimates or assumptions involved.

Asset Retirement Obligation

We estimate the future cost of dismantling, restoring and reclaiming operating excavation sites and related facilities in accordance with federal, state and local regulatory requirements and recognize reclamation obligations when extraction occurs and record them as liabilities at estimated fair value. In addition, a corresponding increase in the carrying amount of the related asset is recorded and depreciated over such asset's useful life or the estimated number of years of extraction. The reclamation liability is accreted to expense over the estimated productive life of the related asset and is subject to adjustments to reflect changes in value resulting from the passage of time and revisions to the estimates of either the timing or amount of the liability, a loss or gain will be recognized, respectively. The asset retirement obligation estimate is calculated by estimating the cost to reclaim an area as of the estimation date and inflating that cost to an estimated reclamation date, then discounting that inflated cost back to the reporting period date. Changes in the current estimate or the interest rates used for inflation or discount can have a material effect on the liability reported. In addition, due to the nature or our business, changes in mine planning can result in changes to our estimated future reclamation dates. At December 31, 2021, we reduced our existing asset retirement obligation, which was offset by a new asset retirement obligation, resulting in a net immaterial change to the balance sheet and no change to the consolidated statements of operations for the year ended December 31, 2021.

Inventory Valuation

Sand inventory is stated at the lower of cost or net realizable value using the average cost method. Costs applied to inventory include direct excavation costs, processing costs, overhead allocation, depreciation and depletion. Reserves are estimated for moisture loss and waste during production. Stockpile tonnages are calculated by measuring the number of tons added and removed from the stockpile. Tonnages are verified periodically by a survey. Costs are calculated on a per ton basis and are applied to the stockpiles based on the number of tons in the stockpile. There was no writedown of inventory value based on the lower of cost or net realizable value calculation. However, anticipated waste is considered obsolete inventory. At December 31, 2021, we performed an analysis on our existing inventory and estimated the expected production yield based on waste sand produced in recent months and determined that a portion of our inventory is considered obsolete. We adjusted our inventory down by \$2.2 million on December 31, 2021.

Impairment of Long-Lived Assets

We periodically evaluate whether current events or circumstances indicate that the carrying value of our long-lived assets may not be recoverable. If circumstances indicate that the carrying value may not be recoverable, we estimate future undiscounted net cash flows, estimated future sales prices (considering historical and current prices, price trends and related factors) and anticipated operating costs and capital expenditures. If the carrying value of our long-lived assets is less than the undiscounted cash flows, the assets are measured at fair value and an impairment is recorded if that fair value is less than the carrying value.

During the year ended December 31, 2021, we did not record any impairment charges based on the analysis of our longlived assets. For the year ended December 31, 2020, we recorded an impairment charge of \$5.1 million related to the full impairment of long-lived assets in the Permian basin as we have no intentions to develop these properties in the foreseeable

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (UNAUDITED)

future. During the year ended December 31, 2019, we recorded impairment loss of \$15.5 million, of which \$7.6 million relates to our finite-lived developed technology intangible assets and \$7.9 million relates to our Hixton, Wisconsin property. The impairment of the finite-lived intangible assets is from our developed technology allocated to the Quickload acquired in connection with the acquisition of Quickthree in 2018.

Income Taxes

Under the balance sheet approach to provide for income taxes, we recognize deferred tax assets and liabilities for the expected future tax consequences of net operating loss carryforwards and temporary differences between the carrying amounts and the tax bases of assets and liabilities. In assessing the realizability of deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which those temporary differences become deductible. If we determine it is more likely than not that we will not be able to realize the benefits of the deductible temporary differences, we would record a valuation allowance against the net deferred tax asset.

We recognize the impact of uncertain tax positions at the largest amount that, in our judgment, is more-likely-than-not to be required to be recognized upon examination by a taxing authority.

We have recorded a liability of \$2.2 million for uncertain tax positions included in deferred tax liabilities, long-term, net on our consolidated balance sheet as of December 31, 2021, related to our depletion deduction methodology, and a corresponding increase to the income tax expense on our consolidated statements of operations. There was no liability for uncertain tax positions as of December 31, 2020.

As of December 31, 2021, we determined it is more likely than not that we will not be able to fully realize the benefits of certain existing deductible temporary differences and have recorded a valuation allowance against the deferred tax liabilities, long-term, net on our consolidated balance sheet in the amount of \$1.6 million, and a corresponding increase to the income tax expense on our consolidated statements of operations.

ITEM 7A. – QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the risk of loss arising from adverse changes in market rates and prices. Historically, our risks have been predominantly related to potential changes in the fair value of our long-term debt due to fluctuations in applicable market interest rates. Going forward our market risk exposure generally will be limited to those risks that arise in the normal course of business, as we do not engage in speculative, non-operating transactions, nor do we utilize financial instruments or derivative instruments for trading purposes. We do not believe that inflation has a material impact on our financial position or results of operations during periods covered by the financial statements included in this filing.

Commodity Price Risk

The market for proppant and proppant storage equipment is indirectly exposed to fluctuations in the prices 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 oilfield services and exploration and production industries. We do not currently intend to hedge our indirect exposure to commodity price risk.

Interest Rate Risk

The majority of our debt is financed under fixed interest rates. Borrowings under the ABL Credit Facility bear interest at a rate per annum equal to an applicable margin, plus, at our option, either a LIBOR rate or an alternate base rate ("ABR"). The applicable margin is 2.00% for LIBOR loans and 1.00% for ABR loans. There was no balance on our ABL Credit Facility as of December 31, 2021. We do not believe this represents a material interest rate risk.

Credit Risk

A substantial portion of our revenue for the year ended December 31, 2021 was generated through long-term take-or-pay contracts with few customers. Our customers are oil and natural gas producers and oilfield service providers, all of which have been negatively impacted by the downturn in activity in the oil and natural gas industry beginning in the latter part of 2018 and continuing through much of 2019, 2020 and 2021. This concentration of counterparties operating in a single industry may increase our overall exposure to credit risk, in that the counterparties may be similarly affected by changes in economic, regulatory or other conditions. If a customer defaults or if any of our contracts expire in accordance with its terms, and we are unable to renew or replace these contracts or the related sales volumes, our gross profit and cash flows may be adversely affected.

Foreign Currency Risk

Our revenues and expenses are primarily in United States dollars; however, as a result of our acquisition of Quickthree Solutions, Inc. on June 1, 2018, certain transactions are transacted in Canada dollars. Thus, revenues, operating expenses, the results of operations, assets and liabilities may be impacted to the extent that they are not hedged by the rise and fall of the relative value of the United States dollar to the Canada dollar. During the years ended December 31, 2021, 2020 and 2019, revenue, expenses, assets and liabilities transacted in Canada dollars were immaterial to the results of operations.

ITEM 8. — FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following Consolidated Financial Statements are filed as part of this Annual Report on Form 10-K:

	PAGE
Report of Independent Registered Public Accounting Firm (PCAOB ID Number 248)	63
Consolidated Balance Sheets	64
Consolidated Statements of Operations	65
Consolidated Statements of Comprehensive (Loss) Income	66
Consolidated Statements of Changes in Stockholders' Equity	67
Consolidated Statements of Cash Flows	68
Notes to the Consolidated Financial Statements	69

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders Smart Sand, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Smart Sand, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive (loss) income, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

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.

Critical audit matters

Critical audit matters are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2014.

New York, New York

March 8, 2021

CONSOLIDATED BALANCE SHEETS

	December 31,			,
		2021		2020
		(in tho	usands	5)
Assets				
Current assets:	¢	25 5 00	¢	11 50 5
Cash and cash equivalents	\$	25,588	\$	11,725
Accounts receivable		17,481		69,720
Unbilled receivables		1,884		127
Inventory		15,024		19,136
Prepaid expenses and other current assets		13,886		11,378
Total current assets		73,863		112,086
Property, plant and equipment, net		262,465		274,676
Operating lease right-of-use assets		29,828		32,099
Intangible assets, net		7,461		8,253
Other assets		402		563
Total assets	\$	374,019	\$	427,677
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	\$	8,479	\$	3,268
Accrued expenses and other liabilities		14,073		13,142
Deferred revenue, current		9,842		6,875
Long-term debt, net, current		7,127		6,901
Operating lease liabilities, current		9,029		7,077
Total current liabilities		48,550		37,263
Deferred revenue, net		6,428		3,482
Long-term debt, net		15,353		22,445
Operating lease liabilities, long-term		23,690		27,020
Deferred tax liabilities, long-term, net		22,434		32,981
Asset retirement obligation		16,155		14,996
Contingent consideration				180
Other non-current liabilities		249		503
Total liabilities		132,859		138,870
Commitments and contingencies (Note 18)				
Stockholders' equity				
Common stock, \$0.001 par value, 350,000,000 shares authorized; 43,567,743 issued and 41,790,742 outstanding at December 31, 2021; 43,193,394 issued and 41,575,129 outstanding at December 31, 2020		42		42
Treasury stock, at cost, 1,777,001 and 1,618,265 shares at December 31, 2021 and 2020, respectively		(4,535)		(4,134)
Additional paid-in capital		174,486		171,209
Retained earnings		70,593		121,267
Accumulated other comprehensive income		574		423
Total stockholders' equity		241,160		288,807
Total liabilities and stockholders' equity	\$	374,019	\$	427,677
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The accompanying notes are an integral part of these consolidated financial statements.

SMART SAND, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Ye	ar Ended December	31,
	2021	2020	2019
	(in thousa	nds, except per share	e amounts)
Revenues:			
Sand sales revenue	\$ 117,402	\$ 70,902	\$ 109,621
Shortfall revenue	4,421	23,281	49,259
Logistics revenue	4,825	28,157	74,193
Total revenue	126,648	122,340	233,073
Cost of goods sold	140,384	104,221	152,021
Inventory impairment loss	2,170		
Gross profit	(15,906)	18,119	81,052
Operating expenses:			
Salaries, benefits and payroll taxes	11,258	9,993	11,560
Depreciation and amortization	1,980	1,911	2,411
Selling, general and administrative	14,749	15,527	11,328
Bad debt expense	19,592		
Change in the estimated fair value of contingent consideration		(1,410)	(3,272)
Impairment loss		5,115	15,542
Total operating expenses	47,579	31,136	37,569
Operating (loss) income	(63,485)	(13,017)	43,483
Other income (expenses):			
Gain on bargain purchase	—	39,600	_
Interest expense, net	(1,979)	(2,091)	(3,621)
Loss on extinguishment of debt			(561)
Other income	5,773	482	131
Total other income (expenses), net	3,794	37,991	(4,051)
(Loss) income before income tax (benefit) expense	(59,691)	24,974	39,432
Income tax (benefit) expense	(9,017)	(12,980)	7,809
Net (loss) income	\$ (50,674)	\$ 37,954	\$ 31,623
Net (loss) income per common share:			
Basic	\$ (1.21)	\$ 0.94	\$ 0.79
Diluted	\$ (1.21)	\$ 0.94	\$ 0.78
Weighted-average number of common shares:	`,		
Basic	41,775	40,260	40,135
Diluted	41,775	40,260	40,337

SMART SAND, INC.

