UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2022

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 1-39270

Patterson-UTI Energy, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

10713 W. Sam Houston Pkwy N, Suite 800, Houston, Texas (Address of principal executive offices) **75-2504748** (I.R.S. Employer

Identification No.)

77064 (Zip Code)

Registrant's telephone number, including area code:

(281) 765-7100

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

Title of each class	Trad	ing Symbol(s)	Name of each exchange on which registered						
Common Stock, \$0.01 Par Value		PTEN	The Nasdaq Global Select Market						
Securities registered pursuant to Section 12(g) of the Act: None									
			in Rule 405 of the Securities Act. Yes \boxtimes or No \square						
			ction 13 or Section 15(d) of the Act. Yes \Box or No \boxtimes						
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 \boxtimes N									
Indicate by check mark whether the registrant has s	submitted elec		teractive Data File required to be submitted pursuant to Rule						
	ng the preced	ing 12 months (or f	or such shorter period that the registrant was required to						
submit such files). Yes \boxtimes or No \square		1.61 1							
			ated filer, a non-accelerated filer, a smaller reporting company, erated filer", "smaller reporting company", and "emerging						
growth company" in Rule 12b-2 of the Exchange Act.		erateu mer, accer	erated mer, smaller reporting company, and emerging						
Large accelerated filer	X	Accelerated file	r 🗆						
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Non-accelerated filer		Emerging grow	_						
	_		l not to use the extended transition period for complying with						
any new or revised financial accounting standards pro-									
			its management's assessment of the effectiveness of its						
	404(b) of the	Sarbanes-Oxley A	ct (15 U.S.C. 7262(b)) by the registered public accounting firm						
that prepared or issued its audit report.) of the Act i	ndianta hu ahaali m	ark whether the financial statements of the registrant included						
in the filing reflect the correction of an error to previou									
			required a recovery analysis of incentive-based compensation						
received by any of the registrant's executive officers d									
Indicate by check mark whether the registrant is a									
	•		on-affiliates of the registrant as of June 30, 2022, the last						
			roximately \$3.4 billion, calculated by reference to the closing						
price of \$15.76 for the common stock on the Nasdaq (on stock, \$0.01 par value, its only class of common stock.						
13 of 1 coruary 7, 2025, the registrant had outstand	ing 215,055,0	soo shares of comm	ion stock, 90.01 par value, its only class of conmon stock.						

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for the 2023 Annual Meeting of Stockholders are incorporated by reference into Part III of this report.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Report") and other public filings, press releases and presentations by us contain "forward-looking statements" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Private Securities Litigation Reform Act of 1995, as amended. As used in this Report, "we," "us," "our," "ours" and like terms refer collectively to Patterson-UTI Energy, Inc. and its consolidated subsidiaries. Patterson-UTI Energy, Inc. conducts its operations through its wholly-owned subsidiaries and has no employees or independent business operations. These forward-looking statements involve risk and uncertainty. These forward-looking statements include, without limitation, statements relating to: liquidity; revenue, cost and margin expectations and backlog; financing of operations; oil and natural gas prices; rig counts and frac spreads; source and sufficiency of funds required for building new equipment, upgrading existing equipment and acquisitions (if opportunities arise); demand and pricing for our services; competition; equipment availability; government regulation; legal proceedings; debt service obligations; impact of inflation and economic downturns; and other matters. Our forward-looking statements can be identified by the fact that they do not relate strictly to historical or current facts and often use words such as "anticipate," "believe," "budgeted," "continue," "could," "estimate," "expect," "intend," "may," "plan," "predict," "potential," "project," "pursue," "should, "strategy," "target," or "will," or the negative thereof and other words and expressions of similar meaning. The forward-looking statements are based on certain assumptions and analyses we make in light of our experience and our perception of historical trends, current conditions, expected future developments and other factors we believe are appropriate in the circumstances.

Although we believe that the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to have been correct. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from actual future results expressed or implied by the forward-looking statements. These risks and uncertainties also include those set forth under "Risk Factors" contained in Item 1A of this Report and in Management's Discussion and Analysis of Financial Condition and Results of Operations included in this Report and other sections of our filings with the United States Securities and Exchange Commission (the "SEC") under the Exchange Act and the Securities Act, as well as, among others, risks and uncertainties relating to:

- adverse oil and natural gas industry conditions;
- global economic conditions, including inflationary pressures and risks of economic downturns or recessions in the United States and elsewhere;
- volatility in customer spending and in oil and natural gas prices that could adversely affect demand for our services and their associated effect on rates;
- excess availability of land drilling rigs, pressure pumping and directional drilling equipment, including as a result of reactivation, improvement or construction;
- competition and demand for our services;
- the impact of the ongoing conflict in Ukraine;
- strength and financial resources of competitors;
- utilization, margins and planned capital expenditures;
- liabilities from operational risks for which we do not have and receive full indemnification or insurance;
- operating hazards attendant to the oil and natural gas business;
- failure by customers to pay or satisfy their contractual obligations (particularly with respect to fixed-term contracts);
- the ability to realize backlog;
- specialization of methods, equipment and services and new technologies, including the ability to develop and obtain satisfactory returns from new technology;
- the ability to retain management and field personnel;
- loss of key customers;
- shortages, delays in delivery, and interruptions in supply, of equipment and materials;
- cybersecurity events;
- synergies, costs and financial and operating impacts of acquisitions;
- difficulty in building and deploying new equipment;

- governmental regulation;
- climate legislation, regulation and other related risks;
- environmental, social and governance practices, including the perception thereof;
- environmental risks and ability to satisfy future environmental costs;
- technology-related disputes;
- legal proceedings and actions by governmental or other regulatory agencies;
- the ability to effectively identify and enter new markets;
- public health crises, pandemics and epidemics;
- weather;
- operating costs;
- expansion and development trends of the oil and natural gas industry;
- ability to obtain insurance coverage on commercially reasonable terms;
- financial flexibility;
- adverse credit and equity market conditions;
- availability of capital and the ability to repay indebtedness when due;
- our return of capital to stockholders;
- stock price volatility;
- compliance with covenants under our debt agreements; and
- other financial, operational and legal risks and uncertainties detailed from time to time in our filings with the SEC.

We caution that the foregoing list of factors is not exhaustive. Additional information concerning these and other risk factors is contained in this Report and may be contained in our future filings with the SEC. You are cautioned not to place undue reliance on any of our forward-looking statements. The forward-looking statements speak only as of the date made and, other than as required by law, we undertake no obligation to update publicly or revise any of these forward-looking statements, whether as a result of new information, future events or otherwise. In the event that we update any forward-looking statement, no inference should be made that we will make additional updates with respect to that statement, related matters or any other forward-looking statements. All subsequent written and oral forward-looking statements concerning us or other matters and attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements above.

PART I

Item 1. Business

Available Information

This Report, along with our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, are available free of charge through our internet website (<u>www.patenergy.com</u>) as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information contained on our website is not part of this Report or other filings that we make with the SEC. The SEC maintains an internet site (<u>www.sec.gov</u>) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Overview

We are a Houston, Texas-based oilfield services company that primarily owns and operates one of the largest fleets of land-based drilling rigs in the United States and a large fleet of pressure pumping equipment.

Our contract drilling business operates in the continental United States and internationally in Colombia and, from time to time, we pursue contract drilling opportunities in other select markets. As of December 31, 2022, we had a drilling fleet that consisted of 184 marketed land-based drilling rigs in the United States and eight in Colombia. A drilling rig includes the structure, power source and machinery necessary to cause a drill bit to penetrate the earth to a depth desired by the customer. We also have a substantial inventory of drill pipe and drilling rig components that support our contract drilling operations.

We provide pressure pumping services to oil and natural gas operators primarily in Texas and the Appalachian region. Substantially all of the revenue in the pressure pumping segment is from well stimulation services (such as hydraulic fracturing) for completion of new wells and remedial work on existing wells. Well stimulation involves processes inside a well designed to enhance the flow of oil, natural gas, or other desired substances from the well. As of December 31, 2022, we had approximately 1.2 million fracturing horsepower to provide these services. We also provide cementing services through the pressure pumping segment. Cementing is the process of inserting material between the wall of the well bore and the casing to support and stabilize the casing. Our pressure pumping operations are supported by a fleet of other equipment, including blenders, tractors, manifold trailers and numerous trailers for transportation of materials to and from the worksite as well as bins for storage of materials at the worksite.

We also provide a comprehensive suite of directional drilling services in most major producing onshore oil and gas basins in the United States. Our directional drilling services include directional drilling, measurement-while-drilling and supply and rental of downhole performance motors. We also provide services that improve the statistical accuracy of directional and horizontal wellbores.

We have other operations through which we provide oilfield rental tools in select markets in the United States. We also service equipment for drilling contractors, and we provide electrical controls and automation to the energy, marine and mining industries in North America and other select markets. In addition, we own and invest, as a non-operating working interest owner, in oil and natural gas assets that are primarily located in Texas and New Mexico.

Recent Developments

Recent Developments in Market Conditions — Quarterly average oil prices and our quarterly average number of rigs operating in the United States for 2020, 2021 and 2022 are as follows:

	(1 st Quarter	2 nd Quarter		3 rd Quarter		4 th Quarter
2020:					_		
Average oil price per Bbl ⁽¹⁾	\$	45.76	\$	27.81	\$	40.89	\$ 42.45
Average rigs operating per day - U.S. ⁽²⁾		123		82		60	62
2021:							
Average oil price per Bbl ⁽¹⁾	\$	57.79	\$	66.09	\$	70.62	\$ 77.45
Average rigs operating per day - U.S. ⁽²⁾		69		73		80	106
2022:							
Average oil price per Bbl ⁽¹⁾	\$	94.45	\$	108.72	\$	93.18	\$ 82.79
Average rigs operating per day - U.S. ⁽²⁾		115		121		128	131

- ⁽¹⁾ The average oil price represents the average monthly West Texas Intermediate (WTI) spot price as reported by the United States Energy Information Administration.
- ⁽²⁾ A rig is considered to be operating if it is earning revenue pursuant to a contract on a given day.

Reduced demand for crude oil and refined products related to the COVID-19 pandemic led to a significant reduction in crude oil prices and demand for drilling and completion services in 2020 and early 2021. However, market fundamentals are now strong, as demand increased for drilling and completions equipment and services in 2022, and industry supply of Tier-1, super-spec rigs and premium pressure pumping equipment remains constrained. We expect our rig count in the United States will average 130 rigs in the first quarter and then grow modestly throughout the remainder of 2023. The current demand for equipment and services and strong pricing environment remain dependent on macro conditions, including commodity prices, geopolitical environment, inflationary pressures, economic conditions in the United States and elsewhere, response to the COVID-19 pandemic (including any resurgences and/or lockdowns in the United States and abroad) and continued focus by exploration and production companies and service companies on capital discipline. Oil prices averaged \$82.79 per barrel in the fourth quarter of 2022 and closed at \$77.97 per barrel on January 30, 2023. Natural gas prices (based on the Henry Hub Spot Market Price) averaged \$5.55 per MMBtu in the fourth quarter of 2022 and closed at \$2.82 per MMBtu on January 30, 2023.

Our average active U.S. rig count for the fourth quarter of 2022 was 131 rigs. This was an increase from our average active rig count for the third quarter of 2022 of 128 rigs. Our active U.S. rig count at December 31, 2022 of 132 rigs was more than the rig count of 111 rigs at December 31, 2021, due in large part to the recovery of oil prices and improved demand for drilling services in the United States. Term contracts help support our operating rig count. Based on contracts currently in place in the United States, we expect an average of 87 rigs operating under term contracts during the first quarter of 2023 and an average of 56 rigs operating under term contracts during 2023.

Our average active spread count was 12 in the fourth quarter of 2022, consistent with the third quarter of 2022. We calculated average active spreads as the average number of spreads that were crewed and actively marketed during the period. We expect to average approximately 12 active spreads in the first quarter of 2023. Based on our outlook for 2023 activity, we currently expect to activate a 13th spread towards the end of 2023.

Due to improving activity levels, supply chain disruptions and increasing tightness in the overall labor market, we continue to see general oilfield cost inflation across our segments, including increases in the cost of labor, services and supplies. Supply chain disruptions and the increasing challenge of attracting and retaining employees are increasing the complexity of reactivating equipment.

Pricing for our drilling and completion services increased in 2022 due in part to the limited supply of readily available, high-quality drilling and completion equipment.

Our 2023 capital expenditure forecast is approximately \$550 million.

Recent Developments in Financial Matters and Merger and Acquisition Activity — On October 1, 2021, we completed the acquisition of Pioneer Energy Services Corp. ("Pioneer") by acquiring 100% of its equity interests. Total consideration for the acquisition included the issuance of approximately 26.3 million shares of our common stock and payment of \$30 million cash, which based on the closing price of our common stock of \$9.44 on October 1, 2021, valued the transaction at approximately \$278 million.

Pioneer provided land-based contract drilling services and production services to a diverse group of oil and gas exploration and production companies in the United States and internationally in Colombia. Through the Pioneer acquisition, we acquired Pioneer's 100% pad-capable drilling rig fleet consisting of 17 AC-powered rigs in the United States and eight SCR rigs in Colombia and production services assets consisting of 123 well servicing rigs and 72 wireline services units. The purchase price allocation was finalized in 2022. The measurement period adjustments did not have a material impact on our consolidated financial statements.

On December 31, 2021, we completed the sale of the acquired well servicing rig business and wireline business to Clearwell Dynamics, LLC. The sale price was \$43.0 million in cash consideration, subject to customary purchase price adjustments at closing for cash and working capital. The results of operations of these businesses were presented as a discontinued operation during the fourth quarter of 2021.

On November 9, 2022, we entered into Amendment No. 3 to Amended and Restated Credit Agreement ("Amendment No.3"), which amended our amended and restated credit agreement, dated as of March 27, 2018 (as amended, the "Credit Agreement"), among us, as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender and each of the other letter of credit issuers and lenders party thereto.

Amendment No. 3, among other things, (i) revised the capacity under the letter of credit facility to \$100 million; (ii) revised the capacity under the swing line facility to the lesser of \$50 million and the amount of the swing line provider's unused commitment; (iii) changed the LIBOR reference rate to a SOFR reference rate; and (iv) extended the maturity date for \$416.7 million of revolving credit commitments of certain lenders under the Credit Agreement from March 27, 2025 to March 27, 2026. As a result, of the \$600 million of revolving credit commitments under the Credit Agreement, the maturity date for \$416.7 million of such commitments is March 27, 2026; the maturity date for \$133.3 million of such commitments is March 27, 2025; and the maturity date for the remaining \$50 million of such commitments is March 27, 2024.

As of December 31, 2022, we had no borrowings outstanding under our revolving credit facility. We had no letters of credit outstanding under the Credit Agreement at December 31, 2022 and, as a result, had available borrowing capacity of \$600 million at that date.

During the fourth quarter of 2022, we elected to repurchase portions of our 3.95% Senior Notes due 2028 (the "2028 Notes") and our 5.15% Senior Notes due 2029 (the "2029 Notes") in the open market. The principal amounts retired through these transactions totaled \$21.0 million of our 2028 Notes and \$1.4 million of our 2029 Notes, plus accrued interest. We recorded corresponding gains on the extinguishment of these amounts totaling \$2.3 million and \$0.1 million, respectively, net of the proportional write-off of associated deferred financing costs and original issuance discounts. These gains are included in "Interest expense, net of amount capitalized" in our consolidated statements of operations.

Industry Segments

Our revenues, operating loss and identifiable assets are primarily attributable to three industry segments:

- contract drilling services,
- pressure pumping services, and
- directional drilling services.

Contract Drilling Operations

General — We market our contract drilling services to oil and natural gas operators in the United States and Colombia. As of December 31, 2022, we had 192 marketed land-based drilling rigs based in the following regions:

Region	Number of Rigs
West Texas	80
Appalachia	27
Rockies	23
Oklahoma	20
South Texas	17
East Texas	17
Colombia	8
Total	192

All of these drilling rigs are electric rigs. An electric rig converts the power from its diesel engines into electricity to power the rig. The U.S. land rig industry has in recent years referred to certain high specification rigs as "super-spec" rigs, which we consider to be at least a 1,500 horsepower, AC-powered rig that has at least a 750,000-pound hookload, a 7,500-psi circulating system, and is pad-capable. Due to evolving customer preferences, we refer to certain premium rigs as "Tier-1, super-spec" rigs, which we consider as being a super-spec rig that also has a third mud pump and raised drawworks that allow for more clearance underneath the rig floor. We have 172 super-spec rigs, of which 118 were Tier-1, super-spec rigs.

We also have a substantial inventory of drill pipe and drilling rig components, which may be used in the activation of additional drilling rigs or as upgrades or replacement parts for marketed rigs.

Drilling rigs are typically equipped with engines, drawworks, top drives, masts, pumps to circulate the drilling fluid, blowout preventers, drill pipe and other related equipment. Over time, components on a drilling rig are replaced or rebuilt. We spend significant funds each year as part of a program to modify, upgrade and maintain our drilling rigs. To address our customers' needs for drilling horizontal wells in shale and other unconventional resource plays, we have improved the capability of our drilling fleet. Over the years, we have made performance and safety improvements to our rig fleet. Our APEX® rigs are AC-powered electric rigs with many having high pressure mud systems, walking systems and increased hookload capacity. We have spent approximately \$471 million during the last three years on capital expenditures to modify, upgrade and extend the lives of components of our drilling fleet. During fiscal years 2022, 2021 and 2020, we spent approximately \$256 million, \$110 million, and \$105 million, respectively, on these capital expenditures.

Depth and complexity of the well, drill site conditions and the number of wells to be drilled on a pad are the principal factors in determining the specifications of the rig selected for a particular job.

Our contract drilling operations depend on the availability of drill pipe, drill bits, replacement parts and other related rig equipment, fuel and other materials and qualified personnel. Some of these have been in short supply from time to time.

We perform repair and/or upgrade work to our drilling rig equipment at our yard facilities located in Texas, Oklahoma, Wyoming, Colorado, North Dakota, Ohio, Pennsylvania, and internationally in Colombia.

Drilling Contracts — Most of our drilling contracts are with established customers on a competitive bid or negotiated basis. Our bid for each job depends upon location, equipment to be used, estimated risks involved, estimated duration of the job, availability of drilling rigs and other factors particular to each proposed contract. Our drilling contracts are generally either on a well-to-well basis or a term basis. Well-to-well contracts are generally short-term in nature and cover the drilling of a single well or a series of wells. Term contracts are entered into for a specified period of time (we define term contracts as contracts with a duration of six months or more) or for a specified number of wells.

Our drilling contracts obligate us to provide and operate a drilling rig and to pay certain operating expenses, including wages of our drilling personnel and necessary maintenance expenses. Most drilling contracts are subject to termination by the customer on short notice and may or may not contain provisions for an early termination payment to us in the event that the contract is terminated by the customer.

Our drilling contracts provide for payment on a daywork basis, pursuant to which we provide the drilling rig and crew to the customer. The customer provides the program for the drilling of the well. Our compensation is based on a contracted rate per day during the period the drilling rig is utilized. We often receive a lower rate when the drilling rig is moving or when drilling operations are interrupted or restricted by adverse weather conditions or other conditions beyond our control. Daywork contracts typically provide separately for mobilization of the drilling rig.

Contract Drilling Activity — Information regarding our contract drilling activity for the last three years follows:

	Ye	Year Ended December 31,					
	2022	2021	2020				
Average rigs operating per day - U.S. (1)	124	82	82				
Number of rigs operated during the year - U.S.	132	118	131				
Number of wells drilled during the year - U.S.	2,489	1,662	1,324				
Number of operating days - U.S.	45,216	29,960	29,857				

⁽¹⁾ A rig is considered to be operating if it is earning revenue pursuant to a contract on a given day.

Rig Fleet Evaluation — On a periodic basis, we evaluate our fleet of drilling rigs for marketability based on the condition of inactive rigs, expenditures that would be necessary to bring inactive rigs to working condition and the expected demand for drilling services by rig type. The components comprising rigs that will no longer be marketed are evaluated, and those components with continuing utility to our other marketed rigs are transferred to other rigs or to our yards to be used as spare equipment. The remaining components of these rigs are retired. We had no impairment related to the marketability or condition of our drilling rigs during 2022.

Drilling Technology — We continue to enhance the technology offerings that can be used with our drilling operations. Our proprietary operating system for APEX® drilling rigs, Cortex®, can allow for the deployment of custom applications for rig performance, control and optimization. For instance, our GenAssist® application can employ smart engine logic turning engines on and off to reduce fuel consumption and emissions. Our Cortex® Key edge server can connect to various systems at the well site, streaming large data sets and providing a single, high-speed data aggregation source. Our EcoCellTM lithium battery hybrid energy management system is capable of utilizing stored energy to help reduce fuel consumption and emissions.

Pressure Pumping Operations

General — We provide pressure pumping services to oil and natural gas operators, primarily in Texas and the Appalachian region (Northeast Region). Pressure pumping services consist primarily of well stimulation services (such as hydraulic fracturing) for the completion of new wells and remedial work on existing wells. Wells drilled in shale formations and other unconventional plays require well stimulation through hydraulic fracturing to allow the flow of oil and natural gas. This is accomplished by pumping fluids and proppant under pressure into the well bore to fracture the formation. Many wells in conventional plays also receive well stimulation services. We also provide cementing services through the pressure pumping segment. The cementing process inserts material between the wall of the well bore and the casing to support and stabilize the casing. The scope and impact of our cementing services were insignificant during the fiscal years 2022, 2021 and 2020.

Pressure Pumping Contracts — Our pressure pumping operations are conducted pursuant to a work order for a specific job or pursuant to a term contract. The term contracts are generally entered into for a specified period of time and may include minimum revenue, usage or stage requirements. We are compensated based on a combination of charges for equipment, personnel, materials, mobilization and other items.

Equipment — We have pressure pumping equipment used in providing hydraulic fracturing services as well as cementing and acid pumping services, with a total of approximately 1.2 million horsepower as of December 31, 2022. Pressure pumping equipment at December 31, 2022 included:

T		
Fracturing Equipment	Pumping Equipment	Total
369	12	381
887,750	14,280	902,030
123	9	132
282,150	5,800	287,950
492	21	513
1,169,900	20,080	1,189,980
	369 887,750 123 282,150 492	Equipment Equipment 369 12 887,750 14,280 123 9 282,150 5,800 492 21

Our pressure pumping operations are supported by a fleet of other equipment including blenders, tractors, manifold trailers and numerous trailers for transportation of materials to and from the worksite, as well as bins for storage of materials at the worksite.

We periodically evaluate our pressure pumping assets for marketability based on the condition of inactive equipment, expenditures that would be necessary to bring the equipment to working condition and the expected demand for such equipment. The components of equipment that will no longer be marketed are evaluated, and those components with continuing utility will be used as parts to support active equipment. The remaining components of this equipment are retired. We had no impairment related to the marketability or condition of our equipment during 2022.

Materials — Our pressure pumping operations require the use of acids, chemicals, proppants, fluid supplies and other materials, any of which can be in short supply, including severe shortages, from time to time. We purchase these materials from various suppliers. These purchases are made in the spot market or pursuant to other arrangements that may not cover all of our required supply. These supply arrangements sometimes require us to purchase the supply or pay liquidated damages if we do not purchase the material. Given the limited number of suppliers of certain of our materials, we may not always be able to make alternative arrangements if we are unable to reach an agreement with a supplier for delivery of any particular material or should one of our suppliers, including trucking companies, fail to timely deliver our materials.