	 Ye	ar End	led December	31,	
	2021		2020		2019
		(in	thousands)		
Net (loss) income	\$ (50,674)	\$	37,954	\$	31,623
Other comprehensive (loss) income:					
Foreign currency translation adjustment	151		464		272
Comprehensive (loss) income	\$ (50,523)	\$	38,418	\$	31,895

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

SMART SAND, INC. CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Common Stock	stock		Treasury Stock	Stock	Additional	Ret Far	Retained Farnings	Accumulated Other		Total
	Outstanding Shares	Par Value	lue	Shares	Amount	Paid-In Capital	Accui De	Accumulated Deficit)	Comprehensive Income (Loss)	St	Stockholders' Equity
					(in thousand	(in thousands, except share amounts)	amounts				
Balance at December 31, 2018	39,974,478	\$	40	699,035	\$ (2,839) \$	\$ 162,195	s	51,690	\$ (313)	\$	210,773
Foreign currency translation adjustment		I	I						272		272
Vesting of restricted stock	260,820	I	I								
Stock-based compensation		I	I			2,909					2,909
Employee stock purchase plan compensation		I	I			41					41
Employee stock purchase plan issuance	41,075	I	I			78					78
Restricted stock buy back	(41,922)	I	I	41,922	(140)						(140)
Net income		I	I					31,623			31,623
Balance at December 31, 2019	40,234,451	\$	40	740,957	\$ (2,979) 3	\$ 165,223	s	83,313	\$ (41)	8	245,556
Foreign currency translation adjustment		·	I						464		464
Acquisition stock issuance	1,503,759		7			2,059					2,061
Vesting of restricted stock	674,593		I								
Stock-based compensation		·	I			3,831					3,831
Employee stock purchase plan compensation		·	I			34					34
Employee stock purchase plan issuance	39,634	I	I			62					62
Restricted stock buy back	(99,008)	·	Ι	90,008	(155)						(155)
Shares repurchased	(778, 300)	I	I	778,300	(1,000)						(1,000)
Net income					Ι			37,954			37,954
Balance at December 31, 2020	41,575,129	\$	42	1,618,265	\$ (4,134) \$	5 171,209	S	121,267	\$ 423	S	288,807
Foreign currency translation adjustment		I	I						151		151
Acquisition stock issuance	14,430		Ι			20					20
Vesting of restricted stock	325,492	I	I								I
Stock-based compensation		I	I			3,161					3,161
Employee stock purchase plan compensation		I	I			34					34
Employee stock purchase plan issuance	34,427	·	Ι			62					62
Restricted stock buy back	(158,736)	·	Ι	158,736	(401)						(401)
Net loss		'						(50, 674)			(50, 674)
Balance at December 31, 2021	41,790,742	\$	42	1,777,001	\$ (4,535) \$	\$ 174,486	S	70,593	\$ 574	Ś	241,160

SMART SAND, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

		Yea	ar Ended	December	31,	
		2021	2	020		2019
			(in the	ousands)		
Operating activities:						
Net (loss) income	\$	(50,674)	\$	37,954	\$	31,623
Adjustments to reconcile net (loss) income to net cash provided by operating activities:						
Depreciation, depletion and accretion of asset retirement obligation		25,308		22,130		26,425
Impairment loss		2,170		5,115		15,542
Amortization of intangible assets		795		793		1,394
Asset retirement obligation settlement		—		—		(2,753)
Loss (gain) on disposal of assets		555		237		(42)
Loss on extinguishment of debt		_		_		561
Provision for bad debt		19,592		_		
Amortization of deferred financing cost		105		105		212
Accretion of debt discount		183		185		649
Deferred income taxes		(10,547)		(2,573)		6,123
Stock-based compensation, net		3,161		3,831		2,909
Employee stock purchase plan compensation		34		34		41
Change in contingent consideration fair value		_		(1,410)		(3,272)
Gain on bargain purchase, net of cash acquired		_		(39,291)		_
Changes in assets and liabilities:				())		
Accounts receivable		32,899		(10,719)		(41,063)
Unbilled receivables		(2,011)		4,638		3,058
Inventory		1,942		4,738		(1,021)
Prepaid expenses and other assets		751		(5,327)		1,879
Deferred revenue		5,913		1,032		5,229
Accounts payable		4,508		(370)		(4,680)
Accrued and other expenses		(2,246)		4,981		1,277
Income taxes payable		(_,)		(542)		542
Net cash provided by operating activities		32,438		25,541		44,632
Investing activities:		52,150		20,011		11,052
		(11,220)		(8,620)		(25,525)
Purchases of property, plant and equipment		(11,220)		(0,020)		(23,323)
Proceeds from disposal of assets		(11,142)		(8,559)		(25,425)
Net cash used in investing activities		(11,142)		(0,557)		(23,423)
Financing activities:				952		31,202
Proceeds from the issuance of notes payable		(6,770)		(4,802)		(2,808)
Repayments of notes payable		(123)		(123)		(103)
Payments under equipment financing obligations		(125)		(123)		(2,262)
Payment of deferred financing and debt issuance costs				6,000		(2,202) 52,750
Proceeds from revolving credit facility				(8,500)		(94,750)
Repayment of revolving credit facility		(190)				
Payment of contingent consideration		(180) 42		(310)		(1,995)
Proceeds from equity issuance				62		71
Purchase of treasury stock		(402)		(1,155)		(140)
Net cash used in financing activities		(7,433)		(7,896)		(18,035)
Net increase in cash and cash equivalents		13,863		9,086 2,620		1,173
Cash and cash equivalents at beginning of year	¢	11,725	¢	2,639	¢	1,466
Cash and cash equivalents at end of year	Ф	25,588	\$	11,725	Ф	2,639

(IN THOUSANDS, EXCEPT PER SHARE DATA)

NOTE 1 — Organization and Nature of Business

The Company was incorporated in July 2011 and is headquartered in The Woodlands, Texas. The Company is a fully integrated frac sand supply and services company, offering complete mine to wellsite frac sand supply and logistics solutions. The Company is engaged in the excavation, processing and sale of sand, or proppant, for use in hydraulic fracturing operations for the oil and natural gas industry and began offering sand as Industrial Product Solutions to customers in late 2021.

Sand Mines and Processing Facilities

The Company's integrated Oakdale facility, with on-site rail infrastructure and wet and dry sand processing facilities, has access to two Class I rail lines which enable the Company to process and cost effectively deliver products to its customers. The Company also offers proppant logistics solutions to its customers through, among other things, its in-basin transloading terminals and its SmartSystemsTM wellsite proppant storage and management capabilities. The Company completed construction of the first phase of its mine and processing facility near Oakdale, Wisconsin and commenced operations in July 2012, and subsequently expanded its operations in 2014, 2015 and 2018. Currently, the Company's annual processing capacity is approximately 5.5 million tons.

In September 2020, the Company acquired from Eagle Materials Inc., a Delaware corporation ("Eagle"), all of the issued and outstanding interests in Eagle Oil and Gas Proppants Holdings LLC, a Delaware limited liability company and whollyowned subsidiary of Eagle ("Eagle Proppants Holdings"). The primary assets of Eagle Proppants Holdings and its subsidiaries include two frac sand mines and related processing facilities in Utica, Illinois and New Auburn, Wisconsin. The Company has no plans to operate the New Auburn Facility. The Utica facility has an annual processing capacity of 1.6 million tons and access to the Burlington Northern Santa Fe ("BNSF") Class I rail line through the Peru, Illinois transload facility. The Company began operating the Utica, Illinois mine and Peru, Illinois transload facility in October 2020.

On March 4, 2022, the Company entered into a Membership Interest Purchase Agreement (the "Purchase Agreement") with Hi-Crush Inc., a Delaware corporation ("HCR"), and Hi-Crush Blair LLC, a Delaware limited liability company and wholly-owned subsidiary of HCR ("Blair"), pursuant to which the Company acquired all of the issued and outstanding limited liability company interests of Blair from HCR for aggregate cash consideration of approximately \$6,450, subject to customary purchase price adjustments as set forth in the Purchase Agreement (the "Transaction"). Entities affiliated with Clearlake Capital Group, L.P. ("Clearlake"), who collectively own approximately 24% of the Company's outstanding common stock, also own a significant portion of the outstanding common stock of HCR, and representatives of Clearlake serve on our board of directors and HCR's board of directors.

The primary assets of Blair consist of an idle frac sand mine and related processing facility located in Blair, Wisconsin. The Blair facility has approximately 2.8 million tons of total annual processing capacity and contains an onsite, unit train capable rail terminal with access to the Class 1 Canadian National Railway.

With this acquisition, the Company has direct access to four Class I rail lines and the ability to access all Class 1 rail lines within the United States and Canada.

Transload & Logistics Solutions

In March 2018, the Company acquired the rights to operate a unit train capable transloading terminal in Van Hook, North Dakota to service the Bakken Formation in the Williston Basin and began providing Northern White Sand in-basin in April 2018.

In 2020, the acquisition of Eagle also included rights to use a rail terminal located in El Reno, Oklahoma, which was idled at the time of the acquisition but has recently started operating again.

In September 2021, the Company acquired the rights to construct and operate another transloading terminal in Waynesburg, Pennsylvania to service the Appalachian Basin, including the Marcellus and Utica Formations. The Company began providing Northern White Sand through this terminal in January 2022.

In June 2018, the Company acquired substantially all of the assets of Quickthree Solutions, Inc., ("Quickthree"), a manufacturer of portable vertical proppant storage solution systems. Quickthree formed the basis for the Company's SmartSystems under which it offers various proppant storage solutions that create efficiencies, flexibility, enhanced safety and reliability for customers by providing the capability to unload, store and deliver proppant at the wellsite, as well as the ability to

(IN THOUSANDS, EXCEPT PER SHARE DATA)

rapidly set up, takedown and transport the entire system. The SmartDepotTM silo includes passive and active dust suppression technology, along with the capability of gravity-fed operation. The self-contained SmartPathTM transloader is a mobile sand transloading system designed to work with bottom dump trailers and features a drive over conveyor, surge bin, and dust collection system. Rapid deployment trailers are designed for quick setup, takedown and transportation of the entire SmartSystem, and they detach from the wellsite equipment, which allows for removal from the wellsite during operation. A proprietary software program, the SmartSystem TrackerTM, allows customers to monitor silo-specific information, including location, proppant type and proppant inventory.

NOTE 2 — Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The accompanying consolidated financial statements ("financial statements") of the Company have been prepared in accordance with GAAP and pursuant to the rules and regulations of the SEC. The accompanying financial statements include those of our controlled subsidiaries. The intercompany accounts and transactions have been eliminated. In the opinion of management, all adjustments and disclosures necessary for a fair presentation of these financial statements have been included.

Use of Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent 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 and definite-lived intangible assets; impairment considerations of intangible assets; estimated cost of future asset retirement obligations; fair value of acquired assets and assume liabilities; stock-based compensation; recoverability of deferred tax assets; inventory reserve; collectability of receivables; and certain liabilities.

Actual results could differ from management's best estimates as additional information or actual results become available in the future, and those differences could be material. The decreased demand related to the coronavirus ("COVID-19") pandemic caused dramatic swings in oil prices and significant volatility in the oilfield service sector since March 2020. The Company is currently unable to estimate the impact of these events on its future financial position and results of operations. Therefore, the Company can give no assurances that these events will not have a material adverse effect on its financial position or results of operations.

Revenue Recognition

Revenues are generally recognized when control of the promised goods or services is transferred to our customers, the amount of which reflects the consideration the Company expects to be entitled to in exchange for those goods or services.

Sand Sales Revenue

The Company derives its sand sales revenue by mining and processing sand. Its revenues are primarily a function of the price per ton realized and the volumes sold. For sand delivered at one of the Company's facilities, title passes as the product is loaded into railcars hired by the customer or provided by the Company and revenue is recognized when title transfers at the Company's facility. For sand delivered in-basin, the Company recognizes the revenue when title passes at the destination when the sand arrives at the destination or delivered into the customer's truck, depending on the level of logistics services provided to the customer. The amount invoiced reflects product, transportation and any other additional handling services, such as storage or transloading the product from railcar to truck.

Prices under the Company's long-term agreements with customers are generally fixed but may contain provisions allowing for adjustments including: (i) annual percentage price increases; and/or (ii) market factor adjustments, including a natural gas surcharge/reduction and a propane surcharge/reduction which are applied if prices moved beyond benchmarks established in the contract.

The Company requires certain customers to pay a fixed-price monthly reservation charge based on a minimum contractual volume over the remaining life of their contract, which may be applied as a per ton credit to the sales price up to a

(IN THOUSANDS, EXCEPT PER SHARE DATA)

certain contractually specified monthly volume or credited against any applicable shortfall payments. The Company recognizes revenue when the customer no longer has the right to use the reservation charge towards sand sales or shortfall payments.

Shortfall Revenue

The Company's shortfall revenues are related to minimum commitments under take-or-pay contracts and based on negotiated contract terms and are recognized when rights of use are expired. The Company recognizes revenue to the extent of the unfulfilled minimum contracted quantity at the shortfall price per ton as stated in the contract.

Logistics Revenue

Logistics revenue includes railcar usage revenue, transportation revenue and SmartSystems revenue.

Railcar usage revenue consists of revenue derived from the usage of the Company's railcars by customers under longterm contracts or on an as-used basis. Based on the customer contract, the Company either recognizes revenue on the usage of railcars based on when the terms of the agreement state that the railcar is available to the customer for use, or based on a specified price per ton shipped.

Transportation revenue consists primarily of railway transportation and transload services to deliver products to customers. The Company's transportation revenue fluctuates based on many factors, including the volume of product it transports and the distance between its plant and customers.

SmartSystems revenues are primarily from the rental of our patented SmartSystems equipment to customers, which is typically earned under fixed monthly fees and services related to delivery, proppant management and maintenance on the equipment. Revenues are recognized as the performance obligations are satisfied under the terms of the customer contract.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables, deferred revenue, and contract assets, included in other assets, on the consolidated balance sheet. Generally, billing occurs subsequent to revenue recognition, though certain billing occurs in advance, resulting in unbilled receivables and deferred revenue, respectively. In addition, the Company sometimes receives shortfall payments from or offers pricing concessions to its customers, which results in deferred revenue until the Company recognizes such revenue when performance obligations are met in accordance with the contract.

Deferred Revenues

The Company receives advance payments from certain customers in order to secure and procure a reliable provision and delivery of product. The Company classifies such advances as current or noncurrent liabilities depending upon the anticipated timing of delivery of the supplied product. Deferred revenue is recognized as revenue when performance obligations are met in accordance with the contract.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in accordance with ASC 606. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, each performance obligation is satisfied. The Company's contracts may include a single performance obligation in a single contract whereby the allocation of transaction price is not necessary. The Company's contracts may also contain multiple elements in a single contract or multiple contracts. For contracts with multiple performance obligations, the transaction price is allocated to each performance obligation identified in the contract based on relative standalone 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. The Company expects to recognize approximately 60% of its remaining performance obligations under existing contracts as revenue in 2022 and expects to recognize the remaining 40% as revenue by 2023.

Significant Judgments

Accounting for long-term contracts involves the use of various techniques to estimate total contract revenue, costs and satisfaction of performance obligations. The Company satisfies its performance obligation and subsequently recognizes

(IN THOUSANDS, EXCEPT PER SHARE DATA)

revenue, at a point in time, upon shipment of the products as the customer obtains control over the goods once the sand is loaded into the railcars or sand is delivered to the customer's destination. In the case of sand being delivered to customers, the transaction price may be variable in nature.

Cash and Cash Equivalents

The Company considers all short-term, highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash is maintained at financial institutions and, at times, balances may exceed federally insured limits.

Accounts and Unbilled Receivables

Accounts receivable represents customer transactions that have been invoiced as of the balance sheet date; unbilled receivables represent customer transactions that have not yet been invoiced as of the balance sheet date. Accounts receivable are due in accordance with terms agreed upon with customers, and are stated at amounts due from customers net of any allowance for doubtful accounts. The Company considers accounts outstanding longer than the payment terms past due. The Company determines the allowance by considering a number of factors, including the length of time trade accounts receivable are past due, previous loss history, a customer's current ability to pay its obligation, and the condition of the general economy and the industry as a whole. Accounts receivable are written off when they are deemed uncollectible, and payments subsequently received on such receivables are credited to bad debt expense. As of December 31, 2021 and 2020, the Company recorded no allowance for doubtful accounts. As of December 31, 2021 and 2020, the amount of unbilled receivables included in deferred revenue was \$0 and \$1,443, respectively. The Company recorded \$19,592 as non-cash bad debt expense, which is the difference between the \$54,592 accounts receivable balance that was previously under litigation and the 35,000 cash received under the Settlement Agreement. See Note 17 - Commitments and Contingencies for additional information.

Transportation

Transportation costs are classified as cost of goods sold. Transportation costs consist of railway transportation and transload costs to deliver products to customers. Cost of sales generated from shipping was \$57,770, \$40,891 and \$76,643 for the years ended December 31, 2021, 2020 and 2019, respectively.

Inventories

The Company's sand inventory consists of raw material (sand that has been excavated but not processed), work-inprogress (sand that has undergone some but not all processing) and finished goods (sand that has been completely processed and is ready for sale). Costs applied to sand inventory include direct excavation costs, processing costs, overhead allocation, depreciation and depletion, transportation and additional service costs, as applicable. Stockpile tonnages are calculated by measuring the number of tons added and removed from the stockpile. Costs are calculated on a per ton basis and are applied to the stockpiles based on the number of tons in the stockpile. The Company performs periodic surveys to verify the quantity of sand inventory on hand. Due to variation in sand density and moisture content and production processes utilized to manufacture the Company's products, physical inventories will not necessarily detect all variances. To mitigate this risk, the Company recognizes a yield adjustment on its inventories. Sand inventory is stated at the lower of cost or net realizable value using the average cost method. There was no writedown of inventory value based on the lower of cost or net realizable value calculation. However, anticipated waste is considered obsolete inventory. At December 31, 2021, the Company performed an analysis on its existing inventory and estimated the expected production yield based on waste sand produced in recent months and determined that a portion of its inventory was obsolete. An inventory impairment was recorded in the amount of \$2,170 on December 31, 2021.

The spare parts inventory consists of critical spare parts. Spare parts inventory is accounted for on a first-in, first-out basis at the lower of cost or net realizable value.

Certain acquired inventory is stated at fair market value, as determined by its anticipated sales price less costs of disposal and reasonable profit allowance for selling efforts, which may be higher than its cost.

Deferred Financing Charges

Direct costs incurred in connection with the Company's debt are capitalized amortized using the straight-line method, which approximates the effective interest method, over the term of the debt. Amortization expense of the deferred financing and debt discount charges of \$291, \$290, and \$861 are included in interest expense as of December 31, 2021, 2020 and 2019,

(IN THOUSANDS, EXCEPT PER SHARE DATA)

respectively. Costs related to the Oakdale Equipment Financing are presented net of the related debt and costs related to the ABL Credit Facility are presented in other assets on the balance sheet.

Financial Instruments

The carrying value of the Company's financial instruments, consisting of cash, accounts receivable, accounts payable and accrued expenses, approximates their fair value due to the short maturity of such instruments. Financial instruments also consist of debt for which fair value approximates carrying values as the debt bears interest at fixed or variable rates which are reflective of current rates otherwise available to the Company. Unless otherwise noted, it is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from these financial instruments.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Costs related to researching, surveying, drilling, and related activities are recorded at cost and capitalized once a determination has been made that the Company's property has proven and probable reserves. Capitalized mining costs are depleted using the units-of-production method. Construction in progress is primarily comprised of machinery and equipment which has not been placed in service and is not depreciated until the related assets or improvements are ready to be placed in service. Depreciation is calculated using the straight-line method over the estimated useful lives of the property, plant and equipment, which are:

	Years
Land improvements	10
Plant and buildings	5-15
Real estate properties	10-40
Railroad and sidings	30
Vehicles	3-5
Machinery, equipment and tooling	3-15
SmartSystems	5-15
Furniture and fixtures	3-10
Deferred mining costs	3

Expenditures for maintenance and repairs are charged against income as incurred; betterments that increase the value or materially extend the life of the related assets are capitalized. Upon sale or disposition of property and equipment, the cost and related accumulated depreciation and amortization are removed from the accounts and any resulting gain or loss is recognized in the consolidated statements of operations.

Acquisitions

The Company determines whether a transaction or other event is a business combination, which requires that the assets acquired and liabilities assumed constitute a business. Each business combination is then accounted for by applying the acquisition method. If the assets acquired are not a business, the Company accounts for the transaction or other event as an asset acquisition. Under both methods, the Company recognizes the identifiable assets acquired, the liabilities assumed, contingent considerations and any non-controlling interest in the acquired entity. In addition, for transactions that are business combinations, the Company evaluates the existence of goodwill or a gain from a bargain purchase. The Company capitalizes acquisition-related costs and fees associated with asset acquisitions and expenses acquisition-related costs and fees associated with business combinations in the period in which they are incurred.