Directional Drilling Operations

General — We generally utilize our own proprietary downhole motors and equipment to provide a comprehensive suite of directional drilling services, including directional drilling, measurement-while-drilling (MWD) and supply and rental of downhole performance motors, in most major onshore oil and natural gas basins in the United States. We generally design, assemble and maintain our own fleet of downhole drilling motors and MWD equipment. Our customers primarily consist of oil and natural gas operators in the United States. We believe our customers use our services because of the quality of our specialized, technology-driven equipment and our well-trained and experienced workforce, which enable us to provide our customers with high-quality, reliable and safe directional drilling services.

Directional Drilling Services — We provide our directional drilling services primarily on a dayrate basis, typically under master service agreements. Revenue from directional drilling services is recognized as work progresses based on the number of days or footage completed. Our rates and other charges generally vary by location and depend on the equipment and personnel required for the job and market conditions in the region in which the services are performed. In addition to rates that are charged during periods of active directional drilling, a standby rate is typically agreed upon in advance and charged on a daily basis during periods when drilling is temporarily suspended while other on-site activity is conducted at the direction of the operator or another service provider.

Equipment — We generally design, assemble, maintain and inspect our own equipment. We have developed proprietary equipment for our drilling motors, mud pulse and electromagnetic data transfer MWD equipment. We believe that our vertical integration strategy allows us to deliver better operational performance and higher equipment reliability to our customers. Vertical integration also allows us to build our tools more efficiently and at a lower cost than if purchased from third parties. In addition, we have the ability to upgrade our tools in response to market conditions or our customers' job requirements, which allows us to minimize the costs and delays associated with sending equipment to original manufacturers. Our internal maintenance capability also affords us enhanced control over our supply chain and increases the effective utilization of our assets.

Wellbore Placement Optimization Services — We provide software and services used to improve the accuracy of directional and horizontal wellbores, wellbore quality, and on-bottom ROP (rate of penetration). Our measurement-while-drilling (MWD) Survey FDIR (fault detection, isolation and recovery) service is a data analytics technology to analyze MWD survey data in real-time and more accurately identify the position of a well. Our HiFi NavTM offering enhances FDIR by targeting improved vertical placement of the directional well within the reservoir. Our HiFi GuidanceTM service utilizes trajectory optimization algorithms to determine optimal steering recommendations that enhance well placement within the reservoir, targeting minimal sliding, faster ROP, and a higher percentage of the wellbore placed in the desired drilling window. We provide these services to customers with onshore and offshore operations.

Other Operations

Our oilfield rentals business has a fleet of premium rental tools and provides specialized services for land-based oil and natural gas drilling, completion and workover activities in many of the major producing onshore oil and gas basins in the United States. We service equipment for drilling contractors, and we provide electrical controls and automation to the energy, marine and mining industries in North America and other select markets. In addition, we own and invest, as a non-operating working interest owner, in oil and natural gas assets that are primarily located in Texas and New Mexico.

Contracts

We believe that our contract drilling, pressure pumping, directional drilling and other contracts generally provide for indemnification rights and obligations that are customary for the markets in which we conduct those operations. However, each contract contains the actual terms setting forth our rights and obligations and those of the customer or supplier, any of which rights and obligations may deviate from what is customary due to particular industry conditions, customer or supplier requirements, applicable law or other factors.

Customers

Our customer base includes major, independent and other oil and natural gas operators. With respect to our consolidated operating revenues in 2022, we received approximately 49% from our ten largest customers and approximately 34% from our five largest customers. During 2022, one customer accounted for approximately \$476 million, or approximately 18%, of our consolidated operating revenues. These revenues were earned in both our contract drilling and pressure pumping businesses. The loss of, or reduction in business from, one or more of our larger customers could have a material adverse effect on our business, financial condition, cash flows and results of operations.

Backlog

Our contract drilling backlog in the United States as of December 31, 2022 and 2021 was approximately \$830 million and \$325 million, respectively. Approximately 32% of our contract drilling backlog in the United States at December 31, 2022 is reasonably expected to remain after 2023. See Note 3 of Notes to consolidated financial statements in Item 8 of this Report and "Item 1A. Risk Factors – Our Current Backlog of Contract Drilling Revenue May Decline and May Not Ultimately Be Realized, as Fixed-Term Contracts May in Certain Instances Be Terminated Without an Early Termination Payment" for information pertaining to backlog.

Competition

The businesses in which we operate are highly competitive. Historically, available equipment used in our contract drilling, pressure pumping and directional drilling businesses has frequently exceeded demand, particularly in an industry downturn. The price for our services is a key competitive factor, in part because equipment used in these businesses can be moved from one area to another in response to market conditions. In addition to price, we believe availability, condition and technical specifications of equipment (including emission reduction capabilities), quality of personnel, service quality and safety record are key factors in determining which contractor is awarded a job. We expect that the market for our services will continue to be highly competitive.

Human Capital and Sustainability

We strive to be a leader in our industry in the area of environmental, social, governance and other sustainability-related issues, and we remain committed to managing these issues for the long-term benefit of our employees, our communities and our business. We aim to minimize our environmental impact in the communities in which we work and live, while providing services for our customers in a safe and responsible manner. We invest extensively in the safety, health and well-being of our people, who are our most important asset and our greatest strength. Importantly, we maintain a rigorous focus on ethics and integrity at every level of our operations, a practice on which all of our success depends.

Environment – We continue to pursue initiatives to mitigate climate change risk and make improvements in air quality, water quality, land usage, use of energy and reducing waste materials. For example, we utilize natural gas engines, dual-fuel equipment and other technologies that reduce our carbon and other greenhouse gas emissions as compared to our traditional diesel-only equipment, and we employ spill prevention plans and use additional protective measures in environmentally sensitive areas.

We have strengthened our position as a leader in alternative fuel technology with the commercialization of our EcoCellTM lithium battery hybrid energy management system. EcoCellTM is capable of efficiently displacing one of the gensets on a drilling rig to reduce both fuel consumption and emissions. The value of this technology is enhanced when used in combination with our Cortex® power management system and our dual-fuel engines, as the natural gas substitution rate can be optimized.

Through our Current Power business, we provide in-house electrical engineering, control system automation and installation services to connect drilling rigs to utility electrical lines. This capability enables our customers to use utility power, instead of natural gas or diesel fuel, to power drilling operations. Using utility power is an optimal power solution for our drilling rigs as it minimizes emission impacts at the wellsite.

Some of our key human capital areas of focus include:

Employees – We had approximately 6,500 full-time employees as of January 31, 2023. The number of employees fluctuates depending on the current and expected demand for our services. We consider our employee relations to be satisfactory. None of our U.S. employees are represented by a union. Although some of our Colombian employees may be union members, we have not entered into any collective bargaining arrangements with the unions with which those employees are affiliated.

Training and Safety – Our training programs include opportunities for employees to advance in their professional careers through intensive, multi-day classroom training programs in numerous skills and competencies, as well as management training programs. These programs are geared to providing our employees with opportunities to advance throughout our company.

The safety of our employees and others is our highest priority, as our goal is to provide an incident-free work environment. We have robust safety training programs that are designed to comply with applicable laws and industry standards and to benefit our employees, communities and our business. All U.S. field-based employees are required to have annual safety education that incorporates learning associated with hazard awareness, safe systems of work, permission to work, stop work authority, energy isolation, material handling and management of change.

Diversity, Inclusion and Respect – We are committed to fostering a work environment where all people feel valued and respected. We embrace our diversity of people, thoughts and talents, and combine these strengths to pursue extraordinary results for our company, our employees and our stockholders. We are committed to recruiting, hiring and retaining the highest caliber talent for our business by utilizing outreach initiatives and partnerships with a diverse group of organizations, industry associations and networks.

We require new supervisors and managers in the United States to attend an instructor-led course relative to diversity, inclusion and respect to ensure they understand our expectations regarding their obligations to promote a work environment where all employees are valued and respected. Supplemental diversity, inclusion and respect training for supervisors and managers is required on a biannual basis. All other employees are educated annually on our commitment to a respectful workplace for all to ensure they understand their role as they engage with co-workers.

Maintaining our Core Values – We provide annual training for our employees on our Code of Business Conduct and Ethics, which addresses conflicts of interest, confidentiality, fair dealing with others, proper use of company assets, compliance with laws, insider trading, keeping of books and records, zero tolerance for discrimination and harassment in the work environment, as well as reporting of violations.

Health and Benefits – Our health and benefits program provides for extensive preventative care and is designed to improve our employees' fitness for work, personal safety on the job and overall well-being. We have implemented policies allowing many of our office-based employees the flexibility to work from home.

Government and Environmental Regulation

All of our operations and facilities are subject to numerous federal, state, foreign, regional and local laws, rules and regulations related to various aspects of our business, including:

- drilling of oil and natural gas wells,
- hydraulic fracturing, cementing and acidizing and related well servicing activities,
- directional drilling services,
- services that improve the accuracy of directional and horizontal wellbores, including for customers with offshore operations, wellbore quality, and on-bottom ROP,
- containment and disposal of hazardous materials, oilfield waste, other waste materials and acids,
- use of underground storage tanks and injection wells,
- servicing of equipment for drilling contractors,
- provision of electrical controls and automation, and
- our employees.

To date, applicable environmental and other laws and regulations in the places in which we operate have not required the expenditure of significant resources outside the ordinary course of business. We do not anticipate any material capital expenditures for environmental control facilities or extraordinary expenditures to comply with environmental rules and regulations in the foreseeable future. However, compliance costs under existing laws or under any new requirements could become material, and we could incur liability in any instance of noncompliance.

Our business is generally affected by political developments and by federal, state, foreign, regional and local laws, rules and regulations that relate to the oil and natural gas industry. The adoption of laws, rules and regulations affecting the oil and natural gas industry for economic, environmental and other policy reasons could increase costs relating to drilling, completion and production, delay the permitting of, or related to, such operations, restrict or prohibit oil and gas development in certain areas, reduce the demand for oil and natural gas and otherwise have an adverse effect on our operations or business, and could have a material adverse effect on our business, financial condition, cash flows and results of operations. Federal, state, foreign, regional and local environmental laws, rules and regulations, including laws, rules, regulations and executive actions related to the mitigation of climate change or greenhouse gas emissions, currently apply to our operations and are likely to become more stringent in the future. Any limitation, suspension or moratorium of the services and products we or others provide, whether or not short-term in nature, by a federal, state, foreign, regional or local governmental authority, could have a material adverse effect on our business, financial condition and results of operations.

We believe we use operating and disposal practices that are standard in the industry. However, hydrocarbons and other materials may have been disposed of, or released in or under properties currently or formerly owned or operated by us or our predecessors, which may have resulted, or may result, in soil and groundwater contamination in certain locations. Any contamination found on, under or originating from the properties may be subject to remediation requirements under federal, state, foreign, regional and local laws, rules and regulations. In addition, some of these properties have been operated by third parties over whom we have no control of their treatment of hydrocarbon and other materials or the manner in which they may have disposed of or released such materials. We could be required to remove or remediate wastes disposed of or released by prior owners or operators. In addition, it is possible we could be held responsible for oil and natural gas properties in which we own an interest but are not the operator.

Some of the environmental laws and regulations that are applicable to our business operations are discussed in the following paragraphs, but the discussion does not cover all environmental laws and regulations that may govern our operations.

In the United States, the Federal Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended, commonly known as CERCLA, and comparable state statutes impose strict liability on:

- owners and operators of sites, including prior owners and operators who are no longer active at a site; and
- persons who disposed of or arranged for the disposal of "hazardous substances" found at sites.

The Federal Resource Conservation and Recovery Act ("RCRA"), as amended, and comparable state statutes and implementing regulations govern the disposal of "hazardous wastes." Although CERCLA currently excludes petroleum from the definition of "hazardous substances," and RCRA also excludes certain classes of exploration and production wastes from regulation, such exemptions may be deleted, limited, or modified in the future. For example, in December 2016, the U.S. Environmental Protection Agency ("EPA") and environmental groups entered into a consent decree to address the EPA's alleged failure to timely assess its RCRA Subtitle D criteria regulations exempting certain exploration and production related oil and gas wastes from regulation as hazardous wastes under RCRA. The consent decree requires the EPA to propose a rulemaking by March 2019 for revision of certain Subtitle D criteria regulations pertaining to oil and gas wastes or to sign a determination that revision of the regulations is not necessary. The EPA issued a report on April 23, 2019, determining that no revisions were necessary. However, if changes are made to the classification of exploration and production wastes under CERCLA and/or RCRA in the future, we could be required to remove and remediate previously disposed of materials (including materials disposed of or released by prior owners or operators) from properties (including ground water contaminated with hydrocarbons) and to perform removal or remedial actions to prevent future contamination.

The Federal Water Pollution Control Act (the "Clean Water Act") and the Oil Pollution Act of 1990 (the "Oil Pollution Act"), each as amended, and implementing regulations govern:

- the prevention and permitting of discharges, including oil and produced water spills, into jurisdictional waters; and
- liability for drainage into such waters.

The Oil Pollution Act imposes strict liability for a comprehensive and expansive list of damages from an oil spill into jurisdictional waters from facilities. Liability may be imposed for oil removal costs and a variety of public and private damages. Penalties may also be imposed for violation of federal safety, construction and operating regulations, and for failure to report a spill or to cooperate fully in a clean-up.

The Oil Pollution Act also expands the authority and capability of the federal government to direct and manage oil spill clean-up and operations, and requires operators to prepare oil spill response plans in cases where it can reasonably be expected that substantial harm will be done to the environment by discharges on or into navigable waters. Failure to comply with ongoing requirements or inadequate cooperation during a spill event may subject a responsible party, such as us, to civil or criminal actions. Although the liability for owners and operators is the same under the Clean Water Act, the damages recoverable under the Oil Pollution Act are potentially much greater and can include natural resource damages.

The U.S. Occupational Safety and Health Administration ("OSHA") promulgates and enforces laws and regulations governing the protection of the health and safety of employees. The OSHA hazard communication standard, EPA community right-to-know regulations under Title III of CERCLA and similar state statutes require that information be maintained about hazardous materials used or produced in our operations and that this information be provided to employees, state and local governments and citizens. Also, OSHA has established a variety of standards related to workplace exposure to hazardous substances and employee health and safety.

Our activities include the performance of hydraulic fracturing services to enhance the production of oil and natural gas from formations with low permeability, such as shale and other unconventional formations. Due to concerns raised relating to potential impacts of hydraulic fracturing, including on groundwater quality and seismic activity, legislative and regulatory efforts at the federal level and in some state and local jurisdictions have been initiated to render permitting and compliance requirements more stringent for hydraulic fracturing or prohibit the activity altogether. Certain politicians have also vocalized support for a nationwide ban on hydraulic fracturing. Additional legislation or regulation could lead to operational delays or increased operating costs in the production of oil and natural gas or could make it more difficult to perform hydraulic fracturing. These developments could also lead to litigation challenging proposed or existing wells. Such efforts could have an adverse effect on oil and natural gas production activities, which in turn could have an adverse effect our business, financial condition, cash flows and results of operations. See "Item 1A. Risk Factors – Potential Legislation and Regulation Covering Hydraulic Fracturing or Other Aspects of the Oil and Gas Industry Could Increase Our Costs and Limit or Delay Our Operations."

Other jurisdictions where we may conduct operations have similar environmental and regulatory regimes with which we would be required to comply. These laws, rules and regulations also require that facility sites and other properties associated with our operations be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. In addition, new projects or changes to existing projects may require the submission and approval of environmental assessments or permit applications. These laws, rules and regulations are subject to frequent change, and the clear trend is to place increasingly stringent limitations on activities that may affect the environment.

Our operations are also subject to federal, state, foreign, regional and local laws, rules and regulations for the control of air emissions, including those associated with the Federal Clean Air Act. We and our customers may be required to make capital expenditures in the future for air pollution control equipment in connection with obtaining and maintaining operating permits and approvals for air emissions. We are also subject to regulation by numerous other regulatory agencies, including, but not limited to, the U.S. Department of Labor, which oversees employment practice standards.

For more information, please refer to our discussion under "Item 1A. Risk Factors – Environmental and Occupational Health and Safety Laws and Regulations, Including Violations Thereof, Could Materially Adversely Affect Our Operating Results."

There has been an increasing focus of local, state, national and international regulatory bodies on greenhouse gas ("GHG") emissions and climate change issues. There has also been legislation proposed by U.S. lawmakers to reduce GHG emissions, as well as GHG emissions regulations enacted by the EPA, and future federal action to address climate change is likely.

President Biden and the Democratic Party have identified climate change as a priority, and it is likely that additional executive orders and/or regulatory action targeting greenhouse gas 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 fossil fuel leases or permits without sign-off from a top political appointee. In 2021, President Biden issued an executive order imposing 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 greenhouse gas 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. Although a federal judge for the U.S. District Court of the Western District of Louisiana issued a permanent injunction in 13 states that filed a lawsuit against the pause of oil and natural gas leasing on public lands or in offshore waters, the Biden Administration may take other regulatory steps in the future that could impact our operations.

In February 2021, the United States rejoined the Paris Agreement, and in the future, the United States may also choose to adhere to other international agreements targeting GHG reductions. In April 2021, President Biden set a new goal for the United States to achieve a 50-52 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution in 2030. Further, in November 2021, the United States and other countries entered into the Glasgow Climate Pact, which includes a range of measures designed to address climate change, including but not limited to the phase-out of fossil fuel subsidies, reducing methane emissions by 30% by 2030, and cooperating toward the advancement of the development of clean energy.

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.

We will continue to monitor and assess any new policies, legislation or regulations in the areas where we operate to determine the impact of GHG emissions and climate change on our operations and take appropriate actions, where necessary. Any direct and indirect costs of meeting these requirements may adversely affect our business, results of operations and financial condition. See "Item 1A. Risk Factors – Our and Our Customers' Operations are Subject to a Number of Risks Arising Out of the Threat of Climate Change That Could Result in Increased Operating and Capital Costs, Limit the Areas in Which Oil and Natural Gas Production May Occur and Reduce Demand for Our Services."

Risks and Insurance

Our operations are subject to many hazards inherent in the businesses in which we operate, including inclement weather, blowouts, explosions, fires, loss of well control, motor vehicle accidents, pollution, exposure and reservoir damage. These hazards could cause personal injury or death, work stoppage, and serious damage to equipment and other property, as well as significant environmental and reservoir damages. These risks could expose us to substantial liability for personal injury, wrongful death, property damage, loss of oil and natural gas production, pollution and other environmental damages. An accident or other event resulting in significant environmental or property damage, or injuries or fatalities involving our employees or other persons could also trigger investigations by federal, state or local authorities. Such an accident or other event could cause us to incur substantial expenses in connection with the investigation, remediation and resolution, as well as cause lasting damage to our reputation, loss of customers and an inability to obtain insurance.

We have indemnification agreements with many of our customers, and we also maintain liability and other forms of insurance. In general, our contracts typically contain provisions requiring our customers to indemnify us for, among other things, reservoir and certain pollution damage. Our right to indemnification may, however, be unenforceable or limited due to negligent or willful acts or omissions by us, our subcontractors and/or suppliers. Our customers and other third parties may dispute, or be unable to meet, their indemnification obligations to us due to financial, legal or other reasons. Accordingly, we may be unable to transfer these risks to our customers and other third parties by contract or indemnification agreements. Incurring a liability for which we are not fully indemnified or insured could have a material adverse effect on our business, financial condition, cash flows and results of operations.

We maintain insurance coverage of types and amounts that we believe to be customary in the industry, but we are not fully insured against all risks, either because insurance is not available or because of the high premium costs. The insurance coverage that we maintain includes insurance for fire, windstorm and other risks of physical loss to our equipment and certain other assets, employer's liability, automobile liability, commercial general liability, workers' compensation and insurance for other specific risks. We cannot assure, however, that any insurance obtained by us will be adequate to cover any losses or liabilities, or that this insurance will continue to be available, or available on terms that are acceptable to us. While we carry insurance to cover physical damage to, or loss of, a substantial portion of our equipment and certain other assets, such insurance does not cover the full replacement cost of such equipment or other assets. We have also elected in some cases to accept a greater amount of risk through increased deductibles on certain insurance policies. For example, in the United States we generally maintain a \$1.5 million per occurrence deductible on our workers' compensation insurance coverage, a \$1.0 million per occurrence deductible on our equipment insurance coverage, a \$5.0 million per occurrence deductible on our general liability coverage, a \$2.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our pr

Our insurance may not in all situations provide sufficient funds to protect us from all liabilities that could result from our operations. Our coverage includes aggregate policy limits and exclusions. As a result, we retain the risk for any loss in excess of these limits or that is otherwise excluded from our coverage. There can be no assurance that insurance will be available to cover any or all of our operational risks, or, even if available, that insurance premiums or other costs will not rise significantly in the future, so as to make the cost of such insurance prohibitive, or that our coverage will cover a specific loss. Further, we may experience difficulties in collecting from insurers or such insurers may deny all or a portion of our claims for insurance coverage. Incurring a liability for which we are not fully insured or indemnified could materially adversely affect our business, financial condition, cash flows and results of operations.

If a significant accident or other event occurs that is not fully covered by insurance or an enforceable and recoverable indemnity from a third party, it could have a material adverse effect on our business, financial condition, cash flows and results of operations. See "Item 1A. Risk Factors – Our Operations Are Subject to a Number of Operational Risks, Including Environmental and Weather Risks, Which Could Expose Us to Significant Losses and Damage Claims. We Are Not Fully Insured Against All of These Risks and Our Contractual Indemnity Provisions May Not Fully Protect Us."

Seasonality

Seasonality has not significantly affected our overall operations. Toward the end of calendar years, we experience slower activity in connection with the holidays and as customers' capital expenditure budgets are depleted. Occasionally, our operations have been negatively impacted by severe weather conditions.

Raw Materials and Subcontractors

We use many suppliers of raw materials and services. Although these materials and services have historically been available, there is no assurance that such materials and services will continue to be available on favorable terms or at all. We also utilize numerous independent subcontractors from various trades.

Item 1A. Risk Factors.

You should consider each of the following factors as well as the other information in this Report in evaluating our business and our prospects. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. If any of the following risks actually occur, our business, financial condition, cash flows and results of operations could be harmed. You should also refer to the other information set forth in this Report, including our consolidated financial statements and the related notes.

Business and Operating Risks

We Are Dependent on the Oil and Natural Gas Industry and Market Prices for Oil and Natural Gas. Declines in Customers' Operating and Capital Expenditures and in Oil and Natural Gas Prices May Adversely Affect Our Operating Results.

We depend on our customers' willingness to make operating and capital expenditures to explore for, develop and produce oil and natural gas in the United States. When these expenditures decline, our business may suffer. Our customers' willingness to explore, develop and produce depends largely upon prevailing industry conditions that are influenced by numerous factors over which we have no control, such as:

- the supply of and demand for oil and natural gas, including current natural gas storage capacity and usage,
- the prices, and expectations about future prices, of oil and natural gas,
- the supply of and demand for drilling, pressure pumping and directional drilling services,
- the cost of exploring for, developing, producing and delivering oil and natural gas,
- the availability of capital for oil and natural gas industry participants, including our customers, and the extent to which they are willing or able to deploy capital,
- the availability of and constraints in pipeline, storage and other transportation capacity in the basins in which we operate,
- the environmental, tax and other laws and governmental regulations regarding the exploration, development, production, use and delivery of oil and natural gas, and in particular, public pressure on, and legislative and regulatory interest within, federal, state, foreign, regional and local governments to stop, significantly limit or regulate drilling and pressure pumping activities, including hydraulic fracturing,
- increased focus by the investment and financing community on sustainability practices in the oil and natural gas industry, and
- merger and divestiture activity among oil and natural gas producers.