Long-Lived Assets, Including Definite-Lived Intangible Assets

Long-lived assets, other than goodwill and other indefinite-lived intangibles, are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable through the estimated undiscounted future cash flows derived from such assets. Definite-lived intangible assets primarily consist of developed technology and customer relationships. For long-lived assets used in operations, impairment losses are only recorded if the asset's carrying amount is not recoverable through its undiscounted, probability-weighted future cash flows. The Company measures the impairment loss based on the difference between the carrying amount and the estimated fair value. When an impairment exists, the related assets are written down to fair value.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

Acquired finite-lived intangible assets are amortized on a straight-line basis over the following periods:

Developed technology

Estimated Useful Life (Years)

13

There were no impairments of long-lived assets or definite-lived intangible assets during the year ended December 31, 2021. In 2020, the Company recorded an impairment loss of \$5,115 to fully write down the value of its long-lived assets in the Permian basin as it has no intentions to develop these properties in the foreseeable future. In 2019, the Company recorded impairment losses of \$15,542 of which \$7,628 related to finite-lived developed technology intangible assets in intangible assets, net on the balance sheet and \$7,914 related to its Hixton, Wisconsin property in property, plant and equipment, net on the balance sheet. The impairment of the finite-lived intangible assets is from developed technology allocated to the Quickload transloader acquired in connection with the acquisition of Quickthree in 2018. The Company has developed technology intangible assets related to the Quickload were fully impaired during the third quarter of 2019. In the fourth quarter of 2019, the Company determined that the carrying amount of the Hixton, Wisconsin property may not be fully recoverable as the Company had no immediate plans to further develop the site. The Company determined the fair value of the Hixton, Wisconsin property may not be fully recoverable as the Company had no immediate plans to further develop the site. The Company determined the fair value of the Hixton, Wisconsin property based on market prices for similar properties sold in the area and recorded an impairment loss for the amount which the carrying value exceeded the fair value.

Leases

Lessee

The Company uses leases primarily to procure certain office space, railcars and heavy equipment as part of its operations. The majority of its lease payments are fixed and determinable with certain of its lease payments containing immaterial variable payments based on the number of hours the equipment is used. Certain of its leases have options that allow for renewal at market rates, purchase at fair market value or termination of the lease. The Company must determine that it is reasonably certain that a lease option will be exercised for such an option to be included in the right-of-use asset or lease liability. The Company is not reasonably certain that any of its lease options will be exercised and, as such, has not included those options in its right-of-use assets or lease liabilities. Certain of its equipment leases contain residual value guarantees which guarantee various parts of heavy equipment will have a remaining life when the equipment is returned to the lessor. It is possible that the Company could owe additional amounts to the lessor upon return of equipment. There are no restrictions or covenants imposed by any of the Company's leases.

The Company evaluates contracts during the negotiation process and when they are executed to determine the existence of leases. A contract contains a lease when it conveys the right to use property, plant or equipment for a stated period of time in exchange for consideration. Leases with an initial term of twelve months or less are not recorded on the balance sheet. The Company recognizes lease expense on a straight-line basis over the term of the lease. The Company evaluates the classification of its leases at the commencement date and includes both lease and non-lease components in its calculation of consideration in the contract for all classes of operating leases.

The Company applies a single discount rate to all operating leases, which is its incremental borrowing rate. The Company determined its incremental borrowing rate based on an average of collateralized borrowing rates offered by various lenders. The Company considered the nature of the assets and the life of the leases and determined that there is no significant difference in the incremental borrowing rate among its classes of assets. See Note 10 — Leases for additional disclosures regarding the Company's leasing activity.

The Company is obligated under certain contracts for minimum payments for the right to use land for extractive activities, which is not within the scope of leases under ASC 842. See Note 17 — Commitments and Contingencies for additional disclosures regarding these obligations.

Lessor

The Company manufactures SmartSystems and offers the equipment for lease. The Company negotiates the terms of its leases on a case-by-case basis. There are no significant options that are reasonably certain to be exercised, residual value guarantees, restrictions or covenants in its lease contracts and have, therefore, not been included in its accounting for the leases. All of our SmartSystems are accounted for as operating leases.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

Fair Value Measurements

The Company has categorized its assets and liabilities that are measured at fair value on a recurring and non-recurring basis into a three-level fair value hierarchy, of which the first two are considered observable and the last unobservable, which are as follows:

- Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date;
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active or other inputs corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3—Unobservable inputs that reflect the Company's assumptions that market participants would use in pricing assets or liabilities based on the best information available.

The Company had no financial instruments carried at fair value as of December 31, 2021.

Asset Retirement Obligation

The Company estimates the future cost of dismantling, restoring and reclaiming operating excavation sites and related facilities in accordance with federal, state and local regulatory requirements and recognizes reclamation obligations when disturbance occurs and records them as liabilities at estimated fair value. In addition, a corresponding increase in the carrying amount of the related asset is recorded and depreciated over such asset's useful life or the estimated number of years of extraction. The reclamation liability is accreted to expense over the estimated productive life of the related asset and is subject to adjustments to reflect changes in value resulting from the passage of time and revisions to the estimates of either the timing or amount of the reclamation costs. If the asset retirement obligation is settled for more or less than the carrying amount of the liability, a loss or gain will be recognized, respectively.

Stock-Based Compensation

The Company issues restricted stock to certain employees and members of the board of directors of the Company (the "Board") for their services on the Board. The Company estimates the grant date fair value of each share of restricted stock at issuance. For awards subject to service-based vesting conditions, the Company recognizes, in the consolidated statements of operations, stock-based compensation expense equal to the grant date fair value of the award on a straight-line basis over the requisite service period, which is generally the vesting term. For awards subject to both performance and service-based vesting conditions, the Company recognizes stock-based compensation expense on a straight-line basis when it is probable that the performance condition will be achieved. Forfeitures are accounted for when they occur. The Company uses the market price of its shares as the grant date fair value for restricted stock awards.

Income Taxes

The Company applies the provisions of ASC 740, "Income Taxes" ("ASC 740"), which principally utilizes a balance sheet approach to provide for income taxes. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of net operating loss carryforwards and temporary differences between the carrying amounts and the tax bases of assets and liabilities.

ASC 740 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements. The impact of an uncertain income tax position on the income tax returns must be recognized at the largest amount that is more-likely-than-not to be required to be recognized upon audit by the relevant taxing authority. This standard also provides guidance on derecognition, measurement, classification, interest and penalties, accounting for interim periods, disclosure and transition issues with respect to tax positions. The Company includes interest and penalties as a component of income tax expense in the consolidated statements of operations. For the periods presented, no interest and penalties were recorded.

Environmental Matters

The Company is subject to various federal, state and local laws and regulations relating to the protection of the environment. Management has established procedures for the ongoing evaluation of the Company's operations, to identify

(IN THOUSANDS, EXCEPT PER SHARE DATA)

potential environmental exposures and to comply with regulatory policies and procedures. Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations and do not contribute to current or future revenue generation are expensed as incurred. Liabilities are recorded when environmental costs are probable, and the costs can be reasonably estimated. The Company maintains insurance which may cover, in whole or in part, certain environmental expenditures. As of December 31, 2021 and 2020, there were no material probable environmental matters.

Segment Information

Reportable operating segments are identified as components of an enterprise about which separate discrete financial information is available and utilized by the chief operating decision maker, or decision-making group, in making decisions on how to allocate resources and assess performance. The Company's chief operating decision maker is the Chief Executive Officer. The Company and the Chief Executive Officer view the Company's operations and manage its business as one reportable operating segment.

Basic and Diluted Net Income Per Share of Common Stock

Basic net income per share of common stock is computed by dividing net income attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, excluding the dilutive effects of restricted stock. Diluted net income per share of common stock is computed by dividing the net income attributable to common stockholders by the sum of the weighted-average number of shares of common stock outstanding during the period plus the potential dilutive effects of restricted stock outstanding during the period calculated in accordance with the treasury stock method, although these shares and restricted stock are excluded if their effect is anti-dilutive. The number of shares underlying equity-based awards that were excluded from the calculation of diluted earnings per share for the years ended December 31, 2021, 2020, 2019 was 3,011, 1,886 and 764, respectively as their effect would be anti-dilutive. The following table reconciles the weighted-average common shares outstanding used in the calculation of basic net income per share to the weighted average common shares outstanding used in the calculation of basic net income per share to the weighted average common shares outstanding used in the calculation of basic net income per share to the weighted average common shares outstanding used in the calculation of diluted net income per share to the weighted average common shares outstanding used in the calculation of basic net income per share to the weighted average common shares outstanding used in the calculation of diluted net income per share.

	Year	Year Ended December 31,				
	2021	2020	2019			
Weighted average common shares outstanding	41,775	40,260	40,135			
Assumed conversion of restricted stock			202			
Diluted weighted average common stock outstanding	41,775	40,260	40,337			

Employee Retention Credit

The Company qualified for federal government assistance through employee retention credit provisions of the Consolidated Appropriations Act of 2021. During the period ended December 31, 2021, the Company recorded \$5,026 of employee retention credits in other income on its consolidated statements of operations, of which \$1,180 remained included in prepaid expenses and other current assets on the consolidated balance sheet as of December 31, 2021. The calculation of the credit is based on employees continued employment and represents a portion of the wages paid to them. For income tax purposes, the credit will result in decreased expense related to the wages it offsets in the period received.

Recent Accounting Pronouncements

There are no recent accounting pronouncements that materially affect the financial statements of the Company.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

NOTE 3 — Acquisitions

Business Combination - Eagle Proppants Holdings

On September 18, 2020, the Company entered into an Equity Purchase and Sale Agreement (the "Purchase Agreement") with Eagle Materials Inc., a Delaware corporation ("Eagle"), pursuant to which the Company acquired all of the issued and outstanding interests in Eagle Oil and Gas Proppants Holdings LLC, a Delaware limited liability company and wholly-owned subsidiary of Eagle ("Eagle Proppants Holdings"), from Eagle for aggregate non-cash consideration of approximately \$2,080. In satisfaction of the purchase price, the Company issued to Eagle 1,504 shares of its common stock; the Company issued an additional 14 shares of its common stock in January 2021 as settlement of the net working capital adjustment. The number of shares issued was determined by the weighted average trading price of the Company's common stock over the twenty days preceding the date of the Purchase Agreement.

In connection with the acquisition of Eagle Proppants Holdings, the Company, as borrower, also entered into a Loan Agreement with Eagle, as lender. See Note 9 - Debt, for additional information.

The primary assets of Eagle Proppants Holdings and its subsidiaries include two frac sand mines and related processing facilities in Utica, Illinois and New Auburn, Wisconsin, with approximately 3.5 million tons of total combined annual processing capacity, 1.6 million tons of which has access to the BNSF rail line through the Peru, Illinois transload facility.

The table below presents the calculation of the total purchase consideration:

Base price consideration	\$ 2,000
20-day volume weighted average price of Smart Sand stock	\$ 1.33
Shares issued	1,504
Closing share price on September 18, 2020	\$ 1.37
Total equity issued	\$ 2,060
Net working capital adjustment	\$ 20
Total purchase consideration	\$ 2,080

(IN THOUSANDS, EXCEPT PER SHARE DATA)

The Company's allocation of the purchase price in connection with the acquisition was calculated as follows:

	Fair Value
Assets Acquired	
Cash	\$ 309
Accounts receivable	75
Inventory	2,459
Prepaid expenses and other current assets	124
Property, plant and equipment	60,310
Right-of-use assets	9,603
Total assets acquired	72,880
Liabilities Assumed	
Accounts payable	16
Accrued expenses and other liabilities	2,008
Asset retirement obligations	8,424
Operating lease liabilities	9,603
Deferred income taxes	11,149
Total liabilities assumed	31,200
Estimated fair value of net assets acquired	\$ 41,680

The estimated aggregate fair value of the net assets acquired was \$41,680, which exceeds the total consideration and results in a bargain purchase gain of \$39,600 on the acquisition date, which is included in net income for the year ended December 31, 2020. The Company believes that the seller wanted to exit the business relatively quickly and that there were a limited number of potential buyers due to the downturn in the market.

The Company determined the fair values of the acquired assets and assumed liabilities based on the highest and best use of such assets as required by GAAP. Cash, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and other liabilities are based on underlying assets and liabilities whose carrying value approximates fair value. The Company acquired \$2,050 of contractual receivables; however, it does not expect to collect on \$1,975 as these customers are in bankruptcy proceedings. The fair value of inventory was determined using market prices the Company expects to receive for the inventory when it is sold. Operating leases are considered to be at market rates and the fair values of the associated operating lease liabilities and right-of-use assets were determined using the Company's lease accounting policies. The fair value of the asset retirement obligations was calculated consistently with the Company's other asset retirement obligations and includes assumptions about inflation and discount rates over time to represent the estimated future cost of dismantling, restoring and reclaiming the plant and mines in accordance legal obligations. Deferred income taxes represent the temporary differences between future expenses for GAAP purposes and income tax purposes at the Company's applicable enacted tax rate. The Company determined the fair values of the property, plant and equipment with the assistance of external valuation specialists. The fair value is based on the highest and best use, as required by GAAP, which was determined to be the orderly liquidation value rather than the value imputed by other valuation methods. During the fourth quarter 2020, the Company finalized the deferred tax liability impacts of the acquisition, resulting in a \$289 reduction to the initial gain on bargain purchase. The Company's allocation of the purchase price is complete as of December 31, 2020.

Total acquisition costs incurred during the year ended December 31, 2020 was \$891, which is included in selling, general and administrative expense on the Company's consolidated statements of operations.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

The following represents unaudited pro forma consolidated revenue and income before income tax expense as if Eagle Proppants Holdings had been included in the consolidated results of the Company for the year ended December 31, 2020. These amounts have been calculated after applying the Company's accounting policies and adjusting the results of Eagle Proppants Holdings to reflect the depreciation and accretion expense that would have been charged assuming the fair value adjustments to property, plant and equipment and asset retirement obligations as well as equipment rent that would have been recorded based on the acquired right-of-use assets.

	Year ended December 31,
	 2020
	 (unaudited)
Revenues	\$ 131,189
Income before income tax expense	\$ 23,173

From the date of acquisition through December 31, 2020, the Company recognized \$3,161 and \$3,021 of revenue and loss before income tax expense, respectively.

NOTE 4 — Inventories

Inventories consisted of the following:

		Decembe	er 31,
	202	l	2020
Raw material	\$	293 \$	§ 428
Work in progress		3,082	10,465
Finished goods		7,269	4,400
Spare parts		4,380	3,843
Total inventory	\$ 1	5,024 \$	\$ 19,136

NOTE 5 — Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	 Decem	iber 3	1,
	 2021		2020
Prepaid insurance	\$ 404	\$	177
Prepaid expenses	731		655
Prepaid income taxes	7,932		10,169
Other receivables	 4,819		377
Total prepaid expenses and other current assets	\$ 13,886	\$	11,378

(IN THOUSANDS, EXCEPT PER SHARE DATA)

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NOTE 6 — Property, Plant and Equipment, net

Net property, plant and equipment consists of:

	Decer	nber 31,
	2021	2020
Machinery, equipment and tooling	\$ 30,813	\$ 29,002
SmartSystems	27,343	22,352
Vehicles	3,066	2,893
Furniture and fixtures	1,325	1,302
Plant and building	199,958	199,867
Real estate properties	6,496	6,458
Railroad and sidings	27,703	27,703
Land and land improvements	35,652	33,040
Asset retirement obligation	20,536	19,993
Mineral properties	7,442	7,442
Deferred mining costs	2,455	2,123
Construction in progress	9,574	7,489
	372,363	359,664
Less: accumulated depreciation and depletion	109,898	84,988
Total property, plant and equipment, net	\$ 262,465	\$ 274,676

Depreciation expense was \$24,667, \$21,725 and \$25,689 for the years ended December 31, 2021, 2020 and 2019, respectively. Depletion expense was \$36, \$18 and \$49 for the years ended December 31, 2021, 2020 and 2019, respectively.

The Company capitalized no interest expense associated with the construction of new property, plant and equipment for the years ended December 31, 2021, 2020 and 2019.

NOTE 7 — Intangible Assets, net

The following table reflects the changes in the net carrying amounts of the Company's intangible assets for the year ended December 31, 2021.

	Balance at ember 31, 2020	Assets Acquired irsuant to Business Combination	Impa	airment Charges	Amor	tization Expense	Salance at mber 31, 2021
Developed technology	\$ 8,253	\$ —	\$	_	\$	792	\$ 7,461
	\$ 8,253	\$ 	\$		\$	792	\$ 7,461

The following table reflects the changes in the net carrying amounts of the Company's finite-lived intangible assets for the year ended December 31, 2020.

	Dec	Balance at cember 31, 2019	Pı	Assets Acquired ursuant to Business Combination	Im	pairment Charges	Amo	ortization Expense	D	Balance at ecember 31, 2020
Developed technology	\$	9,046	\$	—	\$	_	\$	793	\$	8,253
	\$	9,046	\$		\$		\$	793	\$	8,253

(IN THOUSANDS, EXCEPT PER SHARE DATA)

The following table reflects the carrying amounts of the Company's finite-lived intangible assets at December 31, 2021 and 2020.

		Decembe	2021	December 31, 2020					
	Gross	Gross Carrying Amount		Accumulated Amortization		Carrying Amount		Accumulated Amortization	
Developed technology	\$	10,300	\$	(2,839)	\$	10,300		(2,047)	
	\$	10,300	\$	(2,839)	\$	10,300	\$	(2,047)	

The Company uses the straight-line method to determine the amortization expense for its definite-lived intangible assets. The weighted-average remaining useful life for the intangible assets is 9.4 years. Amortization expense related to the purchased intangible assets was \$792, \$793 and \$1,394 for the year ended December 31, 2021, 2020, and 2019, respectively. The Company recorded an impairment charge of \$7,628 related to specific developed technology allocated to the Quickload during the third quarter of 2019. Amortizable intangible assets are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable through the estimated undiscounted future cash flows derived from such assets. The Company has developed and tested a new transload technology and no longer plans to actively market the Quickload and as such, all developed technology intangible assets related to the Quickload has been impaired.

The table below reflects the future estimated amortization expense for amortizable intangible assets as of December 31, 2021.

Year ending December 31,	
2021	\$ 792
2022	792
2023	792
2024	792
2025	792
Thereafter	 3,501
Total	\$ 7,461

(IN THOUSANDS, EXCEPT PER SHARE DATA)

NOTE 8 — Accrued and Other Expense

Accrued and other expense consists of the following:

	 December 31,				
	 2021		2020		
Employee related expenses	\$ 806	\$	1,048		
Accrued equipment expense	58		55		
Accrued professional fees	691		1,129		
Accrued royalties	2,701		2,624		
Accrued freight and delivery charges	2,164		2,901		
Accrued real estate tax	1,010		1,637		
Accrued utilities	1,264		748		
Sales tax liability	665		1,386		
Income taxes payable	2,332				
Other accrued expense and other liabilities	 2,382		1,614		
Total accrued liabilities	\$ 14,073	\$	13,142		

NOTE 9 — Debt

Long-term debt, net, current consists of the following:

	 Decem	ber 31	l,
	 2021		2020
Dakdale Equipment Financing	\$ 3,814	\$	3,600
Finance leases	117		123
Notes payable	3,196		3,178
Long-term debt, net, current	\$ 7,127	\$	6,901

Long-term debt, net consists of the following:

	2021	2020
ABL Credit Facility	\$	\$
Oakdale Equipment Financing, net	11,608	15,236
Finance leases	234	351
Notes payable	3,511	6,858
Long-term debt, net	\$ 15,353	\$ 22,445

December 31,

(IN THOUSANDS, EXCEPT PER SHARE DATA)

ABL Credit Facility

On December 13, 2019, the Company entered into a \$20,000 five-year senior secured asset-based credit facility with Jefferies Finance LLC. The available borrowing amount under the ABL Credit Facility as of December 31, 2021 was \$13,660 and is based on the Company's eligible accounts receivable and inventory, as described in the ABL Credit Agreement. As of December 31, 2021, there were no amounts outstanding under the ABL Credit Facility, \$1,232 letters of credit and \$14,892 was available to be drawn. We use this facility primarily as a source for working capital needs. Borrowings under the ABL Credit Facility bear interest at a rate per annum equal to an applicable margin, plus, at our option, either a LIBOR rate or an alternate base rate ("ABR") as well as unused commitment fees. The applicable margin is 2.00% for LIBOR loans and 1.00% for ABR loans. Substantially all of the U.S. assets of the Company are pledged as collateral under the ABL Credit Facility. The ABL Credit Facility contains various reporting requirements, negative covenants and restrictive provisions and requires maintenance of financial covenants, under certain conditions, including a fixed charge coverage ratio, as defined in the ABL Credit Agreement. As of December 31, 2021, the Company was in compliance with all financial covenants.

Oakdale Equipment Financing

On December 13, 2019, the Company received net proceeds of \$23,000 in an equipment financing arrangement with Nexseer. The Oakdale Equipment Financing is legally comprised of an MLA and five lease schedules. The Oakdale Equipment Financing is considered a lease under article 2A of the Uniform Commercial Code but is considered a financing arrangement for accounting or financial reporting purposes and not a lease. Substantially all of the Company's mining and processing equipment at its Oakdale facility are pledged as collateral under the Oakdale Equipment Financing. The Oakdale Equipment Financing bears interest at a fixed rate of 5.79%. The Company used the net proceeds to repay in full and terminate the Former Credit Facility, pay transaction costs, and the remainder was used for working capital purposes. The Oakdale Equipment Financing matures on December 13, 2024. As a result of financial relief during the COVID-19 coronavirus pandemic in 2020, a portion of the Oakdale Equipment Financing matures on March 31, 2025. The Company has the right to prepay the financing and reacquire the underlying equipment on a lease schedule-by-lease schedule basis during the period commencing on the seventh month of the term and continuing until the 54th month of the term at a percentage of the purchase price of the relevant equipment, and at the end of the term at the fair market value of the equipment. The Oakdale Equipment Financing contains affirmative and restrictive covenants customary for transactions of this type.

Notes Payable

The Company entered into various financing arrangements to finance its manufactured wellsite proppant storage solutions equipment. Upon completion of the equipment manufacturing, title to the subject equipment passes to the financial institutions as collateral. In June 2020, the Company executed a note payable to defer certain near-term minimum royalty payments. All notes payable bear interest at fixed rates between 4.00% and 7.49%.

Acquisition Liquidity Support Facility

In connection with the Company's acquisition of Eagle Proppants Holdings, the Company, as borrower, also entered into a Loan Agreement with Eagle, as lender, secured by certain property rights and assets of the acquired business, whereby the Company may draw loans in an aggregate amount up to \$5,000 during the twelve month period ending September 18, 2021. This facility was terminated on September 20, 2021 and there were no borrowings under this facility.