In particular, our revenues, profitability and cash flows are highly dependent upon prevailing prices for oil and natural gas and expectations about future prices. Oil and natural gas prices and markets can be extremely volatile. Prices, and expectations about future prices, are affected by factors such as:

- market supply and demand,
- the desire and ability of the Organization of Petroleum Exporting Countries ("OPEC"), its members and other oil-producing nations, such as Russia, to set and maintain production and price targets,
- the level of production by OPEC and non-OPEC countries,
- domestic and international military, political, economic, health and weather conditions, including the impacts of war, including the impact of the ongoing conflict in Ukraine, or terrorist activity, pandemics and other unexpected disasters or events,
- changes to tax, tariff and import/export regulations and sanctions by the United States or other countries,
- legal and other limitations or restrictions on exportation and/or importation of oil and natural gas,
- technical advances affecting energy consumption and production, and
- the development, price, availability and market acceptance of alternative fuels and energy sources.

All of these factors are beyond our control. Reduced demand for crude oil and refined products related to the COVID-19 pandemic led to a significant reduction in crude oil prices and demand for drilling and completion services in 2020 and early 2021. However, market fundamentals have improved. The current demand for equipment and services and improved market fundamentals remain dependent on macro conditions, including commodity prices, geopolitical environment, inflationary pressures, economic conditions in the United States and elsewhere, response to the COVID-19 pandemic (including any resurgences and/or lockdowns in the United States and abroad) and continued focus by exploration and production companies and service companies on capital discipline. Oil prices averaged \$82.79 per barrel in the fourth quarter of 2022 and closed at \$77.97 per barrel on January 30, 2023. Natural gas prices (based on the Henry Hub Spot Market Price) averaged \$5.55 per MMBtu in the fourth quarter of 2022 and closed at \$2.82 per MMBtu on January 30, 2023.

In light of these and other factors, we expect oil and natural gas prices to continue to be volatile and to affect our financial condition, operations and ability to access sources of capital. Higher oil and natural gas prices do not necessarily result in increased activity because demand for our services is generally driven by our customers' expectations of future oil and natural gas prices, as well as our customers' ability to access sources of capital to fund their operating and capital expenditures. A decline in demand for oil and natural gas, prolonged low oil or natural gas prices, expectations of decreases in oil and natural gas prices or a reduction in the ability of our customers to access capital would likely result in reduced capital expenditures by our customers and decreased demand for our services, which could have a material adverse effect on our operating results, financial condition and cash flows. Even during periods of historically moderate or high prices for oil and natural gas, companies exploring for oil and natural gas may cancel or curtail programs or reduce their levels of capital expenditures for exploration and production for a variety of reasons, which could reduce demand for our services.

Global Economic Conditions May Adversely Affect Our Operating Results.

Concerns regarding global economic conditions, energy costs, geopolitical issues, supply chain disruptions, inflation and the availability and cost of credit have contributed to increased economic uncertainty. Demand for energy and for oil and natural gas end products is highly sensitive to economic conditions; as a result, global economic conditions, indications that economic growth is slowing and volatility in commodity prices may cause our customers to reduce or curtail their drilling and well completion programs, which could result in a decrease in demand for our services. In addition, uncertainty in the capital markets, whether due to global economic conditions, low commodity prices or otherwise, may result in reduced access to, or an inability to obtain, financing by us, our customers and our suppliers and result in reduced demand for our services. An economic slowdown or recession in the United States or in any other country that significantly affects the supply of or demand for oil or natural gas could negatively impact our operations and therefore adversely affect our results. Furthermore, these factors may result in certain of our customers experiencing an inability or unwillingness to pay suppliers, including us. The global economic environment in the past has experienced significant deterioration in a relatively short period, such as a result of the COVID-19 pandemic or the conflict in Ukraine, and there is no assurance that the global economic environment, will not quickly deteriorate again due to one or more factors, including as a result of actual or perceived threats to geopolitical stability and changes in production from OPEC, its members and other oil-producing nations. A deterioration in the global economic environment could have a material adverse effect on our business, financial condition, cash flows and results of operations.

A Surplus of Equipment and a Highly Competitive Oil Service Industry May Adversely Affect Our Utilization and Profit Margins and the Carrying Value of our Assets.

The land drilling and pressure pumping industries in the United States are highly competitive, and at times available land drilling rigs and pressure pumping equipment exceed the demand for such equipment. A low commodity price environment or capital spending reductions by our customers due to customer consolidation, investor requirements or other reasons can result in substantially more drilling rigs and pressure pumping equipment being available than are needed to meet demand. Low commodity prices and a rise in new and upgraded equipment can result in excess capacity and substantial competition for a declining number of drilling and pressure pumping contracts.

Operating costs for our core businesses include all direct and indirect costs associated with the operation, maintenance and support of our equipment, which is often not affected by changes in our rates and utilization. During periods of reduced revenue and/or activity, certain of our fixed costs, such as depreciation, may not decline and often we may incur additional costs. During times of reduced utilization, reductions in costs may not be immediate as we may incur additional costs associated with maintaining and stacking equipment, or we may not be able to fully reduce the cost of our support operations in a particular geographic region due to the need to support the remaining operations in that region. Accordingly, a decline in revenue due to lower rates and/or utilization may not be offset by a corresponding decrease in operating costs, which could have a material adverse impact on our business, financial condition and results of operations. Even in an environment of high oil and natural gas prices and/or increased drilling and completion activity, reactivation and improvement of existing drilling rigs and pressure pumping equipment, construction of new technology drilling rigs and new pressure pumping equipment, and movement of drilling rigs and pressure pumping equipment from region to region in response to market conditions or otherwise can lead to a surplus of equipment.

In times of reduced demand for our industry's services, certain of our industry competitors may initiate bankruptcy proceedings or engage in debt refinancing transactions, management changes, or other strategic initiatives in an attempt to reduce operating costs to maintain a position in the market. This could result in such competitors emerging with stronger or healthier balance sheets and, in turn, an improved ability to compete with us in the future. We may also see corporate consolidations among both our customers and competitors, which could significantly alter industry conditions and competition within the industry, and have a material adverse effect on our business, financial condition, cash flows and results of operations.

We periodically seek to increase the prices on our services to offset rising costs, earn returns on our capital investment, and otherwise generate higher returns for our stockholders. However, we operate in a very competitive industry, and we are not always successful in raising or maintaining our existing prices. Even if we are able to increase our prices, we may not be able to do so at a rate that is sufficient to offset rising costs, including capital expenditures, without adversely affecting our activity levels. The inability to maintain our pricing and to increase our pricing as costs, including capital expenditures, increase could have a material adverse effect on our business, financial condition, cash flows and results of operations. In addition, we may be unable to replace fixed-term contracts that expire or are terminated early, extend expiring contracts or obtain new contracts in the spot market, and the rates and other material terms under any new or extended contracts may be on substantially less favorable rates and terms.

Accordingly, high competition and a surplus of equipment can cause oil and natural gas service contractors to have difficulty maintaining pricing, utilization and profit margins and, at times, result in operating losses. We cannot predict the future level of competition or surplus equipment in the oil and natural gas service businesses or the level of demand for our contract drilling, pressure pumping or directional drilling services.

A surplus of operable land drilling rigs, increasing rig specialization and surplus of pressure pumping and directional drilling equipment, which can be exacerbated by capital spending reductions by our customers, could affect the fair market value of our contract drilling, pressure pumping and directional drilling equipment, which in turn could result in additional impairments of our assets. A prolonged period of lower oil and natural gas prices or changes in customer preferences and requirements could result in future impairment to our long-lived assets. For example, we recognized impairment charges of \$4.5 million, \$267 million and \$423 million in 2022, 2021 and 2020, respectively.

Our Operations Are Subject to a Number of Operational Risks, Including Environmental and Weather Risks, Which Could Expose Us to Significant Losses and Damage Claims. We Are Not Fully Insured Against All of These Risks and Our Contractual Indemnity Provisions May Not Fully Protect Us.

Our operations are subject to many hazards inherent in the businesses in which we operate, including inclement weather, blowouts, explosions, fires, loss of well control, motor vehicle accidents, equipment failure, pollution, exposure and reservoir damage. These hazards could cause personal injury or death, work stoppage, and serious damage to equipment and other property, as well as significant environmental and reservoir damages. These risks could expose us to substantial liability for personal injury, wrongful death, property damage, loss of oil and natural gas production, pollution and other environmental damages. An accident or other event resulting in significant environmental or property damage, or injuries or fatalities involving our employees or other persons could also trigger investigations by federal, state or local authorities. Such an accident or other event could cause us to incur substantial expenses in connection with the investigation, remediation and resolution, as well as cause lasting damage to our reputation, loss of customers and an inability to obtain insurance.

We have indemnification agreements with many of our customers, and we also maintain liability and other forms of insurance. In general, our contracts typically contain provisions requiring our customers to indemnify us for, among other things, reservoir and certain pollution damage. Our right to indemnification may, however, be unenforceable or limited due to negligent or willful acts or omissions by us, our subcontractors and/or suppliers. In addition, certain states, including Louisiana, New Mexico, Texas and Wyoming, have enacted statutes generally referred to as "oilfield anti-indemnity acts" expressly prohibiting certain indemnity agreements contained in or related to oilfield services agreements. Such oilfield anti-indemnity acts may restrict or void a party's indemnification of us.

Our customers and other third parties may dispute, or be unable to meet, their indemnification obligations to us due to financial, legal or other reasons. Accordingly, we may be unable to transfer these risks to our customers and other third parties by contract or indemnification agreements. Incurring a liability for which we are not fully indemnified or insured could have a material adverse effect on our business, financial condition, cash flows and results of operations.

We maintain insurance coverage of types and amounts that we believe to be customary in the industry, but we are not fully insured against all risks, either because insurance is not available or because of the high premium costs. The insurance coverage that we maintain includes insurance for fire, windstorm and other risks of physical loss to our equipment and certain other assets, employer's liability, automobile liability, commercial general liability, workers' compensation and insurance for other specific risks. We cannot assure, however, that any insurance obtained by us will be adequate to cover any losses or liabilities, or that this insurance will continue to be available, or available on terms that are acceptable to us. While we carry insurance to cover physical damage to, or loss of, a substantial portion of our equipment and certain other assets, such insurance does not cover the full replacement cost of such equipment or other assets. We have also elected in some cases to accept a greater amount of risk through increased deductibles on certain insurance policies. For example, in the United States we generally maintain a \$1.5 million per occurrence deductible on our workers' compensation insurance coverage, a \$1.0 million per occurrence deductible on our equipment insurance coverage, a \$5.0 million per occurrence deductible on our general liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deduct

Our insurance may not in all situations provide sufficient funds to protect us from all liabilities that could result from our operations. Our coverage includes aggregate policy limits and exclusions. As a result, we retain the risk for any loss in excess of these limits or that is otherwise excluded from our coverage. There can be no assurance that insurance will be available to cover any or all of our operational risks, or, even if available, that insurance premiums or other costs will not rise significantly in the future, so as to make the cost of such insurance prohibitive, or that our coverage will cover a specific loss. Further, we may experience difficulties in collecting from insurers or such insurers may deny all or a portion of our claims for insurance coverage. Incurring a liability for which we are not fully insured or indemnified could materially adversely affect our business, financial condition, cash flows and results of operations.

If a significant accident or other event occurs that is not fully covered by insurance or an enforceable and recoverable indemnity from a third party, it could have a material adverse effect on our business, financial condition, cash flows and results of operations.

Our Current Backlog of Contract Drilling Revenue May Decline and May Not Ultimately Be Realized, as Fixed-Term Contracts May in Certain Instances Be Terminated Without an Early Termination Payment.

Fixed-term drilling contracts customarily provide for termination at the election of the customer, with an early termination payment to us if a contract is terminated prior to the expiration of the fixed term. However, in certain circumstances, for example, destruction of a drilling rig that is not replaced within a specified period of time, our bankruptcy, or a breach of our contract obligations, the customer may not be obligated to make an early termination payment to us. Additionally, during depressed market conditions or otherwise, customers may be unable to satisfy their contractual obligations or may seek to terminate or renegotiate or otherwise fail to honor their contractual obligations, including as a result of their bankruptcy. In addition, we may not be able to perform under these contracts due to events beyond our control, and our customers may seek to terminate or renegotiate our contracts for various reasons, including those described above. As a result, we may be unable to realize all of our current contract drilling backlog. In addition, the termination or renegotiation of fixed-term contracts without the receipt of early termination payments could have a material adverse effect on our business, financial condition, cash flows and results of operations. As of December 31, 2022, our contract drilling backlog in the United States for future revenues under term contracts, which we define as contracts with a fixed term of six months or more, was approximately \$830 million. Please see Note 3 of Notes to consolidated financial statements in Item 8 of this Report for a description of our calculation of backlog. Our contract drilling backlog may decline, as fixed-term drilling contract coverage over time may not be offset by new contracts or may be reduced by price adjustments to existing contracts, including as a result of a decline in the price of oil and natural gas, capital spending reductions by our customers or other factors. For these and other reasons, our contract drilling backlog may not generate sufficient liquidity for us during periods of reduced demand for our services or otherwise.

New Technologies May Cause Our Operating Methods, Equipment and Services to Become Less Competitive, and Higher Levels of Capital Expenditures May Be Necessary to Remain Competitive.

The market for our services is characterized by continual technological and process developments that have resulted in, and will likely continue to result in, substantial improvements in the functionality and performance, including environmental performance, of drilling rigs and pressure pumping and other equipment. Our customers are increasingly demanding the services of newer, higher specification drilling rigs and pressure pumping and other equipment, as well as new and improved technology, such as drilling automation technology and lower-emissions operations and services, and data analytics. Accordingly, we may have to allocate a higher proportion of our capital expenditures to maintain and improve existing rigs and pressure pumping and other equipment, purchase and construct newer, higher specification drilling rigs and pressure pumping and other equipment to meet the increasingly sophisticated needs of our customers, and develop new and improved technology and data analytics. In addition, technological changes, process improvements and other factors that increase operational efficiencies could continue to result in oil and natural gas wells being drilled

and completed more quickly, which could reduce the number of revenue earning days. Technological and process developments in the pressure pumping and directional drilling businesses could have similar effects.

We continually attempt to develop or acquire new technologies for use in our business. In the event that we are successful in developing or acquiring new technologies for use in our business, there is no guarantee of future demand for those technologies. Customers may be reluctant or unwilling to adopt our new technologies. We may also have difficulty negotiating satisfactory terms for our new technologies, including terms that would enable us to obtain acceptable returns on our investment in the development or acquisition of new technologies.

Development and acquisition of new technology is critical to maintaining our competitiveness. There can be no assurance that we will be able to successfully develop or acquire technology that our customers demand. Some of our competitors have greater financial, technical and personnel resources that may allow them to enjoy technological advantages and develop, acquire and implement new technology on a more timely basis or in a more cost-effective manner. If we are not successful keeping pace with technological advances in a timely and cost-effective manner, demand for our services may decline. If any technology that we need to successfully compete is not available to us or that we implement in the future does not work as we expect, we may be adversely affected. Additionally, new technologies, services or standards could render some of our equipment and services obsolete, which could reduce our competitiveness and have a material adverse impact on our business, financial condition, cash flows and results of operation.

Loss of Key Personnel and Competition for Experienced Personnel May Negatively Impact Our Financial Condition and Results of Operations.

We greatly depend on the efforts of our key employees to manage our operations. The loss of members of management could have a material adverse effect on our business. In addition, we utilize highly skilled field-based and non-field based personnel in operating and supporting our businesses and in developing new technologies. In times of increasing demand for our services, it may be difficult to attract and retain qualified field-based and non-field based personnel, particularly after a prolonged industry downturn. During periods of high demand for our services or inflation, wage rates for personnel are also likely to increase (and, during recent periods of high demand and inflation, have increased), resulting in higher operating costs. During periods of lower demand for our services, we may experience reductions in force and voluntary departures of personnel, which could adversely affect our business and make it more it difficult to meet customer demands when demand for our services in certain areas, it may be difficult to attract and retain qualified personnel to perform services in such areas. The loss of key employees, the failure to attract and retain qualified personnel and the increase in labor costs could have a material adverse effect on our business, financial condition, cash flows and results of operations.

The Loss of Large Customers Could Have a Material Adverse Effect on Our Financial Condition and Results of Operations.

With respect to our consolidated operating revenues in 2022, we received approximately 49% from our ten largest customers, approximately 34% from our five largest customers and 18% from our largest customer. The loss of, or reduction in business from, one or more of our larger customers could have a material adverse effect on our business, financial condition, cash flows and results of operations.

Shortages, Delays in Delivery, and Interruptions in Supply, of Equipment and Materials Could Adversely Affect Our Operating Results.

Periodically, the oilfield services industry has experienced shortages of equipment for upgrades, drill pipe, replacement parts and other equipment and materials, including, in the case of our pressure pumping operations, proppants, cement, acid, gel and water. These shortages can cause the price of these items to increase significantly and require that orders for the items be placed well in advance of expected use. In addition, any interruption in supply could result in significant delays in delivery of equipment and materials or prevent operations. Interruptions may be caused by, among other reasons:

- lingering effects of the COVID-19 pandemic,
- weather issues, whether short-term such as a hurricane, or long-term such as a drought,
- labor shortages or other labor issues,
- transportation, fuel shortages and other logistical challenges, and
- a shortage in the number of vendors able or willing to provide the necessary equipment and materials, including as a result of commitments of vendors to other customers or third parties or bankruptcies or consolidation.

These price increases, delays in delivery and interruptions in supply may require us to delay operations, increase capital and repair expenditures or otherwise incur higher operating costs. During recent years, there have been significant disruptions and delays across the global supply chain, which have created a tightening of supplies and shortages in a number of areas, including basic raw materials. Severe shortages, delays in delivery and interruptions in supply could increase our costs and limit our ability to operate, maintain, upgrade and construct our drilling rigs and pressure pumping and other equipment and could have a material adverse effect on our business, financial condition, cash flows and results of operations.

Our Business Is Subject to Cybersecurity Risks and Threats.

Our operations are increasingly dependent on effective and secure information technologies and services. Threats to information technology systems associated with cybersecurity risks and cyber incidents or attacks continue to grow, and include, among other things, storms and natural disasters, terrorist attacks, utility outages, attempts to gain unauthorized access to data and systems, theft, viruses, malware, ransomware, denial-of-service attacks, design defects, human error, or complications encountered as existing systems are maintained, repaired, replaced, or upgraded. Risks associated with these threats include, among other things:

- theft or misappropriation of funds, including via "phishing" or similar attacks directed at us or third parties, including our customers and vendors;
- loss, corruption, or misappropriation of intellectual property, or other proprietary or confidential information (including customer, supplier, or employee data);
- disruption or impairment of our and our customers' and vendors' business operations and safety procedures;
- personal injuries and destruction or damage to property;
- downtime and loss of revenue;
- injury to our reputation, including the perception of our products or services as having security vulnerabilities;
- negative impacts on our ability to compete;
- loss or damage to our and our customers' and vendors' information technology systems, including operational technologies and worksite data delivery systems;
- exposure to litigation and legal and regulatory liability and costs; and
- increased costs to prevent, respond to or mitigate cybersecurity events.

Many of our office personnel have moved to a "remote work" model. This model has significantly increased the use of remote networking and online conferencing services that enable employees to work outside of our corporate infrastructure and, in some cases, use their own personal devices. This may expose us to additional cybersecurity risks or related incidents. Additionally, geopolitical tensions or conflicts, such as the ongoing conflict in Ukraine, may heighten the risk of cybersecurity attacks and other cyber events.

Although we utilize various procedures and controls to mitigate our exposure to the risks described above, cybersecurity attacks and other cyber events are evolving and unpredictable. There can be no assurance that the procedures and controls that we implement, or that our third party service providers implement, will be sufficient to protect our people, systems, information or other property. Moreover, we have no control over the information technology systems of our customers, suppliers, and others with which our systems may connect and communicate. As a result, the occurrence of a cyber incident could go unnoticed for a period of time. We self-insure most of our cybersecurity risks, and any such incident could have a material adverse effect on our business, financial condition, cash flows and results of operations. As cyber incidents continue to evolve, we may be required to incur additional costs to continue to modify or enhance our protective measures or to investigate or remediate the effects of cyber incidents.

Our Commitments Under Supply Agreements Could Exceed Our Requirements, Exposing Us to Risks Including Price, Timing of Delivery and Quality of Equipment and Materials Upon Which Our Business Relies.

We have purchase commitments with certain vendors to supply equipment and materials, including, in the case of our pressure pumping business, proppants. Some of these agreements are take-or-pay agreements with minimum purchase obligations. If demand for our services decreases from current levels, demand for the equipment that we use and the materials that we supply as part of these services will also decrease. In addition, our customers may self-source certain materials. If demand for our services and/or materials decreases enough, we could have contractual minimum commitments that exceed the required amount of materials we need to supply to our customers. In this instance, we could be required to purchase materials that we do not have a present need for, pay for materials that we do not take delivery of or pay prices in excess of market prices at the time of purchase.

Growth Through Acquisitions, the Building or Upgrading of Equipment and the Development of Technology Is Not Assured.

We have grown our drilling rig fleet and pressure pumping fleet and expanded our business lines and use of technology in the past through mergers, acquisitions, upgrades, new construction and technology development. There can be no assurance that acquisition opportunities will be available in the future or that we will be able to execute timely or efficiently any plans for building or upgrading equipment or developing new technology. We are also likely to continue to face intense competition from other companies for available acquisition opportunities. In addition, because improved technology has enhanced the ability to recover oil and natural gas, our competitors may continue to upgrade and build new equipment and develop new technology, including drilling automation technology and lower-emissions operations and services.

There can be no assurance that we will:

- successfully complete any acquisitions we attempt on the terms announced, or at all,
- have sufficient capital resources to complete additional acquisitions, build or upgrade equipment or develop new technology,
- through due diligence conducted prior to an acquisition, successfully uncover situations that could result in financial or legal exposure, or appropriately quantify the exposure from known risks,
- successfully integrate additional equipment, acquired or developed technology or other assets or businesses into our operations and internal controls, including financial reporting disclosure and cybersecurity and information technology systems,
- effectively manage the growth and increased size, complexity and geography of our organization, including as a result of any completed merger or acquisition,
- successfully deploy idle, stacked, upgraded or additional equipment and acquired or developed technology,
- maintain the crews necessary to operate additional equipment or the personnel necessary to evaluate, acquire, develop and deploy new technology, or
- successfully improve our financial condition, results of operations, business or prospects, or provide an adequate return of capital, as a result of any completed acquisition, the building or upgrading equipment or the development of new technology.

Our failure to achieve consolidation savings, to integrate acquired businesses and technology and other assets into our existing operations successfully or to minimize any unforeseen operational difficulties could have a material adverse effect on our business. In addition, we may incur liabilities arising from events occurring prior to any completed acquisitions, prior to our establishment of adequate compliance oversight or in connection with disputes over acquired or developed technology. While we generally seek to obtain indemnities for liabilities arising from events occurring before such acquisitions, we may be unable to do so, and any indemnities we do obtain will be limited in amount and duration, may be held to be unenforceable or the seller may not be able to indemnify us.

We may incur substantial indebtedness to finance future acquisitions, build or upgrade equipment or acquire or develop new technology, and we also may issue equity, convertible or debt securities in connection with any such acquisitions, building or upgrade program or technology development. Use of cash for these purposes may adversely affect our cash available for capital expenditures and other uses, debt service requirements could represent a significant burden on our results of operations and financial condition, and the issuance of additional equity or convertible securities could be dilutive to existing stockholders. Also, continued growth and resulting integration efforts could strain our management, operations, employees and other resources.

Public Health Crises, Pandemics and Epidemics, such as the COVID-19 Pandemic, Have Had, and May Continue to Have, a Significant Adverse Impact on Our Business, Liquidity, Results of Operations and Financial Condition.