Finance Leases

See Note 10 - Leases for additional information about the Company's finance leases.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

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Future minimum payments as of December 31, 2021 are as follows:

Year Ended December 31,	ABL Credit Facility	Oakdale Equipment Financing	Notes Payable	F	inance Leases	 Total
2022	\$ _	\$ 4,638	\$ 3,647	\$	136	\$ 8,421
2023		4,638	2,371		245	7,254
2024		6,888	807		—	7,695
2025		1,724	187		—	1,911
2026 and thereafter	 	 	 174			 174
Total minimum payments	—	17,888	7,186		381	25,455
Amount representing interest		(1,918)	(479)		(30)	(2,427)
Amount representing unamortized lender fees		(548)				(548)
Present value of payments					351	
Less: current portion	 	 (3,814)	(3,196)		(117)	 (7,127)
Total long-term debt, net	\$ 	\$ 11,608	\$ 3,511	\$	234	\$ 15,353

NOTE 10 — Leases

Lessee

At December 31, 2021 and 2020, the operating and financing components of the Company's right-of-use assets and lease liabilities on the consolidated balance sheet are as follows:

	Balance Sheet Location	December 31,							
			2021		2020				
Right-of-use assets									
Operating	Operating right-of-use assets	\$	29,828	\$	32,099				
Financing	Property, plant and equipment, net		262		373				
Total right-of use assets		\$	30,090	\$	32,472				
Lease liabilities									
Operating	Operating lease liabilities, current and long-term portions	\$	32,719	\$	34,097				
Financing	Long-term debt, current and long-term portions		351		474				
Total lease liabilities		\$	33,070	\$	34,571				

(IN THOUSANDS, EXCEPT PER SHARE DATA)

Operating lease costs are recorded in a single expense on the statements of operations and allocated to the right-of-use assets and the related lease liabilities as depreciation expense and interest expense, respectively. Lease cost recognized in the consolidated statements of operations for the years ended December 31, 2021 and 2020 is as follows:

		Year ended I	Decemt	oer 31,		
	2	2021		2020		
Finance lease cost						
Amortization of right-of-use assets	\$	139	\$	139		
Interest on lease liabilities		28		36		
Operating lease cost		11,008		12,087		
Short-term lease cost		428		238		
Total lease cost	\$	11,603	\$	12,500		

Other information related to the Company's leasing activity for year ended December 31, 2021 and 2020 is as follows:

	 Year ended	Decem	ber 31,
	 2021		2020
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows used for finance leases	\$ 28	\$	36
Operating cash flows used for operating leases	\$ 10,083	\$	10,523
Financing cash flows used for finance leases	\$ 123	\$	123
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 6,903	\$	15,510
Weighted average remaining lease term - finance leases	1.5 years	5	2.6 years
Weighted average discount rate - finance leases	6.60 %	0	6.60 %
Weighted average remaining lease term - operating leases	3.5 years	5	3.9 years
Weighted average discount rate - operating leases	5.81 %	<i></i> 0	5.78 %

Maturities of the Company's lease liabilities as of December 31, 2021 are as follows:

Year	Operating Leases			e Leases	Total		
2022	\$	10,655	\$	136	\$	10,791	
2023		10,135		245		10,380	
2024		7,567				7,567	
2025		3,773				3,773	
2026 and thereafter		4,450				4,450	
Total cash lease payments		36,580		381		36,961	
Less: amounts representing interest		(3,861)		(30)		(3,891)	
Total lease liabilities	\$	32,719	\$	351	\$	33,070	

(IN THOUSANDS, EXCEPT PER SHARE DATA)

NOTE 11 — Asset Retirement Obligation

The Company had a post-closure reclamation and site restoration obligation of \$16,155 as of December 31, 2021. The following is a reconciliation of the total reclamation liability for asset retirement obligations.

Balance at December 31, 2019	\$ 6,142
Additions and revisions of prior estimates	8,458
Accretion expenses	396
Settlement of liability	
Balance at December 31, 2020	\$ 14,996
Additions and revisions of prior estimates	419
Accretion expenses	740
Settlement of liability	
Balance at December 31, 2021	\$ 16,155

NOTE 12 — Revenue

Disaggregation of Revenue

The following table presents the Company's revenues disaggregated by type and percentage of total revenues for the periods indicated.

				Year Ended D	December 31,				
	 2021			202	20	2019			
	 Revenue	Percentage of Total Revenue		Revenue	Percentage of Total Revenue		Revenue	Percentage of Total Revenue	
Sand sales revenue	\$ 117,402	93 %	\$	70,902	58 %	\$	109,621	47 %	
Shortfall revenue	4,421	3 %		23,281	19 %		49,259	21 %	
Logistics revenue	 4,824	4 %		28,157	23 %		74,193	32 %	
Total revenues	\$ 126,647	100 %	\$	122,340	100 %	\$	233,073	100 %	

Deferred revenue is expected to be recognized as follows:

Year Ended December 31, 2021			Year Ended December 31, 2020					
Total deferred revenue	\$	16,270	Total deferred revenue	\$	10,357			
Expected recognition:								
2022		9,842	Recognized in 2021		6,875			
2023		6,428	Remains in 2021 balance		3,482			
	\$	16,270		\$	10,357			

NOTE 13 — Stock-Based Compensation

Equity Incentive Plan

In November 2016, in connection with its initial public offering, the Company adopted the 2016 Omnibus Incentive Plan ("2016 Plan") which provides for the issuance of Awards (as defined in the 2016 Plan) of up to a maximum of 3,911 shares of the Company's common stock to employees, non-employee members of the Board and consultants of the Company. On April

(IN THOUSANDS, EXCEPT PER SHARE DATA)

3, 2020, the Company's board of directors adopted an amendment to the 2016 Plan to increase the available shares of common stock authorized for issuance by an additional 2,088 shares. The awards can be issued in the form of incentive stock options, non-qualified stock options or restricted stock.

During 2021, there were 2,013 shares of restricted stock issued under 2016 Plan. During 2020 and 2019, — and 1,884 shares of restricted stock were issued under the 2016 Plan, respectively. The grant date fair value of all the restricted stock per share was \$1.84 - \$7.79. The shares vest over one to four years from their respective grant dates. For Awards issued under the 2016 Plan, the grant date fair value was the either the actual market price of the Company's shares or an adjusted price using a Monte Carlo simulation for awards subject to the Company's performance as compared to a defined peer group. The significant assumptions used in the Monte Carlo simulation are presented in the following table.

	Year ended December 31,
	2021
Expected volatility	71.05 %
Expected life (years)	2.0
Risk-free interest rate	1.63 %

The total number of shares and their respective fair values that vested during the years ended December 31, 2021, 2020 and 2019 were 548 at \$1,358, 675 at \$1,013 and 261 at \$844, respectively.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

The Company recognized \$3,161, \$3,831 and \$2,909 of compensation expense for the restricted stock during 2021, 2020 and 2019, respectively, in cost of goods sold and operating expenses on the consolidated statements of operations. At December 31, 2021, the Company had unrecognized compensation expense of \$6,114 related to granted but unvested stock awards. That expense is expected to be recognized as follows:

Year Ended December 31,	
2022	\$ 2,644
2023	1,884
2024	1,130
2025	 456
	\$ 6,114

The following table summarizes restricted stock activity under the 2016 Plan from January 1, 2020 through December 31, 2021:

	Number of Shares	Weighted Average
Unvested, January 1, 2020	2,618	\$ 6.91
Granted	—	\$ —
Vested	(675)	\$ 9.46
Forfeiture	(57)	\$ 13.16
Unvested, December 31, 2020	1,886	\$ 5.14
Granted	2,013	\$ 2.88
Vested	(548)	\$ 7.11
Forfeiture	(200)	\$ 5.71
Unvested December 31, 2021	3,151	\$ 3.06

Employee Stock Purchase Plan

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Shares of the Company's common stock may be purchased by eligible employees under the Company's 2016 Employee Stock Purchase Plan in six-month intervals at a purchase price equal to at least 85% of the lesser of the fair market value of the Company's common stock on either the first day or the last day of each six-month offering period. Employee purchases may not exceed 20% of their gross compensation during an offering period.

NOTE 14 — Income Taxes

On March 27, 2020, the President signed into law the Coronavirus Aid, Relief and Economic Security ("CARES") Act which introduced and revised numerous provisions which include, but are not limited to, (a) a five-year carryback period for net operating losses arising in tax years beginning tax after December 31, 2017 and before January 1, 2021, (b) a technical correction to qualified improvement property for assets placed in service after 2017 through 2022 to allow for immediate depreciation to be claimed on these assets, and (c) temporary increases to the limitations on certain deductions such as interest expense and charitable contributions.

As a result of the CARES Act, the Company recorded a current tax benefit of \$9.7 million for the year ended December 31, 2020 related to the anticipated benefit to be received from the carryback of net operating losses, including those related to depletion deduction, to tax years with a 35% corporate tax rate. The amended returns related to depletion deduction and net operating loss carrybacks were filed in 2021. The Company will continue to monitor and consider available benefits under the CARES Act for which it qualifies, including those described above.

On December 27, 2020, the President signed into law the Consolidated Appropriations Act, 2021 (the "CAA"). The legislation includes additional coronavirus (COVID-19) relief that expands upon the relief provided in the CARES Act and a number of tax provisions. Tax provisions under the CAA include, but are not limited to, (a) the extension for employers to pay

(IN THOUSANDS, EXCEPT PER SHARE DATA)

certain deferred payroll taxes and (b) the extension and revision of employer retention credits. Although the Company is currently evaluating the impact of CAA, it does not expect it to have a material impact on its consolidated financial statements for the year ended December 31, 2021.