The effects of public health crises, pandemics and epidemics, such as the COVID-19 pandemic, including related governmental actions and restrictions related thereto, have had, and may continue to have, a significant adverse impact on the global economy, including the worldwide demand for oil and natural gas, and the level of demand for our services, which has impacted and may continue to impact our business, liquidity, results of operations and our financial condition.

Such public health crises, pandemics and epidemics are continuously evolving, and we are not able to enumerate all potential risks to our business from such events, including the COVID-19 pandemic and related volatility in crude oil prices; however, we believe that in addition to the impacts described above, other current and potential impacts include, but are not limited to: liquidity challenges; customers, suppliers and other third parties seeking to terminate, reject, renegotiate or otherwise avoid, and otherwise failing to perform, their contractual obligations to us; credit rating downgrades of our corporate debt and potentially higher borrowing costs in the future; a need to preserve liquidity; cybersecurity issues; litigation risk and possible loss contingencies; disruption to our supply chain; loss of workers and labor shortages; general oilfield cost inflation; a reduction of our workforce; costs associated with rationalization of our portfolio of real estate facilities; asset impairments and other third parties; actions undertaken by international, national, regional and local governments and health officials; and a structural shift in the global economy and its demand for oil and natural gas.

The full extent of the impact of public health crises, pandemics and epidemics on our business, liquidity, results of operations and financial condition will depend largely on future developments, including the duration and further spread of a subject pathogen, including any new strains thereof, and the related impact on the oil and gas industry, the impact of governmental actions designed to prevent the spread thereof and the further development, availability, timely distribution and acceptance of effective treatments and vaccines, all of which are highly uncertain.

Fuel Conservation Measures Could Reduce Demand for Oil and Natural Gas, Which Would, In Turn, Reduce the Demand for Our Services.

Fuel conservation measures, alternative fuel requirements and increasing consumer demand for alternatives to oil and natural gas could reduce demand for oil and natural gas. The impact of the changing demand for oil and natural gas may have a material adverse effect on our business, financial condition, cash flows and results of operations. Additionally, the increased competitiveness of alternative energy sources (such as wind, solar geothermal, tidal, and biofuels) or increased focus on reducing the use of oil and natural gas (such as governmental mandates that ban the sale of new gasoline-powered automobiles, and new legislation such as the Inflation Reduction Act of 2022, which contains tax inducements and other provisions that incentivize investment, development, and deployment of alternative energy sources and technologies) could reduce demand for oil and natural gas and therefore for our services, which would lead to a reduction in our revenues.

Legal and Regulatory Risks

Potential Legislation and Regulation Covering Hydraulic Fracturing or Other Aspects of the Oil and Gas Industry Could Increase Our Costs and Limit or Delay Our Operations.

Numerous political and regulatory authorities, governmental bodies and officials, and environmental groups devote resources to campaigns aimed at eradicating hydraulic fracturing, a technology employed by our pressure pumping business, which involves the injection of water, sand and chemicals under pressure into rock formations to stimulate oil and natural gas production.

President Biden and other political candidates and officeholders stated that they would support either increased regulation or a ban on hydraulic fracturing; however, we cannot predict whether hydraulic fracturing regulations will be enacted during the Biden Administration or how stringent they may be. In addition, members of the U.S. Congress and the EPA have reviewed proposals for more stringent regulation of hydraulic fracturing, and various state and local initiatives have been or may be proposed or implemented to further regulate hydraulic fracturing. In addition, a number of lawsuits have been filed against other industry participants alleging damages and regulatory violations in connection with such activity. These and other ongoing or proposed studies could spur initiatives to further regulate hydraulic fracturing and other aspects of the oil and gas industry.

In addition, legislation has been proposed, but not enacted, and may be proposed in the future, in the U.S. Congress to require the disclosure of chemicals used by the oil and gas industry in the hydraulic fracturing process, which could make it easier for third parties opposing the hydraulic fracturing process to initiate legal proceedings based on allegations that specific chemicals used in the fracturing process are impairing ground water or causing other damage. These bills, if enacted, could establish an additional level of regulation at the federal or state level that could limit or delay operational activities or increase operating costs and could result in additional regulatory burdens that could make it more difficult to perform or limit hydraulic fracturing and increase our costs of compliance and doing business.

Regulatory efforts at the federal level and in many states have been initiated to require or make more stringent the permitting and compliance requirements for hydraulic fracturing operations. These regulatory initiatives could each spur further action toward federal and/or state legislation and regulation of hydraulic fracturing activities. Certain states where we operate have adopted or are considering disclosure legislation and/or regulations, including a variety of well construction, set back and disclosure regulations limiting how fracturing can be performed and requiring various degrees of chemical disclosure.

Some parties believe that there is a correlation between hydraulic fracturing and other oilfield related activities and the increased occurrence of seismic activity. When caused by human activity, such seismic activity is called induced seismicity. The extent of this correlation, if any, is the subject of studies of both state and federal agencies. In light of concerns about induced seismicity, some state regulatory agencies have modified their regulations or issued orders to address induced seismicity.

Finally, several jurisdictions have taken steps to enact hydraulic fracturing bans, moratoria or increased regulations on hydraulic fracturing practices. These actions have been the subject of legal challenges.

The full impact of the foregoing actions remains unclear, but the adoption of any future federal, state, foreign, regional or local laws that impact permitting requirements for, result in reporting obligations on, or otherwise limit or ban, the hydraulic fracturing process could restrict our ability, or make it more difficult, to perform hydraulic fracturing and could increase our costs of compliance and doing business and reduce demand for our services. Regulation that significantly restricts or prohibits hydraulic fracturing could have a material adverse impact on our business, financial condition, cash flows and results of operations. Additionally, the adoption of significant

restrictions or a prohibition on hydraulic fracturing by a state, region or locality could result in a surplus of oilfield equipment in other states, regions or localities where hydraulic fracturing remains allowed.

Our and Our Customers' Operations are Subject to a Number of Risks Arising Out of the Threat of Climate Change That Could Result in Increased Operating and Capital Costs, Limit the Areas in Which Oil and Natural Gas Production May Occur and Reduce Demand for Our Services.

The physical and regulatory effects of climate change could have a negative impact on our operations, our customers' operations and the overall demand for our customers' products and, accordingly, our services. There is an increasing focus of local, state, regional, national and international regulatory bodies on GHG emissions and climate change issues. Legislation to regulate GHG emissions has periodically been introduced in the U.S. Congress, and there has been a wide-ranging policy debate, both in the United States and internationally, regarding the impact of these gases and possible means for their regulation. These efforts have included consideration of cap-and-trade programs, carbon taxes, GHG reporting, tracking programs, attestation requirements and regulations that directly limit GHG emissions from certain sources. Some of the proposals would require industries to meet stringent new standards that would require substantial reductions in carbon emissions. Those reductions could be costly and difficult to implement. In the absence of federal GHG-limiting legislation, the EPA has determined that GHG emissions present a danger to public health and the environment and has adopted regulations that, among other things, establish construction and operating permit reviews for GHG emissions from certain large stationary sources, require the monitoring and annual reporting of GHG emissions from certain oil and natural gas system sources, implement CAA emission standards directing the reduction of methane emissions from certain new, modified, or reconstructed facilities in the oil and natural gas sector, and together with the DOT, implement GHG emissions limits on vehicles manufactured for operation in the United States.

The United States is currently a member of the Paris Agreement, which requires countries to review and "represent a progression" in their nationally determined contributions, which set emissions reduction goals, every five years. Under the Paris Agreement, the Biden Administration has committed the United States to reducing its greenhouse gas emissions by 50-52% from 2005 levels by 2030. In November 2021, the United States and other countries entered into the Glasgow Climate Pact, which includes a range of measures designed to address climate change, including but not limited to the phase-out of fossil fuel subsidies, reducing methane emissions 30% by 2030, and cooperating toward the advancement of the development of clean energy. 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.

Governmental, scientific, and public concern over the threat of climate change arising from GHG emissions has resulted in increasing political risks in the United States. President Biden and the Democratic Party have identified climate change as a priority, and it is likely that additional executive orders and/or regulatory action targeting greenhouse gas emissions, or prohibiting or restricting oil and gas development activities in certain areas, will be proposed and/or promulgated during the Biden Administration. In 2021, President Biden issued an executive order imposing 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 greenhouse gas 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. Although a federal judge for the U.S. District Court of the Western District of Louisiana issued a permanent injunction in 13 states that filed a lawsuit against the pause of oil and natural gas leasing on public lands or in offshore waters, the Biden Administration may take other regulatory steps in the future that could impact our operations. Other actions impacting oil and natural gas production activities that could be pursued by the Biden administration may include more restrictive requirements for the establishment of pipeline infrastructure or the permitting of liquified natural gas export facilities.

It is not possible at this time to predict the timing and effects of climate change or whether additional climate-related legislation, regulations or other measures will be adopted at the local, state, regional, national and international levels. However, continued efforts by governments and non-governmental organizations to reduce GHG emissions appear likely, and additional legislation, regulation or other measures that control or limit GHG emissions or otherwise seek to address climate change could adversely affect our business. The cost of complying with any new law, regulation or treaty will depend on the details of the particular program. We will continue to monitor and assess any new policies, legislation or regulations in the areas where we operate to determine the impact of GHG emissions and climate change on our operations and take appropriate actions, where necessary. Any direct and indirect costs of meeting these requirements may adversely affect our business, results of operations and financial condition. Because our business depends on the level of activity in the oil and natural gas industry, existing or future laws or regulations related to GHGs and climate change, including incentives to conserve energy or use alternative energy sources, could have a negative impact on our business if such laws or regulations increase compliance costs, add operating restrictions, or reduce demand for our customers' products and, accordingly, our services.

Increasing attention to the risks of climate change has resulted in an increased possibility of lawsuits or investigations brought by public and private entities against oil and natural gas companies in connection with their GHG emissions. Should we be targeted by any

such litigation or investigations, we may incur liability, which, to the extent that societal pressures or political or other factors are involved, could be imposed without regard to the causation of or contribution to the asserted damage, or to other mitigating factors.

These political, litigation, and financial risks may result in our customers restricting or cancelling production activities, incurring liability for infrastructure damage as a result of climatic changes, or impairing their ability to continue to operate in an economic manner, which also could reduce demand for our products and services. One or more of these developments could have a material adverse effect on our business, financial condition, cash flows and results of operations. Finally, 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 and our customers' facilities and operations.

Environmental and Occupational Health and Safety Laws and Regulations, Including Violations Thereof, Could Materially Adversely Affect Our Operating Results.

Our business is subject to numerous federal, state, foreign, regional and local laws, rules and regulations governing the discharge of substances into the environment, protection of the environment and worker health and safety, including, without limitation, laws concerning the containment and disposal of hazardous substances, oil field waste and other waste materials, the use of underground storage tanks, and the use of underground injection wells. The cost of compliance with these laws and regulations could be substantial. A failure to comply with these requirements could expose us to:

- substantial civil, criminal and/or administrative penalties or judgments,
- modification, denial or revocation of permits or other authorizations,
- imposition of limitations on our operations, and
- performance of site investigatory, remedial or other corrective actions.

In addition, environmental laws and regulations in the places that we operate impose a variety of requirements on "responsible parties" related to the prevention of spills and liability for damages from such spills. As an owner and operator of land-based drilling rigs and pressure pumping equipment, a manufacturer and servicer of equipment and automation to the energy, marine and mining industries and a provider of directional drilling and other services, we may be deemed to be a responsible party under these laws and regulations.

Technology Disputes Could Negatively Impact Our Operations or Increase Our Costs.

Our services and products use proprietary technology and equipment, which can involve potential infringement of a third party's rights, or a third party's infringement of our rights, including patent rights. The majority of the intellectual property rights relating to our drilling rigs, pressure pumping equipment and directional drilling services are owned by us or certain of our supplying vendors. However, in the event that we or one of our customers or supplying vendors becomes involved in a dispute over infringement of intellectual property rights relating to equipment or technology owned or used by us, services performed by us or products provided by us, we may lose access to important equipment or technology or our ability to provide services or products, or we could be required to cease use of some equipment or technology or forced to modify our equipment, technology, services or products. We could also be required to pay license fees or royalties for the use of equipment or technology or provision of services or products. In addition, we may lose a competitive advantage in the event we are unsuccessful in enforcing our rights against third parties. Regardless of the merits, any such claims may result in significant legal and other costs, including reputational harm, and may distract management from running our business. Some of our competitors and current and potential vendors have a substantial amount of intellectual property related to new equipment and technologies. We cannot guarantee that our equipment, technology, services or products will not be determined to infringe currently issued or future issued patents or other intellectual property rights belonging to others, including, without limitation, situations in which our equipment, technology, services or products may be covered by patent applications filed by other parties. Technology disputes involving us or our customers or supplying vendors could have a material adverse impact on our business, financial condition, cash flows and results of operations.

The Design, Manufacture, Sale and Servicing of Products, including Electrical Controls, May Subject Us to Liability for Personal Injury, Property Damage and Environmental Contamination Should Such Equipment Fail to Perform to Specifications.

We provide products, including electrical controls, to customers involved in oil and gas exploration, development and production and in the marine and mining industries. Because of applications that use our products and services, a failure of such equipment, or a failure of our customer to maintain or operate the equipment properly, could cause harm to our reputation, contractual and warrantyrelated liability, damage to the equipment, damage to the property of customers and others, personal injury and environmental contamination, leading to claims against us.

Legal Proceedings and Governmental Investigations Could Have a Negative Impact on Our Business, Financial Condition and Results of Operations.

The nature of our business makes us susceptible to legal proceedings and governmental investigations from time to time. In addition, during periods of depressed market conditions, we may be subject to an increased risk of our customers, vendors, current and former employees and others initiating legal proceedings against us. Lawsuits or claims against us could have a material adverse effect on our business, financial condition and results of operations. Any legal proceedings or claims, even if fully indemnified or insured, could negatively affect our reputation among our customers and the public, and make it more difficult for us to compete effectively or obtain adequate insurance in the future. Please see "Our Operations Are Subject to a Number of Operational Risks, Including Environmental and Weather Risks, Which Could Expose Us to Significant Losses and Damage Claims. We Are Not Fully Insured Against All of These Risks and Our Contractual Indemnity Provisions May Not Fully Protect Us."

Political, Economic and Social Instability Risk and Laws Associated with Conducting International Operations Could Adversely Affect Our Opportunities and Future Business.

We provide contract drilling services in Colombia, we sell products, including electrical controls, for use in numerous oil and gas producing regions outside of North America, and through our Superior QC business, we occasionally provide remote data analytics and other services to customers to support their operations outside of the United States. We also continue to evaluate opportunities from time to time to provide our services outside of the United States. International operations are subject to certain political, economic and other uncertainties generally not encountered in U.S. operations, including increased risks of social and political unrest, changing political conditions and changing laws and policies affecting trade and investment, strikes, work stoppages, labor disputes and other slowdowns, terrorism, war, kidnapping of employees, blockades, regional economic downturns, nationalization, forced negotiation or modification of contracts, difficulty resolving disputes and enforcing contractual rights, difficulty in collecting international accounts receivable, potentially longer payment cycles, expropriation of equipment as well as expropriation of oil and gas exploration and drilling rights, foreign taxation and customs regulations, the overlap of different tax structures, changes in taxation policies, foreign exchange restrictions and restrictions on repatriation of income and capital, currency rate fluctuations, increased governmental ownership and regulation of the economy and industry in the markets in which we may operate, economic and financial instability of national oil companies, and restrictive governmental regulation, bureaucratic delays and general hazards associated with foreign sovereignty over certain areas in which operations are conducted.

There can be no assurance that there will not be changes in local laws, regulations and administrative requirements, or the interpretation thereof, which could have a material adverse effect on the cost of entry into international markets, the profitability of international operations or the ability to continue those operations in certain areas. Because of the impact of local laws, any future international operations in certain areas may be conducted through entities in which local citizens own interests and through entities (including joint ventures) in which we hold only a minority interest or pursuant to arrangements under which we conduct operations under contract to local entities. While we believe that neither operating through such entities nor pursuant to such arrangements would have a material adverse effect on our operations or revenues, there can be no assurance that we will in all cases be able to structure or restructure our operations to conform to local law (or the administration thereof) on terms we find acceptable. Additionally, we may be subject to foreign governmental regulations favoring or requiring the awarding of contracts to local contractors or requiring foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. These regulations could adversely affect our ability to compete.

There can be no assurance that we will:

- identify attractive opportunities in international markets,
- have sufficient capital resources to pursue and consummate international opportunities,
- successfully integrate international drilling and completion operations or other assets or businesses,
- effectively manage the start-up, development and growth of an international organization and assets,
- · hire, attract and retain the personnel necessary to successfully conduct international operations, or
- receive awards for work and successfully improve our financial condition, results of operations, business or prospects as a result
 of the entry into one or more international markets.

In addition, the U.S. Foreign Corrupt Practices Act ("FCPA") and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business. Some parts of the world where our services could be provided or where our consumers for products are located have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practice and could impact business. Any failure to comply with the FCPA or other anti-bribery legislation could subject to us to civil, criminal and/or administrative penalties or other sanctions, which could have a material adverse impact on our business, financial condition and results of operation. In addition, investors could negatively view potential violations, inquiries or allegations of misconduct under the FCPA or similar laws, which could adversely affect our reputation and the market for our shares. We could also face fines, sanctions and other penalties from authorities in the relevant foreign jurisdictions, including prohibition of our participating in or curtailment of business operations in those jurisdictions and the seizure of drilling rigs, pressure pumping equipment or other assets.

Many countries, including the United States, control the import and export of certain goods, services and technology and impose related import and export recordkeeping and reporting obligations. Governments also may impose economic sanctions against certain countries, persons and other entities that may restrict or prohibit transactions involving such countries, persons and entities. In particular, U.S. sanctions are targeted against certain countries that are heavily involved in the oil and gas industry. The laws and regulations concerning import and export activity, recordkeeping and reporting, including customs, export controls and economic sanctions, are complex and constantly changing. Any failure to comply with applicable legal or regulatory requirements governing international trade could also result in criminal and civil penalties and sanctions, such as fines, imprisonment, debarment from government contracts, seizure of shipments and loss of import and export privileges.

We may incur substantial indebtedness to finance an international transaction or operations, and we also may issue equity, convertible or debt securities in connection with any such transactions or operations. Debt service requirements could represent a significant burden on our results of operations and financial condition, and the issuance of additional equity or convertible securities could be dilutive to existing stockholders. Also, international expansion could strain our management, operations, employees and other resources.

The occurrence of one or more events arising from the types of risks described above could have a material adverse impact on our business, financial condition and results of operations.

Financial Risks

Investor Sentiment and Public Perception Related to the Oil and Natural Gas Industry and to ESG Initiatives could Increase our Costs of Capital and our Reporting Requirements and Impact Our Operations.

There are increasing financial risks for oil and natural gas producers, as stockholders and bondholders currently invested in oil and natural gas companies and concerned about the potential effects of climate change, ESG and other sustainability-related issues may elect in the future to shift some or all of their investments into non-fossil fuel energy related sectors, or into competitors who are perceived to have stronger ESG practices and disclosures. Our ESG practices and disclosures may not satisfy investor requirements or their requirements may not be made known to us. We may continue to face increasing pressure regarding our ESG practices and disclosures, which pressures have intensified recently in connection with significant societal events and worldwide efforts to mitigate climate change.

We have developed, and will continue to develop, goals and other objectives related to ESG and sustainability matters. Statements related to these goals and objectives reflect our current plans and do not constitute a guarantee that they will be achieved. Our ability to achieve any stated goal or objective is subject to numerous factors and conditions, some of which are outside of our control. Our efforts to accurately report on ESG and sustainability matters, including our efforts to research, establish, accomplish and accurately report on goals and objectives, expose us to numerous operational, reputational, financial, legal, and other risks. Standards for tracking and reporting on ESG and sustainability matters, including climate-related matters, have not been harmonized and continue to evolve. Our processes and controls for reporting on ESG and sustainability matters, including our goals and objectives, may not always comply with evolving and disparate standards for identifying, measuring, and reporting such metrics, including any climate change and sustainability-related public company disclosure requirements adopted by the SEC, and such standards may change over time, which could result in significant revisions to our current ESG practices and disclosures.

The lending and investment practices of institutional lenders and investors have been the subject of intensive lobbying efforts in recent years, oftentimes public in nature, not to provide funding for oil and natural gas producers, and some lenders and insurers have announced that they will not lend to or provide insurance for oil and natural gas companies. Limitation of investments in and financings for oil and natural gas could result in the restriction, delay, or cancellation of drilling and completion programs or development of production activities. An increasing number of our customers consider sustainability factors in awarding work. If we are unable to meet the ESG standards or investment criteria set by our customers, investors and other parties, which continue to evolve, if we are unable to successfully continue our sustainability enhancement efforts, or if, notwithstanding our own efforts, our industry becomes the focus of increasing ESG and sustainability related pressures, we may lose customers, we may lose investors, our cost of capital may increase,

our stock price may be negatively impacted, our reputation may be negatively affected, and it may be more difficult for us to effectively compete.

Variable Rate Indebtedness Subjects Us to Interest Rate Risk, Which Could Cause Our Debt Service Obligations to Increase Significantly.

We have in place a committed senior unsecured credit facility that includes a revolving credit facility. Interest is paid on the outstanding principal amount of borrowings under the credit facility at a floating rate based on, at our election, the SOFR rate or base rate. The applicable margin on SOFR rate loans varies from 1.00% to 2.00% and the applicable margin on base rate loans varies from 0.00% to 1.00%, in each case determined based upon our credit rating. As of December 31, 2022, the applicable margin on SOFR rate loans was 0.75%. As of December 31, 2022, we had no borrowings outstanding under our revolving credit facility.

We also have in place a reimbursement agreement pursuant to which we are required to reimburse the issuing bank on demand for any amounts that it has disbursed under any of our letters of credit issued thereunder. We are obligated to pay the issuing bank interest on all amounts not paid by us on the date of demand or when otherwise due at the LIBOR rate plus 2.25% per annum. As of December 31, 2022, no amounts had been disbursed under any letters of credit, and we had \$65.0 million in letters of credit outstanding under the reimbursement agreement.

Interest rates could rise for various reasons in the future and increase our total interest expense, depending upon the amounts borrowed at floating rates under these agreements or under future agreements.

A Downgrade in Our Credit Rating Could Negatively Impact Our Cost of and Ability to Access Capital.

Our ability to access capital markets or to otherwise obtain sufficient financing is enhanced by our senior unsecured debt ratings as provided by major U.S. credit rating agencies. Factors that may impact our credit ratings include debt levels, liquidity, asset quality, cost structure, commodity pricing levels, industry conditions and other considerations. A ratings downgrade could adversely impact our ability in the future to access debt markets, increase the cost of future debt, and potentially require us to post letters of credit for certain obligations.

Our Ability to Access Capital Markets Could be Limited.

From time to time, we may need to access capital markets to obtain financing. Our ability to access capital markets for financing could be limited by oil and gas prices, our existing capital structure, our credit ratings, the state of the economy, the health or market perceptions of the drilling and overall oil and gas industry, the liquidity of the capital markets and ESG considerations and other factors. Many of the factors that affect our ability to access capital markets are outside of our control. No assurance can be given that we will be able to access capital markets on terms acceptable to us when required to do so, which could have a material adverse impact on our business, financial condition and results of operations.

We May Not Be Able to Generate Sufficient Cash to Service All of Our Debt and We May Be Forced to Take Other Actions to Satisfy Our Obligations Under Our Debt, which May Not Be Successful.

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial and operating performance, including the ability of our subsidiaries to generate sufficient cash flows, which is subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We cannot assure you that we will maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

In addition, if our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay capital expenditures, sell assets or operations, seek additional capital or restructure or refinance our debt. We cannot assure you that we would be able to take any of these actions, that these actions would be successful and would permit us to meet our scheduled debt service obligations or that these actions would be permitted under the terms of our existing or future debt agreements. In the absence of such cash flows and capital resources, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. However, our debt agreements contain restrictions on our ability to dispose of assets. We may not be able to consummate those dispositions, and any proceeds may not be adequate to meet any debt service obligations then due.

Our Return of Capital to Stockholders, Including Through the Payment of Dividends and Repurchases of our Common Stock, is within the Discretion of our Board of Directors, and There is No Guarantee That We Will Return Capital to Shareholders, Including Through the Payment of Dividends and Repurchases of our Common Stock, in the Future or at Levels Anticipated by our Stockholders.

Although we currently plan to return capital to stockholders, the amount and timing of returns of capital to stockholders may vary from time to time. The amount and timing of all returns of capital, including future dividend payments and purchases pursuant to our stock buyback program, if any, are subject to the discretion of the Board of Directors and will depend upon business conditions, results of operations, financial condition, terms of our debt agreements and other factors. Our Board of Directors may, without advance notice, reduce or suspend our dividend or limit, suspend or terminate our stock repurchase program. There can be no assurance that we will pay a dividend or make repurchases of our common stock in the future. The payment of dividends and stock repurchases could diminish our cash reserves, which may impact our ability to meet our working capital needs, satisfy our debt obligations, make capital expenditures, grow and pursue strategic opportunities and acquisitions. In addition, any elimination of, or downward revision in, our stock buyback program or dividend payments could have an adverse effect on the market price of our common stock.

Risks Related to Our Common Stock and Corporate Structure

The Market Price of Our Common Stock May Be Highly Volatile, and Investors May Not Be Able to Resell Shares at or Above the Price Paid.

The trading price of our common stock may be volatile. Securities markets worldwide experience significant price and volume fluctuations. This market volatility, as well as other general economic, market or political conditions, could reduce the market price of our common stock in spite of our operating and/or financial performance. The following factors, in addition to other factors described in this "Risk Factors" section and elsewhere in this Report, may have a significant impact on the market price of our common stock:

- investor perception of us and the industry and markets in which we operate;
- general financial, domestic, international, economic, and market conditions, including overall fluctuations in the U.S. equity markets;
- increased focus by the investment community on sustainability practices at our company and in the oil and natural gas industry generally;
- changes in customer needs, expectations or trends and our ability to maintain relationships with key customers;
- our ability to implement our business strategy;
- changes in our capital structure, including the issuance of additional debt;
- public announcements (including the timing of these announcements) regarding our business, financial performance and prospects or new services or products, service or product enhancements, technological advances or strategic actions, such as acquisitions or divestitures, restructurings or significant contracts, by our competitors or us;
- trading activity in our stock, including portfolio transactions in our stock by us, our executive officers and directors, and significant stockholders or trading activity that results from the ordinary course rebalancing of stock indices in which we may be included;
- any elimination of, or downward revision in, our stock buyback program or dividend payments;
- short-interest in our common stock, which could be significant from time to time;
- our inclusion in, or removal from, any stock indices;
- changes in earnings estimates or buy/sell recommendations by securities analysts;
- whether or not we meet earnings estimates of securities analysts who follow us; and
- regulatory or legal developments in the United States and foreign countries where we operate.

Anti-takeover Measures in Our Charter Documents and Under State Law Could Discourage an Acquisition and Thereby Affect the Related Purchase Price.

We are a Delaware corporation subject to the Delaware General Corporation Law, including Section 203, an anti-takeover law. Our restated certificate of incorporation authorizes our Board of Directors to issue up to one million shares of preferred stock and to determine the price, rights (including voting rights), conversion ratios, preferences and privileges of that stock without further vote or action by the holders of the common stock. It also prohibits stockholders from acting by written consent without the holding of a meeting. In addition, our bylaws impose certain advance notification requirements as to business that can be brought by a stockholder before annual stockholder meetings and as to persons nominated as directors by a stockholder. As a result of these measures and others, potential acquirers might find it more difficult or be discouraged from attempting to effect an acquisition transaction with us. This may deprive holders of our securities of certain opportunities to sell or otherwise dispose of the securities at above-market prices pursuant to any such transactions.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties

Our property consists primarily of drilling rigs, pressure pumping equipment and related equipment. We own substantially all of the equipment used in our businesses.

Our corporate headquarters is in leased office space and is located at 10713 W. Sam Houston Parkway N., Suite 800, Houston, Texas, 77064. Our telephone number at that address is (281) 765-7100. Our primary administrative office, which is located in Snyder, Texas, is owned and includes approximately 37,000 square feet of office and storage space.

Contract Drilling — Our drilling services are supported by multiple offices and yard facilities located throughout our areas of operations, including Texas, Oklahoma, Colorado, North Dakota, Wyoming, Pennsylvania, Ohio, and internationally in Colombia.

Pressure Pumping — Our pressure pumping services are supported by multiple offices and yard facilities located in Texas and Pennsylvania.

Directional Drilling — Our directional drilling services are supported by multiple offices and yard facilities located throughout our areas of operations, including Texas, North Dakota, and Ohio.

Our oilfield rental operations are supported by offices and yard facilities located in Texas, Oklahoma and Ohio. Our servicing of equipment for drilling contractors is supported by offices and yard facilities located in Texas. Our electrical controls and automation operation is supported by an office and yard facility in Texas. Our interests in oil and natural gas properties are primarily located in Texas and New Mexico.

We own our administrative offices in Snyder, Texas, as well as several other facilities. We also lease a number of facilities, and we do not believe that any one of the owned or leased facilities is individually material to our operations. We believe that our existing facilities are suitable and adequate to meet our needs.

We incorporate by reference in response to this item the information set forth in Item 1 of this Report and the information set forth in Note 6 of the Notes to Consolidated Financial Statements included in Item 8 of this Report.

Item 3. Legal Proceedings.

We are party to various legal proceedings arising in the normal course of our business. We do not believe that the outcome of these proceedings, either individually or in the aggregate, will have a material adverse effect on our financial condition, cash flows and results of operations.

Item 4. Mine Safety Disclosure.

Not applicable.

PART II

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

(a) Market Information

Our common stock, par value \$0.01 per share, is publicly traded on the Nasdaq Global Select Market and is quoted under the symbol "PTEN." Our common stock is included in the S&P SmallCap 600 Index and several other market indices.

(b) Holders

As of February 9, 2023, there were approximately 800 holders of record of our common stock.

(c) Dividends

On February 8, 2023, our Board of Directors approved a cash dividend on our common stock in the amount of \$0.08 per share to be paid on March 16, 2023 to holders of record as of March 2, 2023. The amount and timing of all future dividend payments, if any, are subject to the discretion of the Board of Directors and will depend upon business conditions, results of operations, financial condition, terms of our debt agreements and other factors. Our Board of Directors may, without advance notice, reduce or suspend our dividend in order to improve our financial flexibility and position our company for long-term success. There can be no assurance that we will pay a dividend in the future.

(d) Issuer Purchases of Equity Securities

The table below sets forth the information with respect to purchases of our common stock made by us during the quarter ended December 31, 2022.

	Total Number of	erage Price Paid per	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or	Dol Sł M P Und	proximate lar Value of lares That (ay Yet Be urchased ler the Plans Programs (in
Period Covered	Shares Purchased (1)	 Share	Programs		ousands) (2)
October 2022		\$ _		\$	300,000
November 2022	2,247,013	\$ 18.08	2,247,013	\$	259,380
December 2022	1,007,586	\$ 16.43	1,007,586	\$	242,827
Total	3,254,599		3,254,599		

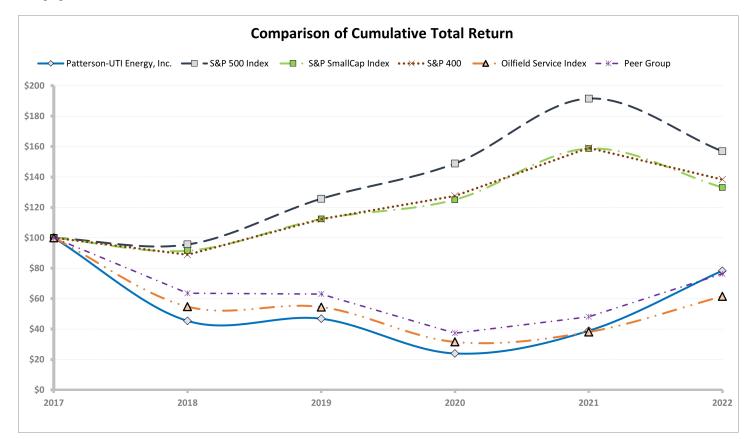
⁽¹⁾ No shares were withheld in the fourth quarter with respect to employees' tax withholding obligations upon the vesting of restricted stock units.

(2) We have a stock buyback program, which was originally approved by our Board of Directors on September 9, 2013. Our Board of Directors most recently approved an increase of the authorization under the stock buyback program on October 26, 2022. Under the program, we are authorized to repurchase up to \$300 million of our common stock in open market or privately negotiated transactions after October 26, 2022. All purchases executed to date have been through open market transactions. Purchases under the program are made at management's discretion, at prevailing prices, subject to market conditions and other factors. Purchases may be made at any time without prior notice. Shares of stock purchased under the buyback program are held as treasury shares. There is no expiration date associated with the buyback program.

(e) Performance Graph

The following graph compares the cumulative stockholder return of our common stock for the period from December 31, 2017 through December 31, 2022, with the cumulative total return of the S&P 500 Index, the S&P SmallCap 600 Index and the Oilfield Service Index. The graph also shows our previous company-determined 2021 peer group, which consisted of Archrock, Inc., Bristow Group Inc., Cactus, Inc., ChampionX Corp., EQT Corporation, Helix Energy Solutions Group, Inc., Helmerich & Payne, Inc., Liberty Oilfield Services, Inc., Nabors Industries Ltd., NexTier Oilfield Solutions, Inc., NOV Inc., Oceaneering International, Inc., Oil States International, Inc., PDC Energy, Inc., Precision Drilling Corporation, Range Resources Corporation, TechnipFMC Plc. and Transocean Ltd. We elected to replace our previous peer group with the Oilfield Service Index to improve consistency of disclosures between reporting periods.

The graph assumes investment of \$100 on December 31, 2017 and reinvestment of all dividends.



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	Fiscal Year Ended December 31,							
	2017	2018	2019	2020	2021	2022		
Company/Index	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
Patterson-UTI Energy, Inc.	100.00	45.37	46.77	23.94	38.85	78.35		
S&P 500 Index	100.00	95.62	125.72	148.85	191.58	156.88		
S&P SmallCap 600 Index	100.00	91.52	112.37	125.05	158.59	133.06		
Oilfield Service Index	100.00	54.78	54.48	31.56	38.10	61.53		
Old Peer Group Index	100.00	63.49	63.03	37.28	48.05	76.33		

The foregoing graph is based on historical data and is not necessarily indicative of future performance. This graph shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulations 14A or 14C under the Exchange Act or to the liabilities of Section 18 under such Act.

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

Management Overview and Recent Developments in Market Conditions — We are a Houston, Texas-based oilfield services company that primarily owns and operates one of the largest fleets of land-based drilling rigs in the United States and a large fleet of pressure pumping equipment.

Our contract drilling business operates in the continental United States and internationally in Colombia and, from time to time, we pursue contract drilling opportunities in other select markets. Our pressure pumping business operates primarily in Texas and the Appalachian region. We also provide a comprehensive suite of directional drilling services in most major producing onshore oil and gas basins in the United States, and we provide services that improve the statistical accuracy of directional and horizontal wellbores. We have other operations through which we provide oilfield rental tools in select markets in the United States. We also service equipment for drilling contractors, and we provide electrical controls and automation to the energy, marine and mining industries, in North America and other select markets. In addition, we own and invest, as a non-operating working interest owner, in oil and natural gas assets that are primarily located in Texas and New Mexico.

Reduced demand for crude oil and refined products related to the COVID-19 pandemic led to a significant reduction in crude oil prices and demand for drilling and completion services in 2020 and early 2021. However, market fundamentals are now strong, as demand increased for drilling and completions equipment and services in 2022, and industry supply of Tier-1, super-spec rigs and premium pressure pumping equipment remains constrained. We expect our rig count in the United States will average 130 rigs in the first quarter and then grow modestly throughout the remainder of 2023. The current demand for equipment and services and strong pricing environment remain dependent on macro conditions, including commodity prices, geopolitical environment, inflationary pressures, economic conditions in the United States and elsewhere, response to the COVID-19 pandemic (including any resurgences and/or lockdowns in the United States and abroad) and continued focus by exploration and production companies and service companies on capital discipline. Oil prices averaged \$82.79 per barrel in the fourth quarter of 2022 and closed at \$77.97 per barrel on January 30, 2023. Natural gas prices (based on the Henry Hub Spot Market Price) averaged \$5.55 per MMBtu in the fourth quarter of 2022 and closed at \$2.82 per MMBtu on January 30, 2023.

Quarterly average oil prices and our quarterly average number of rigs operating in the United States for 2020, 2021 and 2022 are as follows:

0	1		2 nd Quarter		•		4 th Quarter
			Quarter		Quarter		Quarter
\$	45.76	\$	27.81	\$	40.89	\$	42.45
	123		82		60		62
\$	57.79	\$	66.09	\$	70.62	\$	77.45
	69		73		80		106
\$	94.45	\$	108.72	\$	93.18	\$	82.79
	115		121		128		131
	Q \$ \$	Quarter \$ 45.76 123 123 \$ 57.79 69 94.45	Quarter \$ 45.76 \$ 123 \$ \$ 57.79 \$ 69 \$ \$ 94.45 \$	Quarter Quarter \$ 45.76 \$ 27.81 123 82 \$ 57.79 \$ 66.09 69 73 \$ 94.45 \$ 108.72	Quarter Quarter \$ 45.76 \$ 27.81 \$ 123 82 \$ 57.79 \$ 66.09 69 73 \$ 94.45 \$ 108.72	Quarter Quarter Quarter Quarter \$ 45.76 \$ 27.81 \$ 40.89 123 82 60 \$ 57.79 \$ 66.09 \$ 70.62 69 73 80 \$ 94.45 \$ 108.72 \$ 93.18	Quarter Quarter Quarter \$ 45.76 \$ 27.81 \$ 40.89 \$ 123 82 60 \$ \$ 57.79 \$ 66.09 \$ 70.62 \$ 69 73 80 \$ \$ 94.45 \$ 108.72 \$ 93.18 \$

⁽¹⁾ The average oil price represents the average monthly WTI spot price as reported by the United States Energy Information Administration.

⁽²⁾ A rig is considered to be operating if it is earning revenue pursuant to a contract on a given day.

Our average active U.S. rig count for the fourth quarter of 2022 was 131 rigs. This was an increase from our average active rig count for the third quarter of 2022 of 128 rigs. Our active U.S. rig count at December 31, 2022 of 132 rigs was more than the rig count of 111 rigs at December 31, 2021, due in large part to the recovery of oil prices and improved demand for drilling services in the United States. Term contracts help support our operating rig count. Based on contracts currently in place in the United States, we expect an average of 87 rigs operating under term contracts during the first quarter of 2023 and an average of 56 rigs operating under term contracts during 2023.

Our average active spread count was 12 in the fourth quarter of 2022, consistent with the third quarter of 2022. We calculated average active spreads as the average number of spreads that were crewed and actively marketed during the period. We expect to average approximately 12 active spreads in the first quarter of 2023. Based on our outlook for 2023 activity, we currently expect to activate a 13th spread towards the end of 2023.

Due to improving activity levels, supply chain disruptions and increasing tightness in the overall labor market, we continue to see general oilfield cost inflation across our segments, including increases in the cost of labor, services and supplies. Supply chain disruptions and the increasing challenge of attracting and retaining employees are increasing the complexity of reactivating equipment. Pricing for our drilling and completion services increased in 2022 due in part to the limited supply of readily available, high-quality drilling and completion equipment.

Our 2023 capital expenditure forecast is approximately \$550 million.

Recent Developments in Financial Matters and Merger and Acquisition Activity — On October 1, 2021, we completed the acquisition of Pioneer by acquiring 100% of its equity interests. Total consideration for the acquisition included the issuance of approximately 26.3 million shares of our common stock and payment of \$30 million cash, which based on the closing price of our common stock of \$9.44 on October 1, 2021, valued the transaction at approximately \$278 million.

Pioneer provided land-based contract drilling services and production services to a diverse group of oil and gas exploration and production companies in the United States and internationally in Colombia. Through the Pioneer acquisition, we acquired Pioneer's 100% pad-capable drilling rig fleet consisting of 17 AC-powered rigs in the United States and eight SCR rigs in Colombia and production services assets consisting of 123 well servicing rigs and 72 wireline services units. The purchase price allocation was finalized in 2022. The measurement period adjustments did not have a material impact on our consolidated financial statements.

On December 31, 2021, we completed the sale of the acquired well servicing rig business and wireline business to Clearwell Dynamics, LLC. The sale price was \$43.0 million in cash consideration, subject to customary purchase price adjustments at closing for cash and working capital. The results of operations of these businesses were presented as a discontinued operation during the fourth quarter of 2021.

On November 9, 2022, we entered into Amendment No. 3 to Amended and Restated Credit Agreement ("Amendment No. 3"), which amended our Credit Agreement (as defined below), among us, as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender and each of the other letter of credit issuers and lenders party thereto.

Amendment No. 3, among other things, (i) revised the capacity under the letter of credit facility to \$100 million; (ii) revised the capacity under the swing line facility to the lesser of \$50 million and the amount of the swing line provider's unused commitment; (iii) changed the LIBOR reference rate to a SOFR reference rate; and (iv) extended the maturity date for \$416.7 million of revolving credit commitments of certain lenders under the Credit Agreement from March 27, 2025 to March 27, 2026. As a result, of the \$600 million of revolving credit commitments under the Credit Agreement, the maturity date for \$416.7 million of such commitments is March 27, 2026; the maturity date for \$133.3 million of such commitments is March 27, 2025; and the maturity date for the remaining \$50 million of such commitments is March 27, 2024.

As of December 31, 2022, we had no borrowings outstanding under our revolving credit facility. We had no letters of credit outstanding under the Credit Agreement at December 31, 2022 and, as a result, had available borrowing capacity of \$600 million at that date.

During the fourth quarter of 2022, we elected to repurchase portions of our 2028 Notes and 2029 Notes (as defined below) in the open market. The principal amounts retired through these transactions totaled \$21.0 million of our 2028 Notes and \$1.4 million of our 2029 Notes, plus accrued interest. We recorded corresponding gains on the extinguishment of these amounts totaling \$2.3 million and \$0.1 million, respectively, net of the proportional write-off of associated deferred financing costs and original issuance discounts. These gains are included in "Interest expense, net of amount capitalized" in our consolidated statements of operations.

Our revenues, profitability and cash flows are highly dependent upon prevailing prices for oil and natural gas and upon our customers' ability to access capital to fund their operating and capital expenditures. During periods of improved oil and natural gas prices, the capital spending budgets of oil and natural gas operators tend to expand, which generally results in increased demand for our services. Conversely, in periods when oil and natural gas prices are relatively low or when our customers have a reduced ability to access capital, the demand for our services generally weakens, and we experience downward pressure on pricing for our services. Even during periods of historically moderate or high prices for oil and natural gas, companies exploring for oil and natural gas may cancel or curtail programs or reduce their levels of capital expenditures for exploration and production for a variety of reasons, which could reduce demand for our services. We may also be impacted by delayed customer payments and payment defaults associated with customer liquidity issues and bankruptcies.

The North American oil and natural gas services industry is cyclical and at times experiences downturns in demand. During these periods, there has been substantially more oil and natural gas service equipment available than necessary to meet demand. As a result, oil and natural gas service contractors have had difficulty sustaining profit margins and, at times, have incurred losses during the

downturn periods. We cannot predict either the future level of demand for our oil and natural gas services or future conditions in the oil and natural gas service businesses.

In addition to the dependence on oil and natural gas prices and demand for our services, we are highly impacted by operational risks, competition, labor issues, weather, the availability, from time to time, of products used in our pressure pumping business, supplier delays and various other factors that could materially adversely affect our business, financial condition, cash flows and results of operations, including as a result of the COVID-19 pandemic. See "Risk Factors" in Item 1A of this Report.

For the three years ended December 31, 2022, our operating revenues and net income consisted of the following (dollars in thousands):

	2022	2021	2020
Contract drilling	\$1,316,672	49.7% \$ 664,030	48.9% \$ 669,126 59.5%
Pressure pumping	1,022,413	38.6% 523,756	38.6% 336,111 29.9%
Directional drilling	216,498	8.2% 111,481	8.2% 73,356 6.5%
Other	92,009	3.5% 57,814	4.3% 45,656 4.1%
	\$2,647,592	100.0% \$1,357,081	100.0% \$1,124,249 100.0%
Net income (loss)	\$ 154,658	\$ (654,545)	\$ (803,692)

Contract Drilling

We have addressed our customers' needs for drilling horizontal wells in shale and other unconventional resource plays by improving the capabilities of our drilling fleet. The U.S. land rig industry has in recent years referred to certain high specification rigs as "super-spec" rigs, which we consider to be at least a 1,500 horsepower, AC-powered rig that has at least a 750,000-pound hookload, a 7,500-psi circulating system, and is pad-capable. Due to evolving customer preferences, we refer to certain premium rigs as "Tier-1, super spec" rigs, which we consider as being a super-spec rig that also has a third mud pump and raised drawworks that allow for more clearance underneath the rig floor. As of December 31, 2022, our rig fleet included 172 super-spec rigs, of which 118 were Tier-1, super-spec rigs.

We maintain a backlog of commitments for contract drilling services under term contracts, which we define as contracts with a duration of six months or more. Our contract drilling backlog in the United States as of December 31, 2022 and 2021 was approximately \$830 million and \$325 million, respectively. Approximately 32% of the total contract drilling backlog in the United States at December 31, 2022 is reasonably expected to remain after 2023. See Note 3 of Notes to consolidated financial statements in Item 8 of this Report and "Item 1A. Risk Factors – Our Current Backlog of Contract Drilling Revenue May Decline and May Not Ultimately Be Realized, as Fixed-Term Contracts May in Certain Instances Be Terminated Without an Early Termination Payment."

Pressure Pumping

As of December 31, 2022, we had approximately 1.2 million horsepower in our pressure pumping fleet. We provide pressure pumping services to oil and natural gas operators primarily in Texas and the Appalachian region. Substantially all of the revenue in the pressure pumping segment is from well stimulation services, such as hydraulic fracturing, for completion of new wells and remedial work on existing wells. We also provide cementing services through the pressure pumping segment.

Directional Drilling

We provide a comprehensive suite of directional drilling services in most major producing onshore oil and gas basins in the United States. Our directional drilling services include directional drilling, measurement-while-drilling and supply and rental of downhole performance motors. We also provide services that improve the statistical accuracy of directional and horizontal wellbores.

Other Operations

Our oilfield rentals business, with a fleet of premium oilfield rental tools, along with the results of our ownership, as a non-operating working interest owner, in oil and gas assets located in Texas and New Mexico, provide the largest revenue contributions to our other operations. Other operations also includes the results of our electrical controls and automation business and the results of our drilling equipment service business.

Capital Expenditures

Cash capital expenditures for 2022 totaled \$437 million. This was an increase from the \$166 million of cash capital expenditures excluding discontinued operations for 2021, due largely to higher activity levels in 2022. Based on our current outlook for activity, we expect our capital expenditures for 2023 to be approximately \$550 million.