The provision for income taxes consists of the following:

	Year Ended December 31,					
	2021			2020		2019
Current						
Federal	\$	1,404	\$	(10,175)	\$	913
State and local		125		(9)		550
Foreign				(223)		223
Total current (benefit) expense		1,529		(10,407)		1,686
Deferred						
Federal		(10,133)		(2,497)		5,746
State and local		(413)		(76)		377
Foreign						_
Total deferred income tax (benefit) expense		(10,546)		(2,573)		6,123
Total income tax (benefit) expense	\$	(9,017)	\$	(12,980)	\$	7,809

Income tax expense differs from the amounts computed by applying the statutory income tax rates to pretax income. The statutory income tax rates were 21% for the years ended December 31, 2021, 2020 and 2019. The reconciliations from the applicable statutory income tax rates to income tax (benefit) expense are as follows:

	Year Ended December 31,						
	2021	2020	2019				
At statutory rate	\$ (12,535)	\$ 5,245	\$ 8,281				
State taxes, net of U.S. federal benefit	(757)	(99)	926				
Foreign taxes	_	(223)	223				
Federal tax deductions	357	(5)	(1,248)				
Change in applicable tax rate	286	478					
Provision to return permanent difference	340	(20)	7				
R&D credits	67	(159)	(29)				
Fuel tax credit	(125)	(90)	(176)				
Foreign tax credit	_	153	(175)				
Foreign branch loss	_	50					
Gain on bargain purchase		(8,316)	—				
Unrecognized tax benefits	2,163						
NOL carryback/carryforward	1,186	(10,046)					
Other	—	52	—				
Total income tax (benefit) expense	\$ (9,017)	\$ (12,980)	\$ 7,809				

Deferred income taxes reflect the net tax effects of loss and credit carry-forwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

(IN THOUSANDS, EXCEPT PER SHARE DATA)

Significant components of the Company's deferred tax assets for federal and state income taxes are as follows:

	Year Ended December 31,			ber 31,
		2021		2020
Deferred tax assets:				
Reserves and accruals	\$	377	\$	200
Prepaid expenses and other		1,457		1,645
Federal net operating losses		9,818		379
State net operating losses		781		125
Operating lease liabilities		7,458		7,771
Total gross deferred tax assets		19,891		10,120
Less valuation allowance		(1,574)		
Total net deferred tax assets		18,317		10,120
Deferred tax liabilities:				
Depreciation and amortization		(33,904)		(35,735)
Foreign net operating losses		(50)		(50)
Operating lease right-of-use assets		(6,797)		(7,316)
Total deferred tax liabilities		(40,751)		(43,101)
Deferred tax liabilities, long-term, net	\$	(22,434)	\$	(32,981)

In assessing the realizability of deferred tax assets, the Company considered whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which those temporary differences become deductible. A valuation allowance should be recorded if, based on the weight of all positive and negative evidence, it is more likely than not that some portion or all of a deferred tax asset will not be related. At December 31, 2021, the Company determined it was more likely than not that it will not be able to fully realize the benefits of certain existing deductible temporary differences and has recorded a partial valuation allowance against the gross deferred tax assets on its consolidated balance sheet in the amount of \$1,574 and a corresponding increase to the income tax expense on its consolidated statements of operations. There was no valuation allowance as of December 31, 2020.

The Company has recorded a liability of \$2,172 for unrecognized tax benefits included on its consolidated balance sheet as of December 31, 2021, related to its depletion deduction methodology, and a corresponding increase to the income tax expense on its consolidated statements of operations. There was no liability for uncertain tax positions as of December 31, 2020. A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows:

	Unrecogni	ized tax benefits
Unrecognized tax benefits as of December 31, 2020	\$	
Additions based on prior year positions		2,172
Decreases due to settlements and /or reduction in reserves		
Unrecognized tax benefits as of December 31, 2021	\$	2,172

The Company's federal income tax returns subsequent to 2017 remain open to audit by taxing authorities. The Company has not been informed that its tax returns are the subject of any audit or investigation by taxing authorities.

NOTE 15 — Retirement Benefits

U.S. Defined Contribution Plan

The Company is the sponsor of a defined contribution plan, subject to the provisions of the Employee Retirement Income Security Act of 1974, that covers substantially all U.S. employees over the age of 21 that have been employed for at least 90 days. The plan allows participants to make pre-tax and Roth after-tax contributions and the Company provides 100% matching

(IN THOUSANDS, EXCEPT PER SHARE DATA)

contributions on the first 3% of employee contributions and 50% matching contributions on the next 2% of employee contributions. Employees are immediately vested in both their contributions and the Company's matching contributions. In accordance with the provisions of the plan, the Company may make additional discretionary contributions to the accounts of its participants. There were no additional discretionary contributions during the years ended December 31, 2021, 2020 and 2019. During the years ended December 31, 2021, 2020 and 2019, the Company made matching contributions of \$513, \$397 and \$488, respectively to its U.S. Defined Contribution Plan.

Canada Group Savings Plan and Deferred Profit Sharing Plan

The Company is the sponsor of a defined contribution plan that covers substantially all Canada employees that have been employed for at least 90 days. The plan allows participants to make contributions to the Group Savings Plan and after six months of employment the Company provides 100% matching contributions on between 3% - 5% of the employee's salary, depending on their length of service to the Deferred Profit Sharing Plan. Employees are immediately vested in their contributions to the Group Savings Plan and vest in the Company's contributions to the Deferred Profit Sharing Plan after two years of service. All accounts opened prior to May 31, 2018 are fully vested. During the year ended December 31, 2021, 2020 and subsequent to the acquisition of Quickthree in 2019, the Company made matching contributions of \$30 and \$18 and \$59, respectively, to its Deferred Profit Sharing Plan.

NOTE 16 — Concentrations

As of December 31, 2021, two customers accounted for 59% of the Company's total accounts receivable. As of December 31, 2020, one customers accounted for 78% of the Company's total accounts receivable.

During the year ended December 31, 2021, 58% of the Company's revenues were earned from three customers. During the years ended December 31, 2020 and 2019, 64% and 73% of the Company's revenues were earned from three and four customers, respectively.

As of December 31, 2021, one vendor accounted for 19% of the Company's accounts payable. As of December 31, 2020, three vendors accounted for 42% of the Company's accounts payable.

During the year ended December 31, 2021, one supplier accounted for 22%, of the Company's cost of goods sold. During the year ended December 31, 2020 and 2019, one and two suppliers accounted for 45% and 44%, respectively, of the Company's cost of goods sold.

The Company's primary product is Northern White frac sand and its mining operations are limited to Wisconsin and Illinois. There is a risk of loss if there are significant environmental, legal or economic changes to this geographic area.

As of December 31, 2021, the Company employed 239 people, of which 43 were employed under collective bargaining agreements. There are no collective bargaining agreements expiring within one year.

NOTE 17 — Commitments and Contingencies

Future Minimum Commitments

The Company is obligated under certain contracts for minimum payments for the right to use land for extractive activities, which is not within the scope of leases under ASC 842. Future minimum annual commitments under such contracts at December 31, 2021 are as follows:

2022	\$ 2,467
2023	2,573
2024	2,469
2025	2,462
2026	2,456
Thereafter	24,611
Total future minimum annual commitments under these obligations	\$ 37,038

(IN THOUSANDS, EXCEPT PER SHARE DATA)

Litigation

In addition to the matters described below, we may be subject to various legal proceedings, claims and governmental inspections, audits or investigations arising out of our operations in the normal course of business, which cover matters such as general commercial, governmental and trade regulations, product liability, environmental, intellectual property, employment and other actions. Although the outcomes of these routine claims cannot be predicted with certainty, in the opinion of management, the ultimate resolution of these matters will not have a material adverse effect on our financial statements.

U.S. Well Services, LLC

On January 14, 2019, the Company, as plaintiff filed suit against U.S. Well Services, LLC ("defendant"), in the Superior Court of the State of Delaware in and for New Castle County (C.A. No. N19C-01-144-PRW [CCLD]) (the "Court"). In the suit, the Company alleged that defendant was in breach of contract for failure to pay amounts due and payable under a long-term take-or-pay Master Product Purchase Agreement and coterminous Railcar Usage Agreement. The trial took place in December 2020. On June 17, 2021, the Court issued an Order of Final Judgment (the "Order") awarding \$50,896 in damages to the Company. On June 28, 2021, the Company entered into a Settlement Agreement and Release ("Settlement Agreement") with defendant, pursuant to which defendant paid to the Company a \$35,000 cash payment, and defendant and the Company each agreed to withdraw appeals of certain rulings that they each filed after the Order was issued. The Company and defendant and its affiliates in the continental United States from January 1, 2022 through December 31, 2023. The Company recorded \$19,592 as non-cash bad debt expense, which is the difference between the \$54,592 accounts receivable balance that was under litigation and the cash received under the Settlement Agreement.

Bonds

The Company has performance bonds with various public and private entities regarding reclamation, permitting and maintenance of public roadways. Total performance bonds as of December 31, 2021 was \$8,619.

NOTE 18 — Supplemental Disclosures of Cash Flow information

Supplemental disclosures regarding cash flow information and non-cash investing and financing activities are as follows:

	Year Ended December 31,						
		2021	2020			2019	
Cash paid for interest	\$	1,548	\$	1,766	\$	2,833	
Cash paid for taxes	\$	209	\$	635	\$	207	
Non-cash investing activities:							
Asset retirement obligation	\$		\$	34	\$	(5,114)	
Non-cash financing activities:							
Equipment purchased with debt	\$		\$		\$	4,733	
Write-off of remaining balance of returned equipment under capital lease	\$		\$		\$	398	
Capitalized expenditures in accounts payable and accrued expenses	\$	1,586	\$	376	\$	899	

ITEM 9. — CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS AND FINANCIAL DISCLOSURE

None.

ITEM 9A. — CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of such date, our disclosure controls and procedures were effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed under the supervision of our Chief Executive Officer and Chief Financial Officer 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.

Because of its inherent limitations, internal control over financial reporting may not detect or prevent misstatements. Also, projections of any evaluation of the effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As of December 31, 2021, our management assessed the effectiveness of our internal control over financial reporting based on the criteria for effective internal control over financial reporting established in *Internal Control - Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Based on its assessment, management determined that we maintained effective internal control over financial reporting as of December 31, 2021.

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 a smaller reporting company.

Changes in Internal Controls Over Financial Reporting

There have been no changes in our internal control over financial reporting for the three months ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. — OTHER INFORMATION

None.

ITEM 9C. — DISCLOSURES REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

ITEM 10. — DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item with respect to directors and corporate governance will be set forth under "Proposal No. 1: Election of Directors" in the 2022 Proxy Statement and is incorporated herein by reference.

The information required by this item with respect to executive officers of Smart Sand, Inc., pursuant to instruction 3 of paragraph (b) of Item 401 of Regulation S-K, is set forth following Part I, Item 1 of this Annual Report on Form 10-K under "Executive Officers of the Registrant".

The information required by this item regarding Section 16(a) beneficial ownership reporting compliance will be set forth under "Section 16(a) Beneficial Ownership Reporting Compliance" in the 2022 Proxy Statement and is incorporated herein by reference.

ITEM 11. — EXECUTIVE COMPENSATION

The information required by this item will be set forth under "Executive Compensation" in the 2022 Proxy Statement and is incorporated herein by reference.

ITEM 12. — SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The Equity Compensation Plan Information table required pursuant to Item 201(d) of Regulation S-K will be set forth in the 2022 Proxy Statement and is incorporated herein by reference.

The information required by Item 403 of Regulation S-K regarding security ownership of certain beneficial owners and management will be set forth under "Principal Stockholders" in the 2022 Proxy Statement and is incorporated herein by reference.

ITEM 13. — CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be set forth under "Certain Relationships and Transactions with Related Persons" and "Corporate Governance" in the 2022 Proxy Statement and is incorporated herein by reference.

ITEM 14. — PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will be set forth under "Ratification of the Selection of Grant Thornton LLP as the Company's Independent Registered Public Accounting Firm for the Year Ending December 31, 2022" in the 2022 Proxy Statement and is incorporated herein by reference.