Comparison of the years ended December 31, 2021 and 2020

A discussion of our financial condition and results of operations for the fiscal year ended December 31, 2021 compared to the fiscal year ended December 31, 2020 is included in Part II, Item 7— "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on February 16, 2022.

Results of Operations

Comparison of the years ended December 31, 2022 and 2021

The following tables summarize results of operations by business segment for the years ended December 31, 2022 and 2021:

	Year Ended December 31,							
Contract Drilling		2022		2021	% Change			
			(Dolla	ars in thousands)				
Revenues	\$	1,316,672	\$	664,030	98.3%			
Direct operating costs		832,180		463,456	79.6%			
Adjusted gross margin ⁽¹⁾		484,492		200,574	141.6%			
Other operating (income) expenses, net		(34)		25	NA			
Selling, general and administrative		6,774		4,699	44.2%			
Depreciation, amortization and impairment		337,513		618,879	(45.5)%			
Operating income (loss)	\$	140,239	\$	(423,029)	NA			
Operating days - U.S. ⁽²⁾		45,216		29,960	50.9%			
Average revenue per operating day - U.S.	\$	27.57	\$	21.64	27.4%			
Average direct operating costs per operating day - U.S.	\$	17.32	\$	15.11	14.6%			
Average adjusted gross margin per operating day - U.S. ⁽³⁾	\$	10.25	\$	6.53	56.9%			
Average rigs operating - U.S. ⁽²⁾		124		82	50.9%			
Capital expenditures	\$	255,634	\$	109,894	132.6%			

(1) Adjusted gross margin is defined as revenues less direct operating costs (excluding depreciation, amortization and impairment expense). See Non-GAAP Financial Measures below for a reconciliation of GAAP gross margin to adjusted gross margin by segment.

⁽²⁾ A rig is considered to be operating if it is earning revenue pursuant to a contract on a given day. Average rigs operating is defined as operating days divided by the number of days in the period.

⁽³⁾ Average adjusted gross margin per operating day is defined as adjusted gross margin divided by operating days.

Generally, the revenues in our contract drilling segment are most impacted by two primary factors: our average number of rigs operating and our average revenue per operating day. Our average revenue per operating day is largely dependent on the pricing terms of our rig contracts. Revenues increased primarily due to an increase in operating days and improved pricing. Average revenue per operating day increased primarily due to improved pricing.

Direct operating costs increased due to an increase in operating days, increased reactivation costs and inflationary cost pressure on labor and supplies. Average direct operating costs per operating day increased primarily due to a lower portion of our rigs being on standby, increased reactivation costs and inflationary cost pressure beginning in the second half of 2021. Rigs on standby have very little associated cost.

Depreciation, amortization and impairment expense decreased primarily due to a \$220 million impairment charge related to the abandonment of 43 legacy non-super-spec rigs and equipment in 2021. Additionally, depreciation, amortization and impairment expense decreased partially due to a lower depreciable asset base during 2022 as a result of the impairment charge taken in 2021.

The increase in capital expenditures was primarily due to rig reactivations, higher maintenance capital expenditures and upgrading certain rig components.

	Year Ended December 31,					
Pressure Pumping		2022		2021	% Change	
			(Dolla	rs in thousands)		
Revenues	\$	1,022,413	\$	523,756	95.2%	
Direct operating costs		781,385		475,953	64.2%	
Adjusted gross margin (1)		241,028		47,803	404.2%	
Selling, general and administrative		8,763		7,361	19.0%	
Depreciation, amortization and impairment		98,162		159,305	(38.4)%	
Operating income (loss)	\$	134,103	\$	(118,863)	NA	
Average active spreads ⁽²⁾		12		8	44.6%	
Fracturing jobs		558		422	32.2%	
Other jobs		669		754	(11.3)%	
Total jobs		1,227		1,176	4.3%	
Average revenue per fracturing job	\$	1,799.97	\$	1,187.29	51.6%	
Average revenue per other job	\$	26.95	\$	30.13	(10.6)%	
Average revenue per total job	\$	833.26	\$	445.37	87.1%	
Average direct operating costs per total job	\$	636.83	\$	404.72	57.4%	
Average adjusted gross margin per total job (3)	\$	196.44	\$	40.65	383.2%	
Adjusted gross margin as a percentage of revenues ⁽³⁾		23.6%	ó	9.1%	159.3%	
Capital expenditures	\$	137,935	\$	34,676	297.8%	

(1) Adjusted gross margin is defined as revenues less direct operating costs (excluding depreciation, amortization and impairment expense). See Non-GAAP Financial Measures below for a reconciliation of GAAP gross margin to adjusted gross margin by segment.

⁽²⁾ Average active spreads is the average number of spreads that were crewed and actively marketed during the period.

(3) Average adjusted gross margin per total job is defined as adjusted gross margin divided by total jobs. Adjusted gross margin as a percentage of revenues is defined as adjusted gross margin divided by revenues.

Generally, the revenues in our pressure pumping segment are most impacted by the number and design of fracturing jobs (including whether or not we provide proppant and other materials). Direct operating costs are also most impacted by these same factors. Our average revenue per fracturing job is largely dependent on the pricing terms of our pressure pumping contracts and the design of the jobs.

Revenues increased primarily due to an increase in the number of higher revenue fracturing jobs, improved pricing and continued improvement in asset utilization and efficiency. Direct operating costs increased primarily due to an increase in the number of higher cost fracturing jobs as well as inflationary cost pressure on labor and supplies.

Our average revenue per total job increased primarily as a result of a shift in the mix of total jobs toward higher revenue fracturing jobs. Average revenue per fracturing job increased primarily due to improved pricing. Average direct operating costs per total job increased primarily as a result of a shift toward higher cost fracturing jobs as well as inflationary cost pressure on labor and supplies.

Depreciation, amortization and impairment expense decreased due to a lower depreciable asset base in 2022 partially as a result of a \$32.2 million impairment charge taken in 2021. This impairment charge was related to the abandonment of approximately 0.2 million horsepower within our pressure pumping fleet. Additionally, a portion of the decrease related to certain equipment that reached the end of its useful life during 2022. This decrease in 2022 outpaced incremental depreciation resulting from equipment additions in 2020 and 2021, when our capital expenditures were significantly lower.

The increase in capital expenditures was primarily due to costs associated with reactivating stacked equipment as well as upgrades and the increase in maintenance capital expenditures associated with a higher average number of active spreads.

	Year Ended December 31,				
Directional Drilling	2022		2021		% Change
Revenues	\$	216,498	\$	111,481	94.2%
Direct operating costs		179,135		101,628	76.3%
Adjusted gross margin (1)		37,363		9,853	279.2%
Selling, general and administrative		6,401		4,884	31.1%
Depreciation, amortization and impairment		15,428		40,270	(61.7)%
Operating income (loss)	\$	15,534	\$	(35,301)	NA
Capital expenditures	\$	16,598	\$	8,591	93.2%

(1) Adjusted gross margin is defined as revenues less direct operating costs (excluding depreciation, amortization and impairment expense). See Non-GAAP Financial Measures below for a reconciliation of GAAP gross margin to adjusted gross margin by segment.

Revenue increased primarily due to increased job activity and improved pricing. We averaged 44.6 jobs per day in 2022 as compared to 30.1 jobs per day in 2021.

Direct operating costs were higher by \$77.5 million, or 76.3%, primarily due to increased job activity and cost inflation.

Depreciation, amortization and impairment expense decreased due to a lower depreciable asset base in 2022 as a result of the abandonment of an \$11.4 million developed technology intangible asset and \$2.5 million of directional drilling equipment in 2021.

Capital expenditures increased due to higher levels of activity requiring premium equipment to meet market demands.

Other Operations	Year Ended December 31,								
Other Operations			2022		2021	% Change			
				(Dolla	ars in thousands)				
Revenues	9	\$	92,009	\$	57,814	59.1%			
Direct operating costs			53,850		40,911	31.6%			
Adjusted gross margin ⁽¹⁾	-		38,159		16,903	125.8%			
Selling, general and administrative			2,678		1,943	37.8%			
Depreciation, depletion, amortization and impairment			27,671		24,865	11.3%			
Operating income (loss)	•	\$	7,810	\$	(9,905)	NA			
Capital expenditures	(\$	25,504	\$	11,638	119.1%			

(1) Adjusted gross margin is defined as revenues less direct operating costs (excluding depreciation, depletion, amortization and impairment expense). See Non-GAAP Financial Measures below for a reconciliation of GAAP gross margin to adjusted gross margin by segment.

Revenue increased from 2021 primarily due to a \$17.7 million increase in our oilfield rentals business revenues due to higher service volumes and improved pricing as well as a \$13.5 million increase in our oil and natural gas revenues resulting from favorable crude oil market prices and increased production. Average WTI-Cushing prices in 2022 were \$94.90 per barrel as compared to \$68.14 per barrel in 2021.

Direct operating costs increased due to incremental production costs from our oil and natural gas assets as well as a higher service volume provided by our oilfield rentals business and cost inflation.

Depreciation, depletion, amortization and impairment increased primarily due to a \$4.5 million impairment in our oil and natural gas business in 2022.

The increase in capital expenditures was primarily related to incremental spending in our oilfield rentals and oil and natural gas businesses.

	Year Ended December 31,										
Corporate	_	2022		2021	% Change						
		(Dolla	rs in thousands)							
Selling, general and administrative	\$	91,973	\$	73,495	25.1%						
Merger and integration expenses	\$	2,069	\$	12,060	(82.8)%						
Depreciation	\$	5,171	\$	5,859	(11.7)%						
Other operating (income) expenses, net											
Net gain on asset disposals	\$	(12,075)	\$	(1,426)	746.8%						
Legal-related expenses and settlements, net of insurance reimbursements		(349)		762	NA						
Research and development		992		1,371	(27.6)%						
Other		(1,126)		31	NA						
Other operating expense (income), net	\$	(12,558)	\$	738	NA						
Credit loss expense	\$		\$	(1,500)	NA						
Interest income	\$	360	\$	222	62.2%						
Interest expense	\$	40,256	\$	41,978	(4.1)%						
Other expense	\$	(3,273)	\$	(275)	1,090.2%						
Capital expenditures	\$	1,126	\$	1,521	(26.0)%						

Selling, general and administrative expense increased primarily due to increased personnel costs as a result of higher headcount, wage growth and changes in stock-based compensation.

Merger and integration expenses were recognized in 2021 related to the Pioneer acquisition, which closed on October 1, 2021, and the subsequent divestiture of Pioneer's well servicing rig business and wireline business, which closed on December 31, 2021.

Other operating (income) expenses, net includes net gains associated with the disposal of assets. Accordingly, the related gains or losses have been excluded from the results of specific segments. The \$12.1 million gain on asset disposals in 2022 was primarily due to the release of an \$11.5 million cumulative translation adjustment from accumulated other comprehensive income into net income (loss) in our consolidated statements of operations upon substantially completing our exit from our Canadian operations. The majority of the net gain on asset disposals in 2021 reflect gains on disposals of buildings, land and drilling equipment.

The \$3.0 million change in other expense was primarily due to foreign currency adjustments related to our Colombian operations.

Interest expense was favorably impacted by a gain on debt extinguishment of \$2.5 million associated with the repurchase of portions of our 2028 Notes and 2029 Notes in 2022. Excluding the effects of the gain, interest expense would have increased by \$0.7 million, a 1.8% increase. Additionally, on December 30, 2021, we repaid the final \$50 million of borrowings under the 2019 Term Loan Agreement, and as a result had no remaining borrowings under the Term Loan Agreement as of December 31, 2021. Accordingly, we did not incur interest expense related to the Term Loan Agreement in 2022.

Income Taxes

The effective tax rate decreased by approximately 0.8% to 7.9% for 2022 compared to 8.7% for 2021. Our effective income tax rate fluctuates based on, among other factors, changes in pre-tax income in countries with varying statutory tax rates, changes in valuation allowances, and the impacts of various other permanent adjustments.

The ability to recognize a portion of our U.S. federal and state net operating losses resulted in a significant impact, through changes in valuation allowances, in our effective tax rate for the year ended December 31, 2022. This benefit was partly offset by state and local income taxes and various other permanent adjustments.

We continue to monitor income tax developments in the United States and other countries where we have legal entities. We will incorporate into our future financial statements the impacts, if any, of future regulations and additional authoritative guidance when finalized.

Liquidity and Capital Resources

Our primary sources of liquidity are cash and cash equivalents, availability under our revolving credit facility and cash provided by operating activities. As of December 31, 2022, we had approximately \$278 million in working capital, including \$138 million of cash and cash equivalents, and approximately \$600 million available under our revolving credit facility.

We have an amended and restated credit agreement (as amended, the "Credit Agreement"), which is a committed senior unsecured revolving credit facility that permits aggregate borrowings of up to \$600 million, including a letter of credit facility that, at any time outstanding, is limited to \$100 million and a swing line facility that, at any time outstanding, is limited to \$100 million and a swing line facility that, at any time outstanding, is limited to, the lesser of \$50 million and the amount of the swing line provider's unused commitment. As of December 31, 2022, we had no borrowings outstanding under our revolving credit facility, and no letters of credit outstanding under the Credit Agreement and, as a result, had available borrowing capacity of approximately \$600 million at that date. Of the revolving credit commitments, \$50 million expires on March 27, 2025, and the remaining \$416.7 million expires on March 27, 2026. Subject to customary conditions, we may request that the lenders' aggregate commitments be increased by up to \$300 million, not to exceed total commitments of \$900 million. Additionally, we have the option, subject to certain conditions, to exercise one one-year extension of the maturity date.

Loans under the Credit Agreement bear interest by reference, at our election, to the SOFR rate or base rate, as described in "Item 7A" below. If our credit rating is below investment grade at both Moody's and S&P, we will become subject to a restricted payment covenant. The Credit Agreement also contains a financial covenant that requires our total debt to capitalization ratio, expressed as a percentage, not exceed 50%.

We also have a Reimbursement Agreement (the "Reimbursement Agreement") with The Bank of Nova Scotia ("Scotiabank"), pursuant to which we may from time to time request that Scotiabank issue an unspecified amount of letters of credit. Under the terms of the Reimbursement Agreement, we will reimburse Scotiabank on demand for any amounts that Scotiabank has disbursed under any

letters of credit. Fees, charges and other reasonable expenses for the issuance of letters of credit are payable by us at the time of issuance at such rates and amounts as are in accordance with Scotiabank's prevailing practice. We are obligated to pay to Scotiabank interest on all amounts not paid by us on the date of demand or when otherwise due at the LIBOR rate plus 2.25% per annum. A letter of credit fee is payable by us equal to 1.50% times the amount of outstanding letters of credit.

We had \$65.0 million letters of credit outstanding at December 31, 2022 under the Reimbursement Agreement. We maintain letters of credit primarily for the benefit of various insurance companies as collateral for retrospective premiums and retained losses which could become payable under terms of the underlying insurance contracts. These letters of credit expire annually at various times during the year and are typically renewed. As of December 31, 2022, no amounts had been drawn under the letters of credit.

Our outstanding debt at December 31, 2022 consisted of \$489 million of 3.95% Senior Notes due 2028 (the "2028 Notes") and \$348 million of 5.15% Senior Notes due 2029 (the "2029 Notes"). We were in compliance with all covenants at December 31, 2022.

For a full description of the Credit Agreement, the Reimbursement Agreement, the 2028 Notes and the 2029 Notes, see Note 9 of Notes to consolidated financial statements in Item 8 of this Report.

Cash Requirements

We believe our current liquidity, together with cash expected to be generated from operations, should provide us with sufficient ability to fund our current plans to maintain and make improvements to our existing equipment, service our debt and pay cash dividends for at least the next 12 months.

If we pursue opportunities for growth that require capital, we believe we would be able to satisfy these needs through a combination of working capital, cash flows from operating activities, borrowing capacity under our revolving credit facility or additional debt or equity financing. However, there can be no assurance that such capital will be available on reasonable terms, if at all.

A portion of our capital expenditures can be adjusted and managed by us to match market demand and activity levels. Based on our current outlook for activity, we expect our capital expenditures for 2023 to be approximately \$550 million. The majority of these expenditures are expected to be used for normal, recurring items necessary to support our business.

We anticipate \$28.5 million of expenditures in 2023 related to various contractual obligations such as certain purchase commitments and operating lease liabilities.

As of December 31, 2022, we had working capital of \$278 million, including cash and cash equivalents of \$138 million, compared to working capital of \$148 million, including cash and cash equivalents of \$118 million, at December 31, 2021.

During 2022, our sources of cash flow included:

- \$566 million from operating activities, and
- \$26.1 million in proceeds from the disposal of property and equipment.

During 2022, our uses of cash flow included:

- \$439 million to make capital expenditures for the betterment and refurbishment of drilling and pressure pumping equipment and, to a much lesser extent, equipment for our other businesses, to acquire and procure equipment to support our contract drilling, pressure pumping, directional drilling, oilfield rentals and manufacturing operations, and to fund investments in oil and natural gas properties on a non-operating working interest basis,
- \$70.1 million for repurchases of our common stock,
- \$43.1 million to pay dividends on our common stock,
- \$18.6 million for repurchases of our 2028 Notes, and
- \$1.2 million for repurchases of our 2029 Notes.

We paid cash dividends during the year ended December 31, 2022 as follows:

	P	er Share	Total		
			(in thousands)	
Paid on March 17, 2022	\$	0.04	\$	8,611	
Paid on June 16, 2022		0.04		8,652	
Paid on September 15, 2022		0.04		8,673	
Paid on December 15, 2022		0.08		17,160	
Total cash dividends	\$	0.20	\$	43,096	

On February 8, 2023, our Board of Directors approved a cash dividend on our common stock in the amount of \$0.08 per share to be paid on March 16, 2023 to holders of record as of March 2, 2023. The amount and timing of all future dividend payments, if any, are subject to the discretion of the Board of Directors and will depend upon business conditions, results of operations, financial condition, terms of our debt agreements and other factors. Our Board of Directors may, without advance notice, reduce or suspend our dividend in order to improve our financial flexibility and position our company for long-term success. There can be no assurance that we will pay a dividend in the future.

We may, at any time and from time to time, seek to retire or purchase our outstanding debt for cash through open-market purchases, privately negotiated transactions, redemptions or otherwise. Such repurchases, if any, will be upon such terms and at such prices as we may determine, and will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

In September 2013, our Board of Directors approved a stock buyback program. In October 2022, our Board of Directors approved an increase of the authorization under the stock buyback program to allow for an aggregate of \$300 million of future share repurchases. All purchases executed to date have been through open market transactions. Purchases under the program are made at management's discretion, at prevailing prices, subject to market conditions and other factors. Purchases may be made at any time without prior notice. There is no expiration date associated with the buyback program. As of December 31, 2022, we had remaining authorization to purchase approximately \$243 million of our outstanding common stock under the stock buyback program. Shares of stock purchased under the buyback program are held as treasury shares.

We acquired shares of stock from employees during 2022, 2021 and 2020 that are accounted for as treasury stock. Certain of these shares were acquired to satisfy the exercise price and employees' tax withholding obligations upon the exercise of stock options. The remainder of these shares were acquired to satisfy payroll withholding obligations upon the settlement of performance unit awards and the vesting of restricted stock units. These shares were acquired at fair market value. These acquisitions were made pursuant to the terms of the Patterson-UTI Energy, Inc. Amended and Restated 2014 Long-Term Incentive Plan, as amended (the "2014 Plan") and the Patterson-UTI Energy, Inc. 2021 Long-Term Incentive Plan (the "2021 Plan"), and not pursuant to the stock buyback program. Upon the issuance of shares for the Pioneer acquisition in October 2021, we withheld shares with respect to Pioneer employees' tax withholding obligations.

Treasury stock acquisitions during the years ended December 31, 2022, 2021 and 2020 were as follows (dollars in thousands):

	202	22	202	21	2020		
	Shares	Cost	Shares	Cost	Shares	Cost	
Treasury shares at beginning of period	84,128,995	\$1,372,641	83,402,322	\$1,366,313	77,336,387	\$1,345,134	
Purchases pursuant to stock buyback program	3,254,599	57,173			5,826,266	20,000	
Acquisitions pursuant to long-term incentive plan	1,372,101	23,237	451,196	3,727	239,669	1,179	
Purchases in connection with Pioneer acquisition	—		275,477	2,601			
Other	3,027	28					
Treasury shares at end of period	88,758,722	\$1,453,079	84,128,995	\$1,372,641	83,402,322	\$1,366,313	

As of December 31, 2022, we had unrecognized compensation costs of \$26.0 million and \$11.1 million related to our unvested restricted stock units and our unvested Performance Units, respectively. The weighted-average remaining vesting periods for these awards were 1.40 years and 1.20 years, respectively as of December 31, 2022. See Note 12 of Notes to consolidated financial statements in Item 8 of this Report for additional discussion regarding our stock-based compensation.

Commitments — As of December 31, 2022, we had commitments to purchase major equipment totaling approximately \$130 million for our drilling, pressure pumping, directional drilling and oilfield rentals businesses.

Our pressure pumping business has entered into agreements to purchase minimum quantities of proppants and chemicals from certain vendors. As of December 31, 2022, the remaining minimum obligation under these agreements was approximately \$25.6 million, of which approximately \$22.6 million and \$3.0 million relate to the remainder of 2023 and 2024, respectively.

See Note 10 of Notes to consolidated financial statements in Item 8 of this Report for additional information on our current commitments and contingencies as of December 31, 2022.

Operating lease liabilities totaled \$24.7 million at December 31, 2022. See Note 13 of Notes to consolidated financial statements in Item 8 of this Report for additional information on our operating leases as of December 31, 2022.

Trading and Investing — We have not engaged in trading activities that include high-risk securities, such as derivatives and non-exchange traded contracts. We invest cash primarily in highly liquid, short-term investments such as overnight deposits and money market accounts.

Critical Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from such estimates. Accounting estimates and assumptions discussed in this section are those considered to be the most critical to an understanding of our financial statements because they involve significant judgments and uncertainties. We believe the following critical accounting estimates used in preparing our consolidated financial statements address all important areas where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change. For additional information on our accounting policies, see Note 1 of Notes to consolidated financial statements included as a part of Item 8 of this Report.

Allowance for credit losses — We utilize an accounts receivable aging schedule and historical credit loss information to estimate expected credit losses. We evaluate our accounts receivable periodically through review of historical collection experience, current aging status of the customer accounts, financial condition of our customers, and the overall economic environment of the oil and gas industry. Any customers that have experienced a deterioration in credit quality are removed from the pool and evaluated individually. This process involves judgment and estimated amounts. In applying our methodology of estimating credit losses, we determined that there were no material changes to our credit loss rates. See Note 4 of Notes to consolidated financial statements included as a part of Item 8 of this Report.

Depreciation and amortization — Property and equipment is carried at cost less accumulated depreciation and amortization. No provision for salvage value is considered in determining depreciation of our property and equipment. We calculate depreciation and amortization on our assets based on the estimated useful lives that we believe are reasonable. The estimated useful lives are subject to key assumptions such as maintenance, utilization and job variation. These estimates may change due to a number of factors such as changes in operating conditions or advances in technology. The method of depreciation does not change whenever equipment becomes idle. Maintenance and repairs are charged to expense when incurred. Renewals and betterments which extend the life or improve existing property and equipment are capitalized. See Note 1 of Notes to consolidated financial statements included as a part of Item 8 of this Report.