ITEM 15. — EXHIBITS

- 2.1 Equity Purchase and Sale Agreement, dated September 18, 2020, by and between Smart Sand, Inc. and Eagle Materials, Inc. (incorporated by reference to Exhibit 2.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on September 18, 2020)
- 3.1 Second Amended and Restated Certificate of Incorporation of Smart Sand, Inc. (incorporated by reference to Exhibit 3.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on November 15, 2016)
- 3.2 Second Amended and Restated Bylaws of Smart Sand, Inc. (incorporated by reference to Exhibit 3.2 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on November 15, 2016)
- 4.1 Registration Rights Agreement, dated November 9, 2016, by and among Smart Sand, Inc. and the Persons listed on Schedule A thereto (incorporated by reference to Exhibit 4.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on November 15, 2016)
- 4.2 Stockholders Agreement, dated November 9, 2016, by and among Smart Sand, Inc., Clearlake Capital Partners II (Master), L.P. and Keystone Cranberry, LLC (incorporated by reference to Exhibit 4.2 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on November 15, 2016)
- 4.3* Description of the Company's Capital Stock
- 10.1⁺ Smart Sand, Inc. Amended and Restated 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on June 4, 2020)
- 10.2[†] Form of Time-Based Vesting Restricted Stock Award Agreement under Smart Sand, Inc. 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.1 to Smart Sand Inc.'s Current Report on Form 8-K filed with the SEC on April 5, 2017)
- 10.3† Form of Performance-Based Vesting Restricted Stock Award Agreement under Smart Sand, Inc. 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.2 to Smart Sand Inc.'s Current Report on Form 8-K filed with the SEC on April 5, 2017)
- 10.4[†] Form of Time and Performance-Based Vesting Restricted Stock Award Agreement under Smart Sand, Inc.
 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.3 to Smart Sand Inc.'s Current Report on Form 8-K filed with the SEC on April 5, 2017)
- 10.5 2016 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.3 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on November 15, 2016)
- 10.6 Form of Indemnification Agreement between the Company and its officers and directors (incorporated by reference to Exhibit 10.23 to Amendment No. 2 to Smart Sand, Inc.'s Registration Statement on Form S-1 filed with the SEC on October 18, 2016)
- 10.7 Master Lease Agreement, dated December 13, 2019, among Smart Sand, Inc., Smart Sand Oakdale, LLC and Nexseer Capital (incorporated by reference to Exhibit 10.13 to Smart Sand, Inc.'s Annual Report on Form 10-K filed with the SEC on March 14, 2020)
- 10.8 ABL Credit Agreement, dated December 13, 2019, among Smart Sand, Inc., the subsidiary borrowers and guarantors party thereto, Jefferies Finance LLC, as issuing bank, swingline lender and agent, and certain other lenders from time to time party thereto (incorporated by reference to Exhibit 10.14 to Smart Sand, Inc.'s Annual Report of Form 10-K filed with the SEC on March 14, 2020)
- 10.9 Guarantee and Collateral Agreement, dated December 13, 2019, among Smart Sand, Inc., the subsidiary borrowers and guarantors party thereto and Jefferies Finance LLC, as agent (incorporated by reference to Exhibit 10.15 to Smart Sand, Inc.'s Annual Report on Form 10-K filed with the SEC on March 14, 2020)
- 10.10 First Amendment to ABL Credit Agreement, dated July 8, 2020, by and between Smart Sand, Inc. and Jefferies Finance LLC (incorporated by reference to Exhibit 10.3 to Smart Sand, Inc.'s Quarterly Report on Form 10-K filed with the SEC on November 9, 2020)
- 10.11 Second Amendment to ABL Credit Agreement, dated September 18, 2020, by and between Smart Sand, Inc. and Jefferies Finance LLC (incorporated by reference to Exhibit 10.4 to Smart Sand, Inc.'s Quarterly Report on Form 10-K filed with the SEC on November 9, 2020)
- 10.12 Guarantee and Collateral Agreement Supplement, dated September 18, 2020, by and between Eagle Oil and Gas Proppants Holdings LLC and Northern White Sand LLC, and CRS Proppants LLC, and Jefferies Finance LLC (incorporated by reference to Exhibit 10.5 to Smart Sand, Inc.'s Quarterly Report on Form 10-K filed with the SEC on November 9, 2020)
- 10.13[‡] Master Product Purchase Agreement dated effective as of January 1, 2017 between Rice Drilling B, LLC and Smart Sand, Inc. (incorporated by reference to Exhibit 10.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on January 6, 2017)

- 10.14[‡] Railcar Usage Agreement dated effective as of January 1, 2017 between Rice Drilling B, LLC and Smart Sand, Inc. (incorporated by reference to Exhibit 10.2 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on January 6, 2017)
- 10.15[†] First Amendment to the Master Product Purchase Agreement and First Amendment to Railcar Usage Agreement, dated June 21, 2019, between Smart Sand, Inc. and Rice Drilling B LLC, a subsidiary of EQT Corporation (incorporated by reference to Exhibit 10.1 to Smart Sand, Inc.'s Quarterly Report on Form 10-Q filed with the SEC on August 7, 2019)
- 10.16[†] Letter Agreement to Master Product Purchase Agreement, dated May 26, 2020, between Smart Sand, Inc. and Rice Drilling B LLC, a subsidiary of EQT Corporation (incorporated by reference to Exhibit 10.1 to Smart Sand, Inc.'s Quarterly Report on Form 10-Q filed with the SEC on August 5, 2020)
- 10.17[†] Second Amendment to Master Product Purchase Agreement and Second Amendment to Railcar Usage Agreement, dated September 28, 2020, between Smart Sand, Inc. and Rice Drilling B, LLC, a subsidiary of EQT Corporation (incorporated by reference to Exhibit 10.2 to Smart Sand, Inc.'s Quarterly Report on Form 10-Q filed with the SEC on November 9, 2020)
- 10.18[‡] Second Amended and Restated Master Product Purchase Agreement, dated September 10, 2019, by and between Smart Sand, Inc. and Schlumberger Technology Corporation (incorporated by reference to Exhibit 10.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on September 13, 2019)
- 10.19 Loan and Security Agreement, dated September 18, 2020, by and between Smart Sand, Inc. and Eagle Materials, Inc. (incorporated by reference to Exhibit 10.1 to Smart Sand, Inc.'s Current Report on Form 8-K filed with the SEC on September 18, 2020)
- 10.20 Settlement Agreement and Release, dated June 28, 2021, by and among Smart Sand, Inc., U.S. Well Services, LLC and U.S. Well Services, Inc. (incorporation by reference to Exhibit 10.1 to Smart Sand Inc.'s Current Report on Form 8-K filed with the SEC on June 29, 2021)
- 10.21 Open Market Sale Agreement, dated as of November 9, 2021, by and among Smart Sand, Inc., Clearlake Capital Partners II (Master), L.P. and Jefferies LLC (incorporation by reference to Exhibit 10.1 to Smart Sand Inc.'s Quarterly Report on Form 10-Q filed with the SEC on November 9, 2021)
- 10.22[‡] Master Product Purchase Agreement, dated effective August 1, 2021, by and between Smart Sand, Inc. and EQT Production Company (incorporated by reference to Exhibit 10.1 to Smart Sand Inc.'s Current Report on Form 8-K filed with the SEC on August 4, 2021)
- 10.23* Technical Report Summary, Frac Sand Resources and Reserves Oakdale Mine, Monroe County, Wisconsin
- 10.24* Technical Report Summary, Frac Sand Resources and Reserves Utica Mine, Lasalle County, Illinois
- 10.25* Smart Sand Resource Properties New Auburn Proppant Sand Property and Hixton Greenfield Property
- 21.1* List of subsidiaries of Smart Sand, Inc.
- 23.1* Consent of Independent Registered Public Accounting Firm
- 23.2* Consent of John T. Boyd Company
- 31.1* Certification Pursuant to Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 31.2* Certification Pursuant to Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 32.1*♦ Certification Pursuant to 18 U.S.C. adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 32.2*♦ Certification Pursuant to 18 U.S.C. adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 95.1* Mine Safety Disclosure Mine Safety Disclosure Exhibit
- 101.INS* XBRL Instance Document
- 101.SCH* XBRL Taxonomy Extension Schema
- 101.CAL* XBRL Taxonomy Extension Calculation Linkbase
- 101.DEF* XBRL Taxonomy Extension Definition Linkbase
- 101.LAB* XBRL Taxonomy Extension Label Linkbase
- 101.PRE* XBRL Taxonomy Extension Presentation Linkbase
- 104* Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

- * Filed herewith
- [†] Compensatory plan, contract or arrangement.
- Certain portions have been omitted pursuant to a confidential treatment request. Omitted information has been separately filed with the Securities and Exchange Commission.
- This certification is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended or the Exchange Act.

ITEM 16. — FORM 10-K SUMMARY

None.

Signatures

Date: March 8, 2022

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

/s/ Charles E. Young

Charles E. Young, Director and Chief Executive Officer (Principal Executive Officer) /s/ Lee E. Beckelman

Lee E. Beckelman Chief Financial Officer (Principal Accounting Officer) (Principal Financial Officer)

/s/ José E. Feliciano

José E. Feliciano Director (Co-Chairman of the Board)

/s/ Frank Porcelli

Frank Porcelli Director

/s/ Sharon Spurlin

Sharon Spurlin Director /s/ Andrew Speaker

Andrew Speaker Director (Co-Chairman of the Board)

/s/ Timothy J. Pawlenty

Timothy J. Pawlenty Director

Smart Sand, Inc. trades on the NASDAQ under the symbol "SND"

INDEPENDENT AUDITORS
Grant Thornton LLP

TRANSFER AGENT & REGISTRANT American Stock Transfer & Trust Company LLC 6201 15th Avenue Brooklyn, NY 11219 (800) 937-5449

CORPORATE HEADQUARTERS

Smart Sand, Inc. 1725 Hughes Landing Blvd., Suite 800 The Woodlands, TX 77380

ANNUAL MEETING

June 7, 2022- 9:00 CDT www.virtualshareholdermeeting.com/SND2022

COMPANY CONTACT

Lee Beckelman Chief Financial Officer (281) 231-2660 Ibeckelman@smartsand.com

Josh Jayne Director of Finance and Assistant Treasurer (281) 231-2660 ijayne@smartsand.com

MANAGEMEN

Charles E. Young Chief Executive Officer

Lee E. Beckelman Chief Financial Officer

William John Young Chief Operating Officer

Robert Kiszka Executive Vice President of Operations

Ronald P. Whelan Executive Vice President of Sales

James D. Young Executive Vice President, General Counsel and Secretary

Rick Shearer President – Industrial Products

DRWARD-LOOKING STATEMENTS

All statements in this 2021 Annual Report other than statements of historical facts are forward-looking statements which contain our current expectations about our future results. For additional information regarding forward-looking statements, see the section entitled "Disclaimer Regarding Forward-Looking Statements" on page 4 of the Form 10-K included herewith.

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BOARD OF DIRECTORS

José E. Feliciano Co-Chairman of the Board

Andrew Speaker Co-Chairman of the Board

Charles E. Young Chief Executive Officer

Timothy J. Pawlenty

Frank Porcelli

Sharon Spurlin

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