Fair values of assets acquired and liabilities assumed in acquisitions — Assets acquired and liabilities assumed in a business combination are recorded at their estimated fair values on the date of acquisition. The difference between the purchase price amount and the net fair value of assets acquired and liabilities assumed is recognized as goodwill on the balance sheet if the purchase price exceeds the estimated net fair value or as a bargain purchase gain on the income statement if the purchase price is less than the estimated net fair value. We apply significant judgment in estimating the fair value of assets acquired and liabilities assumed in estimating the fair value of assets acquired and liabilities assumed, which involves the use of significant estimates and assumptions with respect to market day rates, direct operating costs, rig utilization percentages, expectations regarding the amount of future capital and operating costs, and discount rates. Changes in these judgments or estimates can have a material impact on the valuation of the respective assets and liabilities acquired and our results of operations in periods after acquisition, such as through depreciation and amortization expense. The allocation of the purchase price may be modified up to one year after the acquisition date as more information is obtained about the fair value of assets acquired and liabilities assumed. See Note 2 of Notes to consolidated financial statements included as a part of Item 8 of this Report.

Impairment of long-lived assets — We review our long-lived assets, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying amounts of certain assets may not be recovered over their estimated remaining useful lives ("triggering events"). In connection with this review, assets are grouped at the lowest level at which identifiable cash flows are largely independent of other asset groupings. We estimate future cash flows over the life of the respective assets or asset groupings in our assessment of impairment. These estimates of cash flows are based on historical cyclical trends in the industry as well as our expectations regarding the continuation of these trends in the future. If the carrying amount of the asset is not recoverable based on its estimated undiscounted cash flows expected to result from the use and eventual disposition, an impairment loss is recognized in

an amount by which its carrying amount exceeds its estimated fair value. The inputs used to determine such fair value are primarily based upon internally developed cash flow models. Our cash flow models are based on a number of estimates regarding future operations that may be subject to significant variability, are sensitive to changes in market conditions, and are reasonably likely to change in the future. We determined no triggering events occurred in 2022. See Note 6 of Notes to consolidated financial statements included as a part of Item 8 of this Report.

Accruals for self-insured levels of insurance coverage — We maintain insurance coverage for fire, windstorm and other risks of physical loss to our equipment and certain other assets, employers' liability, automobile liability, commercial general liability, workers' compensation and insurance for other specific risks. We also self-insure a number of other risks, including loss of earnings and business interruption and most cybersecurity risks, and do not carry a significant amount of insurance to cover risks of underground reservoir damage. Our insurance accruals are based on claims filed and estimates of claims incurred but not reported and are developed by our management with assistance from our third-party actuary and third-party claims administrator. The insurance accruals are influenced by our past claims experience factors, which have a limited history, and by published industry development factors. If we experience insurance claims or costs above or below our historically evaluated levels, our estimates could be materially affected. The frequency and number of claims or incidents could vary significantly over time, which could materially affect our self-insurance liabilities. Additionally, the actual costs to settle the self-insurance liabilities could materially differ from the original estimates and cause us to incur additional costs in future periods associated with prior year claims.

Income taxes — We are subject to income taxes in the United States and other foreign jurisdictions. We compute our provision for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized for operating loss and tax credit carryforwards and for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. In assessing the realizability of our deferred tax assets, if it is more likely than not that a portion of the deferred tax assets will not be realized in a future period, the deferred tax assets will be reduced by a valuation allowance. We believe the valuation allowance is a critical accounting estimate because it is susceptible to change from period to period, requires assumptions about our future income over the lives of the deferred tax assets, and because the impact of increasing or decreasing the valuation allowance is potentially material to our results of operations.

We continue to monitor income tax developments in the United States and other countries where we have legal entities. We recognize tax benefits related to uncertain tax positions when, in our judgment, it is more likely than not that such positions will be sustained on examination, including resolutions of any related appeals or litigation, based on the technical merits. We adjust our liabilities for uncertain tax positions when our judgment changes as a result of new information previously unavailable. We routinely monitor the potential impact of these situations. As of December 31, 2022, we have no unrecognized tax benefits.

Volatility of Oil and Natural Gas Prices and its Impact on Operations and Financial Condition

Our revenue, profitability and cash flows are highly dependent upon prevailing prices for oil and natural gas and expectations about future prices. Reduced demand for crude oil and refined products related to the COVID-19 pandemic led to a significant reduction in crude oil prices and demand for drilling and completion services in 2020 and early 2021. However, market fundamentals are now strong, as demand increased for drilling and completions equipment and services in 2022, and industry supply of Tier-1, super-spec rigs and premium pressure pumping equipment remains constrained. We expect our rig count in the United States will average 130 rigs in the first quarter and then grow modestly throughout the remainder of 2023. The current demand for equipment and services and strong pricing environment remain dependent on macro conditions, including commodity prices, geopolitical environment, inflationary pressures, economic conditions in the United States and elsewhere, response to the COVID-19 pandemic (including any resurgences and/or lockdowns in the United States and abroad) and continued focus by exploration and production companies and service companies on capital discipline. Oil prices averaged \$82.79 per barrel in the fourth quarter of 2022. Natural gas prices (based on the Henry Hub Spot Market Price) averaged \$5.55 per MMBtu in the fourth quarter of 2022.

In light of these and other factors, we expect oil and natural gas prices to continue to be volatile and to affect our financial condition, operations and ability to access sources of capital. Higher oil and natural gas prices do not necessarily result in increased activity because demand for our services is generally driven by our customers' expectations of future oil and natural gas prices, as well as our customers' ability to access sources of capital to fund their operating and capital expenditures. A decline in demand for oil and natural gas, prolonged low oil or natural gas prices, expectations of decreases in oil and natural gas prices or a reduction in the ability of our customers to access capital would likely result in reduced capital expenditures by our customers and decreased demand for our services, which could have a material adverse effect on our operating results, financial condition and cash flows. Even during periods of historically moderate or high prices for oil and natural gas, companies exploring for oil and natural gas may cancel or curtail programs

or reduce their levels of capital expenditures for exploration and production for a variety of reasons, which could reduce demand for our services.

Impact of Inflation

Due to improving activity levels and increasing tightness in the overall labor market, we have seen general oilfield cost inflation across our segments during 2022, including increases in the cost of labor, services and supplies. This inflation, combined with the increasing challenge of attracting and retaining employees, is increasing the complexity of reactivating equipment. In response to this challenge, combined with the increasing market tightness for our drilling and completion services, we increased the pricing for our drilling and completion services in 2022.

Recently Issued Accounting Standards

For a discussion of recently issued accounting standards, see Note 1 of Notes to consolidated financial statements included as a part of Item 8 of this Report.

Non-GAAP Financial Measures

Adjusted EBITDA

Adjusted earnings before interest, taxes, depreciation and amortization ("Adjusted EBITDA") is not defined by accounting principles generally accepted in the United States of America ("GAAP"). We define Adjusted EBITDA as net income (loss) from continuing operations plus income tax expense (benefit), net interest expense, and depreciation, depletion, amortization and impairment expense (including impairment of goodwill). We present Adjusted EBITDA as a supplemental disclosure because we believe it provides to both management and investors additional information with respect to the performance of our fundamental business activities and a comparison of the results of our operations from period to period and against our peers without regard to our financing methods or capital structure. We exclude the items listed above from net income (loss) from continuing operations in arriving at Adjusted EBITDA because these amounts can vary substantially from company to company within our industry depending upon accounting methods and book values of assets, capital structures and the method by which the assets were acquired. Adjusted EBITDA should not be construed as an alternative to the GAAP measure of net income (loss) from continuing operations of Adjusted EBITDA may not be the same as similarly titled measures of other companies. Set forth below is a reconciliation of the non-GAAP financial measure of Adjusted EBITDA to the GAAP financial measure of net income (loss) from continuing operations.

		2022		2021		2020
			(in	thousands)		
Net income (loss) from continuing operations	\$	154,658	\$	(657,079)	\$	(803,692)
Income tax expense (benefit)		13,204		(62,702)		(127,326)
Net interest expense		39,896		41,756		39,516
Depreciation, depletion, amortization and impairment		483,945		849,178		670,910
Impairment of goodwill						395,060
Adjusted EBITDA	\$	691,703	\$	171,153	\$	174,468

Adjusted Gross Margin

We define "Adjusted gross margin" as revenues less direct operating costs (excluding depreciation, depletion, amortization and impairment expense). Adjusted gross margin is included as a supplemental disclosure because it is a useful indicator of our operating performance.

	Contract Drilling		Pressure <u>Pumping</u> (in tho		Directional Drilling usands)		_0	Other perations
For the year ended December 31, 2022				,		,		
Revenues	\$	1,316,672	\$	1,022,413	\$	216,498	\$	92,009
Less direct operating costs		(832,180)		(781,385)		(179,135)		(53,850)
Less depreciation, depletion, amortization and impairment		(337,513)		(98,162)		(15,428)		(27,671)
GAAP gross margin		146,979		142,866		21,935		10,488
Depreciation, depletion, amortization and impairment		337,513		98,162		15,428		27,671
Adjusted gross margin	\$	484,492	\$	241,028	\$	37,363	\$	38,159
	_							
For the year ended December 31, 2021								
Revenues	\$	664,030	\$	523,756	\$	111,481	\$	57,814
Less direct operating costs		(463,456)		(475,953)		(101,628)		(40,911)
Less depreciation, depletion, amortization and impairment		(618,879)		(159,305)		(40,270)		(24,865)
GAAP gross margin		(418,305)		(111,502)		(30,417)		(7,962)
Depreciation, depletion, amortization and impairment		618,879		159,305		40,270		24,865
Adjusted gross margin	\$	200,574	\$	47,803	\$	9,853	\$	16,903

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

As of December 31, 2022, we would have had exposure to interest rate market risk associated with any outstanding borrowings and letters of credit that we had under the Credit Agreement and amounts owed under the Reimbursement Agreement.

Loans under the Credit Agreement bear interest by reference, at our election, to the SOFR rate or base rate. The applicable margin on SOFR rate loans varies from 1.00% to 2.00% and the applicable margin on base rate loans varies from 0.00% to 1.00%, in each case determined based upon our credit rating. As of December 31, 2022, the applicable margin on SOFR rate loans was 1.75% and the applicable margin on base rate loans was 0.75%. A letter of credit fee is payable by us equal to the applicable margin for SOFR rate loans times the daily amount available to be drawn under outstanding letters of credit. The commitment fee rate payable to the lenders varies from 0.10% to 0.30% based upon our credit rating. As of December 31, 2022, we had no borrowings or letters of credit outstanding under the Credit Agreement.

Under the terms of the Reimbursement Agreement, we will reimburse Scotiabank on demand for any amounts that Scotiabank has disbursed under any letters of credit. We are obligated to pay Scotiabank interest on all amounts not paid by us on the date of demand or when otherwise due at the LIBOR rate plus 2.25% per annum. As of December 31, 2022, no amounts had been disbursed under any letters of credit.

The carrying values of cash and cash equivalents, trade receivables and accounts payable approximate fair value due to the short-term maturity of these items.

Item 8. Financial Statements and Supplementary Data.

Financial Statements are filed as a part of this Report at the end of Part IV hereof beginning at page F-1, Index to Consolidated Financial Statements, and are incorporated herein by this reference.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures:

Under the supervision and with the participation of our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act, as of the end of the period covered by this Report. Based on this evaluation, our CEO and CFO concluded that, as of December 31, 2022, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and is accumulated and reported to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

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 Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our CEO and CFO, we carried out an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2022, based on the *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears on page F-2 of this Report and which is incorporated by reference into Item 8 of this Report.

Changes in Internal Control over Financial Reporting:

There have been no changes to our internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

None.

PART III

Certain information required by Part III is omitted from this Report because we expect to file a definitive proxy statement (the "Proxy Statement") pursuant to Regulation 14A of the Securities Exchange Act of 1934 no later than 120 days after the end of the fiscal year covered by this Report and certain information included therein is incorporated herein by reference.

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item is incorporated herein by reference to the Proxy Statement.

We have adopted a Code of Business Conduct and Ethics for Senior Financial Executives, which covers, among others, our principal executive officer and principal financial and accounting officer. The text of this code is located on our website under "Corporate Governance." Our Internet address is <u>www.patenergy.com</u>. We intend to disclose any amendments to or waivers from this code on our website within four business days following the date of the amendment or waiver.

Item 11. Executive Compensation.

The information required by this Item is incorporated herein by reference to the Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item is incorporated herein by reference to the Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item is incorporated herein by reference to the Proxy Statement.

Item 14. Principal Accounting Fees and Services.

The information required by this Item is incorporated herein by reference to the Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedule.

(a)(1) Financial Statements

See Index to Consolidated Financial Statements on page F-1 of this Report.

(a)(2) Report of Independent Registered Public Accounting Firm

The report of our independent registered public accounting firm (PCAOB ID: 238) with respect to the above-referenced financial statements and their report on internal control over financial reporting are included on page F-2 of this Report.

(a)(3) Financial Statement Schedule

Schedule II — Valuation and qualifying accounts is filed herewith on page S-1.

All other financial statement schedules have been omitted because they are not applicable or the information required therein is included elsewhere in the financial statements or notes thereto.

(a)(3) *Exhibits*

The following exhibits are filed herewith or incorporated by reference herein. Our Commission file number is 0-22664.

- 2.1 Agreement and Plan of Merger, dated July 5, 2021, among Patterson-UTI Energy, Inc., Crescent Merger Sub Inc., Crescent Ranch Second Merger Sub LLC, and Pioneer Energy Services Corp. (incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on July 6, 2021).
- 2.2 Amendment No. 1 to Agreement and Plan of Merger, dated September 13, 2021, among Patterson-UTI Energy, Inc., Crescent Merger Sub Inc., Crescent Ranch Second Merger Sub LLC, and Pioneer Energy Services Corp. (incorporated by reference to Exhibit 2.2 to our Current Report on Form 8-K filed on October 4, 2021).
- 3.1 Restated Certificate of Incorporation, as amended (filed August 9, 2004 as Exhibit 3.1 to our Quarterly Report on Form 10-Q and incorporated herein by reference).
- 3.2 Certificate of Amendment to the Restated Certificate of Incorporation, as amended (filed August 9, 2004 as Exhibit 3.2 to our Quarterly Report on Form 10-Q and incorporated herein by reference).
- 3.3 Certificate of Elimination with respect to Series A Participating Preferred Stock (filed October 27, 2011 as Exhibit 3.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 3.4 Certificate of Amendment to Restated Certificate of Incorporation, as amended (filed July 30, 2018 as Exhibit 3.4 to our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2018 and incorporated herein by reference).
- 3.5 Fourth Amended and Restated Bylaws (filed February 12, 2019 as Exhibit 3.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 3.6 Certificate of Designation of the Series A Junior Participating Preferred Stock of Patterson-UTI Energy, Inc., dated April 22, 2020 (filed April 23, 2020 as Exhibit 3.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 4.1 Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed February 16, 2022 as Exhibit 4.1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and incorporated herein by reference).
- 4.2 Registration Rights Agreement with Bear, Stearns and Co. Inc., dated March 25, 1994, as assigned to REMY Capital Partners III, L.P. (filed March 19, 2002 as Exhibit 4.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2001 and incorporated herein by reference).

- 4.3 Base Indenture, dated January 19, 2018, among Patterson-UTI Energy, Inc., the several guarantors named therein and Wells Fargo Bank, National Association, as trustee (filed January 19, 2018 as Exhibit 4.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 4.4 First Supplemental Indenture, dated January 19, 2018, among Patterson-UTI Energy, Inc., the several guarantors named therein and Wells Fargo Bank, National Association, as trustee (filed January 19, 2018 as Exhibit 4.2 to our Current Report on Form 8-K and incorporated herein by reference).
- 4.5 Form of 3.95% Senior Note due 2028 (included in Exhibit 4.4 above).
- 4.6 Base Indenture, dated November 15, 2019, between Patterson-UTI Energy, Inc. and U.S. Bank National Association, as trustee (filed November 15, 2019 as Exhibit 4.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 4.7 First Supplemental Indenture, dated November 15, 2019, between Patterson-UTI Energy, Inc. and U.S. Bank National Association, as trustee (filed November 15, 2019 as Exhibit 4.2 to our Current Report on Form 8-K and incorporated herein by reference).
- 4.8 Form of 5.15% Senior Note due 2029 (included in Exhibit 4.7 above).
- 10.1 Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan, including Form of Executive Officer Restricted Stock Award Agreement, Form of Executive Officer Stock Option Agreement, Form of Non-Employee Director Restricted Stock Award Agreement and Form of Non-Employee Director Stock Option Agreement (filed June 21, 2005 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.2 First Amendment to the Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan (filed June 6, 2008 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.3 Second Amendment to the Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan (filed June 6, 2008 as Exhibit 10.2 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.4 Third Amendment to the Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan (filed April 27, 2010 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.5 Fourth Amendment to the Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan (filed April 27, 2010 as Exhibit 10.2 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.6 Fifth Amendment to the Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan (filed August 2, 2010 as Exhibit 10.4 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.7 Patterson-UTI Energy, Inc. 2014 Long-Term Incentive Plan, as amended and restated and further amended effective June 6, 2019 (filed June 6, 2019 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.8 Patterson-UTI Energy, Inc. 2021 Long-Term Incentive Plan (incorporated by reference to Annex A of our Definitive Proxy Statement on Schedule 14A, filed on April 12, 2021).*
- 10.9 Form of Executive Officer Restricted Stock Unit Award Agreement (filed August 3, 2021 as Exhibit 10.2 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.10 Form of Executive Officer Stock Option Agreement (filed April 21, 2014 as Exhibit 10.4 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.11 Form of Non-Employee Director Stock Option Agreement (filed April 21, 2014 as Exhibit 10.6 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.12 Form of Non-Employee Director Restricted Stock Unit Award Agreement (filed May 3, 2022 as Exhibit 10.1 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.13 Form of Executive Officer Share-Settled Performance Share Award Agreement (filed August 3, 2021 as Exhibit 10.3 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*

- 10.14 2020 Phantom Unit Award Agreement, dated May 11, 2020, by and between Patterson-UTI Energy, Inc. and William A. Hendricks, Jr. (filed July 28, 2020 as Exhibit 10.2 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.15 Amendment No. 1 to Performance Share Award Agreement, dated May 11, 2020, by and between Patterson-UTI Energy, Inc. and William A. Hendricks, Jr. (filed July 28, 2020 as Exhibit 10.2 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.16 Form of Letter Agreement regarding termination, effective as of January 29, 2004, entered into by Patterson-UTI Energy, Inc. with Kenneth N. Berns (filed on February 25, 2005 as Exhibit 10.23 to our Annual Report on Form 10-K for the year ended December 31, 2004 and incorporated herein by reference).*
- 10.17 Employment Agreement, dated as of January 1, 2023, by and between Patterson-UTI Energy, Inc. and James M. Holcomb (filed on January 3, 2023 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.18 Employment Agreement, effective as of August 1, 2016, by and between Patterson-UTI Energy, Inc. and William Andrew Hendricks, Jr. (filed August 2, 2016 as Exhibit 10.2 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.19 First Amendment to Employment Agreement, effective as April 9, 2021, by and between Patterson-UTI Energy, Inc. and William Andrew Hendricks, Jr. (filed August 3, 2021 as Exhibit 10.4 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.20 Employment Agreement, effective as of August 1, 2016, by and between Patterson-UTI Energy, Inc. and Seth D. Wexler (filed February 13, 2017 as Exhibit 10.20 to our Annual Report on Form 10-K for the year ended December 31, 2016 and incorporated herein by reference).*
- 10.21 First Amendment to Employment Agreement, effective as April 9, 2021, by and between Patterson-UTI Energy, Inc. and Seth D. Wexler (filed August 3, 2021 as Exhibit 10.6 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.22 Employment Agreement, dated as of September 3, 2017, between Patterson-UTI Energy, Inc. and C. Andrew Smith (filed September 8, 2017 as Exhibit 10.2 to our Current Report on Form 8-K and incorporated herein by reference).*
- 10.23 First Amendment to Employment Agreement, effective as April 9, 2021, by and between Patterson-UTI Energy, Inc. and C. Andrew Smith (filed August 3, 2021 as Exhibit 10.5 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.24 Form of Indemnification Agreement entered into by Patterson-UTI Energy, Inc. with each of Kenneth N. Berns, Curtis W. Huff, Terry H. Hunt, Seth D. Wexler, William Andrew Hendricks, Jr., Michael W. Conlon, Tiffany J. Thom, James M. Holcomb, C. Andrew Smith, Janeen S. Judah, Cesar Jaime and Julie J. Robertson (filed April 28, 2004 as Exhibit 10.11 to our Annual Report on Form 10-K, as amended, for the year ended December 31, 2003 and incorporated herein by reference).*
- 10.25 Patterson-UTI Energy, Inc. Change in Control Agreement, effective as of January 29, 2004, by and between Patterson-UTI Energy, Inc. and Kenneth N. Berns (filed on February 4, 2004 as Exhibit 10.5 to our Annual Report on Form 10-K for the year ended December 31, 2003 and incorporated herein by reference).*
- 10.26 First Amendment to Change in Control Agreement Between Patterson-UTI Energy, Inc. and Kenneth N. Berns, entered into November 1, 2007 (filed November 5, 2007 as Exhibit 10.11 to our Quarterly Report on Form 10-Q and incorporated herein by reference).*
- 10.27 Amended and Restated Credit Agreement dated March 27, 2018 among Patterson-UTI Energy, Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender and each of the other letter of credit issuers and lenders party thereto (filed March 27, 2018 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).

- 10.28 Amendment No. 1 to Amended and Restated Credit Agreement, dated March 26, 2019, among Patterson-UTI Energy, Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender and each of the other letter of credit issuers and lenders party thereto (filed March 26, 2019 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 10.29 Amendment No. 2 to Amended and Restated Credit Agreement, dated March 27, 2020, among Patterson-UTI Energy, Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender and each of the other letter of credit issuers and lenders party thereto (filed March 27, 2020 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 10.30 Amendment No. 3 to Amended and Restated Credit Agreement, dated November 9, 2022, among Patterson-UTI Energy, Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender and each of the other letter of credit issuers and lenders party thereto.
- 10.31 Reimbursement Agreement, dated as of March 16, 2015, by and between Patterson-UTI Energy, Inc. and The Bank of Nova Scotia (filed March 16, 2015 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).
- 21.1 Subsidiaries of the Registrant.+
- 23.1 Consent of Independent Registered Public Accounting Firm.+
- 31.1 Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended.+
- 31.2 Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended.+
- 32.1 Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 USC Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.++
- 101.INS Inline XBRL Instance Document the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.+
- 101.SCH Inline XBRL Taxonomy Extension Schema Document+
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document+
- 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document+
- 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document+
- 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document+
- 104 Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101).

Item 16. Form 10-K Summary

None.

^{*} Management Contract or Compensatory Plan identified as required by Item 15(a)(3) of Form 10-K.

⁺ Filed herewith.

⁺⁺ Furnished herewith.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Patterson-UTI Energy, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Patterson-UTI Energy, Inc. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of operations, of comprehensive income (loss), of changes in stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

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

Revenue Recognition – Operating Revenues

As described in Notes 1 and 3 to the consolidated financial statements, operating revenues relate to contract drilling, pressure pumping, directional drilling, oilfield rentals, equipment servicing and electrical control and automation activity. The Company recognizes revenue based on the customers' ability to benefit from the services provided in an amount that reflects the consideration the Company expects to receive in exchange for those services. This typically happens when the service is performed. The Company recognized total operating revenues of \$2,648 million for the year ended December 31, 2022.

The principal consideration for our determination that performing procedures relating to revenue recognition for operating revenues is a critical audit matter is a high degree of auditor effort in performing procedures related to the Company's revenue recognition.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the recording of revenue upon completion of the service. These procedures also included, among others, (i) evaluating revenue transactions by testing the issuance and settlement of invoices and credit memos; (ii) tracing transactions not settled to a detailed listing of accounts receivable; (iii) confirming a sample of outstanding customer invoice balances at year end and obtaining and inspecting source documents, including invoices, contracts, proof of service, and subsequent cash receipts, where applicable, for confirmations not returned; and (iv) testing the completeness and accuracy of data provided by management.

/s/ PricewaterhouseCoopers LLP

Houston, Texas February 13, 2023

We have served as the Company's auditor since 1993.

CONSOLIDATED BALANCE SHEETS

	December 31,				
		2022		2021	
		(In thousands, ex	cept sh	are data)	
ASSETS					
Current assets:	¢	127.552	¢	117 504	
Cash and cash equivalents	\$	137,553	\$	117,524	
Accounts receivable, net of allowance for credit losses of \$2,875 and \$8,493 at		565 520		256 002	
December 31, 2022 and 2021, respectively		565,520		356,083	
Federal and state income taxes receivable		399		67	
Inventory		58,038		42,359	
Other		67,909		67,620	
Total current assets		829,419		583,653	
Property and equipment, net		2,260,576		2,331,755	
Right of use asset		20,841		19,024	
Intangible assets, net		5,845		7,537	
Deposits on equipment purchases		13,051		849	
Other		10,881		11,055	
Deferred tax assets, net		3,210		3,975	
Total assets	\$	3,143,823	\$	2,957,848	
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	\$	237,056	\$	190,219	
Federal and state income taxes payable		4,644		232	
Accrued liabilities		304,143		238,511	
Lease liability		5,123		6,891	
Total current liabilities		550,966		435,853	
Long-term lease liability		19,594		18,108	
Long-term debt, net of debt discount and issuance costs of \$5,468 and \$6,432 at					
December 31, 2022 and 2021, respectively		830,937		852,323	
Deferred tax liabilities, net		28,738		29,234	
Other		48,065		12,843	
Total liabilities		1,478,300		1,348,361	
Commitments and contingencies (see Note 10)					
Stockholders' equity:					
Preferred stock, par value \$0.01; authorized 1,000,000 shares, no shares issued					
Common stock, par value \$0.01; authorized 400,000,000 shares with 302,325,853					
and 299,268,967 issued and 213,567,131 and 215,139,972 outstanding at					
December 31, 2022 and 2021, respectively		3,023		2,993	
Additional paid-in capital		3,202,973		3,171,536	
Retained deficit		(87,394)		(198,316)	
Accumulated other comprehensive income				5,915	
Treasury stock, at cost, 88,758,722 shares and 84,128,995 shares at					
December 31, 2022 and 2021, respectively		(1,453,079)		(1,372,641)	
Total stockholders' equity		1,665,523		1,609,487	
Total liabilities and stockholders' equity	\$	3,143,823	\$	2,957,848	

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,					
		2022		2021		2020
		(In thou	usand	s, except per shar	e data	ı)
Operating revenues:	¢	1 216 672	¢	664.020	¢	((0.12)
Contract drilling	\$	1,316,672	\$	664,030	\$	669,126
Pressure pumping		1,022,413		523,756		336,111
Directional drilling		216,498		111,481		73,356
Other		92,009		57,814		45,656
Total operating revenues		2,647,592		1,357,081		1,124,249
Operating costs and expenses:						
Contract drilling		832,180		463,456		380,822
Pressure pumping		781,385		475,953		310,261
Directional drilling		179,135		101,628		69,050
Other		53,850		40,911		41,790
Depreciation, depletion, amortization and impairment		483,945		849,178		670,910
Impairment of goodwill						395,060
Selling, general and administrative		116,589		92,382		97,611
Credit loss expense				(1,500)		5,606
Merger and integration expenses		2,069		12,060		
Restructuring expenses						38,338
Other operating (income) expenses, net		(12,592)		763		7,059
Total operating costs and expenses		2,436,561		2,034,831		2,016,507
Operating income (loss)		211,031		(677,750)		(892,258)
Other income (expense):		2(0		222		1.054
Interest income		360		222		1,254
Interest expense, net of amount capitalized		(40,256)		(41,978)		(40,770)
Other		(3,273)		(275)		756
Total other expense		(43,169)		(42,031)	_	(38,760)
Income (loss) from continuing operations before income taxes		167,862		(719,781)		(931,018)
Income tax expense (benefit)		13,204		(62,702)		(127,326)
Income (loss) from continuing operations		154,658		(657,079)		(803,692)
Income from discontinued operations, net of tax				2,534		_
Net income (loss)	\$	154,658	\$	(654,545)	\$	(803,692)
Net income (loss) per common share - basic:						
Continuing operations	\$	0.72	\$	(3.37)	\$	(4.27)
Discontinued operations	\$	0.72	\$	0.01	\$	(7.27)
Net income (loss) - basic	\$	0.72	\$	(3.36)	\$	(4.27)
				()		()
Net income (loss) per common share - diluted:						
Continuing operations	\$	0.70	\$	(3.37)	\$	(4.27)
Discontinued operations	\$	_	\$	0.01	\$	
Net income (loss) - diluted	\$	0.70	\$	(3.36)	\$	(4.27)
Weighted average number of common shares outstanding:						
Basic		215,935		195,021		188,013
						<i></i>
Diluted		219,496	_	195,021	_	188,013

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,							
	2022		2021			2020		
			(Iı	n thousands)				
Net income (loss)	\$	154,658	\$	(654,545)	\$	(803,692)		
Other comprehensive income (loss):								
Foreign currency translation adjustment, net of taxes of \$0 for all periods		1,793		503		(66)		
Release of cumulative translation adjustment, net of taxes of \$3,770 for								
2022 and \$0 for 2021 and 2020, respectively		(7,708)						
Total comprehensive income (loss)	\$	148,743	\$	(654,042)	\$	(803,758)		

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	<u> </u>	n Sto	ck	Additional Paid-in		Retained	Accumulated Other Comprehensive		Treasury	
	Shares	A	Amount	Capital		Earnings (Deficit) In thousands)		Income	Stock	Total
Balance, December 31, 2019	269,372	\$	2,694	\$2,875,680	\$	1,294,902	\$	5,478	\$(1,345,134)	\$2,833,620
Net loss						(803,692)				(803,692)
Foreign currency translation adjustment			_			_		(66)		(66)
Issuance of restricted stock	333		3	(3)				_	_	_
Vesting of restricted stock units	1,324		13	(13)						
Stock-based compensation			_	26,572		_			_	26,572
Payment of cash dividends (\$0.10 per share)			_	_		(18,862)				(18,862)
Dividend equivalents						(334)			_	(334)
Purchase of treasury stock									(21,179)	(21,179)
Balance, December 31, 2020	271,029	\$	2,710	\$2,902,236	\$	472,014	\$	5,412	\$(1,366,313)	\$2,016,059
Net loss			_			(654,545)			_	(654,545)
Foreign currency translation adjustment			_			_		503		503
Shares issued for acquisition	26,274		263	247,762						248,025
Issuance of restricted stock	621		6	(6)						
Vesting of restricted stock units	1,345		14	(14)						
Stock-based compensation				21,558						21,558
Payment of cash dividends (\$0.08 per share)			_			(15,605)		_	_	(15,605)
Dividend equivalents			_			(180)			_	(180)
Purchase of treasury stock									(6,328)	(6,328)
Balance, December 31, 2021	299,269	\$	2,993	\$3,171,536	\$	(198,316)	\$	5,915	\$(1,372,641)	\$1,609,487
Net income			_			154,658			_	154,658
Foreign currency translation adjustment	_					_		1,793	_	1,793
Release of cumulative translation adjustment			_	_		_		(7,708)	_	(7,708)
Issuance of restricted stock	980		10	(10)						
Vesting of restricted stock units	1,437		14	(14)		_		_	_	_
Exercise of stock options	640		6	10,362		_			_	10,368
Stock-based compensation	_		_	21,099						21,099
Payment of cash dividends (\$0.20 per share)			_			(43,096)				(43,096)
Dividend equivalents						(640)				(640)
Purchase of treasury stock	_		_	_		(010)		_	(80,438)	(80,438)
Balance, December 31, 2022	302,326	\$	3,023	\$3,202,973	\$	(87,394)	\$		\$(1,453,079)	\$1,665,523
	502,520	Ψ	5,025	\$5,202,715	Ψ	(07,374)	Ψ		<i>(</i> (1,100,077)	¢1,005,525

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,					,		
		2022		2021		2020		
			(In	thousands)				
Cash flows from operating activities:	\$	151 659	¢	(651515)	\$	(902 602)		
Net income (loss) Adjustments to reconcile net income (loss) to net cash provided by	\$	154,658	\$	(654,545)	Э	(803,692)		
operating activities:								
Depreciation, depletion, amortization and impairment		483,945		849,178		670,910		
Impairment of goodwill						395,060		
Dry holes and abandonments		119		178		1,285		
Deferred income tax expense (benefit)		6,998		(62,980)		(125,283)		
Stock-based compensation expense		21,099		21,558		26,572		
Net gain on asset disposals		(12,075)		(1,426)		(3,079)		
Net gain on insurance reimbursement						(4,172)		
Write-down of capacity reservation contract						9,207		
Credit loss expense		—		(1,500)		5,606		
Restructuring expenses, non-cash		—				25,067		
Gain on early debt extinguishment		(2,461)				(3,596)		
Amortization of debt discount and issuance costs		835		839		912		
Changes in operating assets and liabilities:								
Accounts receivable		(209,226)		(147,356)		173,862		
Income taxes receivable/payable		4,171		4,516		1,635		
Inventory and other assets		(14,154)		(5,850)		27,192		
Accounts payable		38,986		50,941		(46,576)		
Accrued liabilities		65,091		50,271		(61,266)		
Other liabilities		28,202		(7,812)		(10,786)		
Net cash used in operating activities of discontinued operations				(516)				
Net cash provided by operating activities		566,188		95,496		278,858		
Cash flows from investing activities:								
Acquisitions, net of cash acquired		—		(29,358)		—		
Purchases of property and equipment		(436,797)		(166,320)		(145,481)		
Proceeds from disposal of assets and insurance claims		26,074		23,339		20,929		
Other		(2,504)		(522)		(424)		
Net cash provided by investing activities of discontinued operations				41,267				
Net cash used in investing activities		(413,227)		(131,594)		(124,976)		
Cash flows from financing activities:		(=0,0=0)				(
Purchases of treasury stock		(70,070)		(6,328)		(21,179)		
Dividends paid		(43,096)		(15,605)		(18,862)		
Proceeds from borrowings under revolving credit facility		150,000		—		—		
Repayment of borrowings under revolving credit facility		(150,000)				(12.525)		
Repayment of senior notes		(19,760)		(50.000)		(12,525)		
Repayment of term loan		(455)		(50,000)		(50,000)		
Debt issuance costs		(455)		(71.022)	_	(584)		
Net cash used in financing activities		(133,381)		(71,933)		(103,150)		
Effect of foreign exchange rate changes on cash		449		640		(2)		
Net increase (decrease) in cash and cash equivalents		20,029		(107,391)		50,730		
Cash and cash equivalents at beginning of year	<u>_</u>	117,524	<u>_</u>	224,915	<u>_</u>	174,185		
Cash and cash equivalents at end of year	\$	137,553	\$	117,524	\$	224,915		
Supplemental disclosure of cash flow information:								
Net cash (paid) received during the year for:								
Interest, net of capitalized interest of \$976 in 2022, \$260 in 2021								
and \$431 in 2020	\$	(39,855)	\$	(40,464)	\$	(43,368)		
Income taxes		(1,526)		4,196		3,709		
Non-cash investing and financing activities:	<i>.</i>		<i></i>		^			
Net increase (decrease) in payables for purchases of property and equipment	\$	7,953	\$	31,393	\$	(30,241)		
Issuance of common stock for business acquisitions				248,025				
Net (increase) decrease in deposits on equipment purchases		(12,202)		867		6,350		
Cashless exercise of stock options		10,368		_				

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business and Summary of Significant Accounting Policies

A description of the business and basis of presentation follows:

Description of business — Patterson-UTI Energy, Inc., through its wholly-owned subsidiaries (collectively referred to herein as "we," "us," "our," "ours" and like terms), is a Houston, Texas-based oilfield services company that primarily owns and operates in the United States one of the largest fleets of land-based drilling rigs and a large fleet of pressure pumping equipment. Our contract drilling opportunities operates in the continental United States and internationally in Colombia and, from time to time, we pursue contract drilling opportunities in other select markets. Our pressure pumping business operates primarily in Texas and the Appalachian region. We also provide a comprehensive suite of directional drilling services in most major producing onshore oil and gas basins in the United States, and we provide services that improve the statistical accuracy of directional and horizontal wellbores. We have other operations through which we provide oilfield rental tools in select markets in the United States. We also service equipment for drilling contractors, and we provide electrical controls and automation to the energy, marine and mining industries, in North America and other select markets. In addition, we own and invest, as a non-operating, working interest owner, in oil and natural gas assets that are primarily located in Texas and New Mexico.

In the fourth quarter of 2021, we completed the acquisition of Pioneer Energy Services Corp. ("Pioneer"). Through the Pioneer acquisition, we acquired Pioneer's 100% pad-capable drilling rig fleet consisting of 17 AC-powered rigs in the United States and eight SCR rigs in Colombia and production services assets consisting of 123 well servicing rigs and 72 wireline services units. The purchase price allocation was finalized in 2022. The measurement period adjustments did not have a material impact on our consolidated financial statements.

On December 31, 2021, we completed the sale of the acquired well servicing rig business and wireline business to Clearwell Dynamics, LLC. The sale price was \$43.0 million in cash consideration, subject to customary purchase price adjustments at closing for cash and working capital. The results of operations of these businesses were presented as a discontinued operation during the fourth quarter of 2021.

In the second quarter of 2020, we closed our Canadian drilling operations in response to our longer-term outlook for the western Canadian market. As a result of the closure, we recorded an impairment of \$8.3 million. In April 2022, we sold certain assets to substantially complete our exit from our Canadian operations. The Canadian dollar was our functional currency for our Canadian operations. Prior to the substantial completion of our exit, the effects of exchange rate changes were reflected in accumulated other comprehensive income, which is a separate component of stockholders' equity. Upon substantial completion of our exit, we released the \$7.7 million cumulative translation adjustment, net of tax of \$3.8 million, from accumulated other comprehensive income into net income (loss). The release resulted in an \$11.5 million pre-tax gain, which was recorded in other operating (income) expenses, net.

Basis of presentation — The consolidated financial statements include the accounts of Patterson-UTI and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated. Except for wholly-owned subsidiaries, we have no controlling financial interests in any other entity which would require consolidation. As used in these notes, "we," "us," "our," "ours" and like terms refer collectively to Patterson-UTI Energy, Inc. and its consolidated subsidiaries. Patterson-UTI Energy, Inc. conducts its business operations through its wholly-owned subsidiaries and has no employees or independent operations. Certain prior year amounts have been reclassified to conform to current year presentation. The U.S. dollar is the functional currency for all of our operations.

A summary of the significant accounting policies follows:

Management estimates — The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from such estimates.

Revenue recognition — Revenues from our contract drilling, pressure pumping, directional drilling, oilfield rentals, equipment servicing and electrical control and automation activities are recognized as services are performed. All of the wells we drilled in 2022, 2021 and 2020 were drilled under daywork contracts. Revenue is presented net of any sales tax charged to the customer that we are required to remit to local or state governmental taxing authorities.

Reimbursements for the purchase of supplies, equipment, personnel services, shipping and other services that are provided at the request of our customers are recorded as revenue when incurred. The related costs are recorded as operating expenses when incurred.

Leases — We have operating leases for operating locations, corporate offices and certain operating equipment. We determine if a contract contains a lease at inception or as a result of an acquisition. A right-of-use asset and corresponding lease liability are recognized on our consolidated balance sheet at commencement at an amount based on the present value of the remaining lease payments over the lease term. Renewal options are included in the right-of-use asset and lease liability if it is not reasonably certain that we will exercise the option, and termination options are included in the right-of-use asset and lease liability if it is not reasonably certain we will exercise the option. By our policy election, right-of-use assets and lease liabilities with an initial term of one year or less are not recognized for leasing arrangements, and non-lease and lease components are treated as a single lease component instead of bifurcating lease. Lease expense is recognized on a straight-line basis. If available, we use the rate implicit in the lease at commencement date to discount the lease payments. If the implicit rate is not readily determinable, we use our incremental borrowing rate based on the information available at the commencement date in the determination of the present value of future lease payments. As of December 31, 2022, we did not have any finance leases.

Accounts receivable — Trade accounts receivable are recorded at the invoiced amount. The allowance for credit losses represents our estimate of the amount of probable credit losses existing in our accounts receivable. See Note 4 for our methodology on allowance of credit losses. Significant individual accounts receivable balances and balances which have been outstanding greater than 90 days are reviewed individually for collectability. Account balances, when determined to be uncollectible, are charged against the allowance.

Inventories — Inventories consist primarily of sand and other products to be used in conjunction with our pressure pumping activities, materials used in our directional drilling and equipment servicing business and spare parts for our Colombia contract drilling business. Such inventories are stated at the lower of cost or net realizable value, with cost determined using the average cost method.

Other current assets — Other current assets includes reimbursement from our workers compensation insurance carrier for claims in excess of our deductible in the amount of \$34.6 million and \$29.9 million at December 31, 2022 and 2021, respectively.

Property and equipment — Property and equipment is carried at cost less accumulated depreciation. Depreciation is provided on the straight-line method over the estimated useful lives. The method of depreciation does not change whenever equipment becomes idle. The estimated useful lives, in years, are shown below:

	Useful Lives
Equipment	1.25-15
Buildings	15-20
Other	3-12

Long-lived assets, including property and equipment, are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amounts of certain assets may not be recovered over their estimated remaining useful lives. In the event a triggering event is identified, we estimate future cash flows over the life of the respective assets or asset groupings in our assessment of impairment. Assets are grouped at the lowest level at which identifiable cash flows are largely independent of other asset groupings for impairment assessment. Cash flow estimates are based on historical cyclical trends in the industry as well as our expectations regarding the continuation of these trends in the future. Asset impairments are charged against income when estimated future cash flows, on an undiscounted basis, are less than the asset's net book value. Any impairment is measured at fair value.

Maintenance and repairs — Maintenance and repairs are charged to expense when incurred. Renewals and betterments which extend the life or improve existing property and equipment are capitalized.

Disposals — Upon disposition of property and equipment, the cost and related accumulated depreciation are removed and any resulting gain or loss is reflected in our consolidated statements of operations.

Oil and natural gas properties — Working interests in oil and natural gas properties are accounted for using the successful efforts method of accounting, exploration costs which result in the discovery of oil and natural gas reserves and all development costs are capitalized to the appropriate well. Exploration costs which do not result in discovering oil and natural gas reserves are charged to expense when such determination is made. Costs of exploratory wells are initially capitalized to wells-in-progress until the outcome of the drilling is known. We review wells-in-progress quarterly to determine whether sufficient progress is being made in assessing the reserves and economic viability of the respective projects. If no progress has been made in assessing the reserves and economic viability of a project after one year following the completion of drilling, we consider the well costs to be impaired and recognize the costs as expense. Geological and geophysical costs, including seismic costs, and costs to carry and retain undeveloped properties are charged to expense when incurred. The capitalized costs of both developmental and successful exploratory type wells, consisting of lease and well equipment and intangible development costs, are depreciated, depleted and amortized

using the units-of-production method, based on engineering estimates of total proved developed oil and natural gas reserves for each respective field. Oil and natural gas leasehold acquisition costs are depreciated, depleted and amortized using the units-of-production method, based on engineering estimates of total proved oil and natural gas reserves for each respective field.

We review our proved oil and natural gas properties for impairment whenever a triggering event occurs, such as downward revisions in reserve estimates or decreases in expected future oil and natural gas prices. Proved properties are grouped by field and undiscounted cash flow estimates are prepared based on management's expectation of future pricing over the lives of the respective fields. These cash flow estimates are reviewed by an independent petroleum engineer. If the net book value of a field exceeds our undiscounted cash flow estimates, impairment expense is measured and recognized as the difference between net book value and fair value. The fair value estimates used in measuring impairment are based on internally developed unobservable inputs including reserve volumes and future production, pricing and operating costs (Level 3 inputs in the fair value hierarchy of fair value accounting). We review unproved oil and natural gas properties quarterly to assess potential impairment. Our impairment assessment is made on a lease-by-lease basis and considers factors such as management's intent to drill, lease terms and abandonment of an area. If an unproved property is determined to be impaired, the related property costs are expensed. Impairment expense related to oil and natural gas properties of approximately \$4.5 million, \$1.3 million and \$11.2 million was recorded for the years ended December 31, 2022, 2021 and 2020, respectively.

Income taxes — The asset and liability method is used in accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for operating loss and tax credit carryforwards and for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. If applicable, a valuation allowance is recorded to reduce the carrying amounts of deferred tax assets unless it is more likely than not that such assets will be realized. Our policy is to account for interest and penalties with respect to income taxes as operating expenses.

Stock-based compensation — We recognize the cost of share-based payments under the fair-value-based method. Under this method, compensation cost related to share-based payments is measured based on the estimated fair value of the awards at the date of grant, net of estimated forfeitures. This expense is recognized over the expected life of the awards, see Note 12.

As share-based compensation expense recognized in our consolidated statements of operations is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures, based on historical experience. Forfeitures are estimated at the time of grant and revised in subsequent periods if actual forfeitures differ from those estimates.

Statement of cash flows — For purposes of reporting cash flows, cash and cash equivalents include cash on deposit and money market funds with original maturities of three months or less.

Recently Adopted Accounting Standards — In December 2019, the FASB issued an accounting standards update to simplify the accounting for income taxes. The amendments in the update were effective for public business entities for fiscal years beginning after December 15, 2020, with early adoption permitted. We adopted this new guidance on January 1, 2021, and there was no material impact on our consolidated financial statements.

Recently Issued Accounting Standards — In March 2020, the FASB issued an accounting standards update to provide temporary optional expedients that simplify the accounting for contract modifications to existing debt agreements expected to arise from the market transition from LIBOR to alternative reference rates. The amendments in the update are effective as of March 12, 2020 through December 31, 2022 and may be applied to contract modifications from the beginning of an interim period that includes or is subsequent to March 12, 2020. We plan to adopt this standard when LIBOR is discontinued, and we do not expect this new guidance will have a material impact on our consolidated financial statements.

In October 2021, the FASB issued an accounting standards update, which requires contract assets and contract liabilities (i.e., deferred revenue) acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, Revenue from Contracts with Customers. Generally, this new guidance will result in the acquirer recognizing contract assets and contract liabilities at the same amounts recorded by the acquiree. Historically, such amounts were recognized by the acquirer at fair value in acquisition accounting. The amendments should be applied prospectively to acquisitions occurring on or after the effective date. The amendments in the update are effective for public business entities for fiscal years beginning after December 15, 2022, with early adoption permitted. We plan to adopt this new guidance on January 1, 2023, and we do not expect this new guidance will have a material impact on our consolidated financial statements.

2. Acquisitions and Discontinued Operations

Pioneer Energy Services Corp.

On October 1, 2021, we completed the acquisition of Pioneer by acquiring 100% of its equity interests. Total consideration for the acquisition included the issuance of approximately 26.3 million shares of our common stock and payment of \$30 million cash, which based on the closing price of our common stock of \$9.44 on October 1, 2021, valued the transaction at approximately \$278 million.

Pioneer provided land-based contract drilling services and production services to a diverse group of oil and gas exploration and production companies in the United States and internationally in Colombia.

The acquisition has been accounted for as a business combination using the acquisition method. Under the acquisition method of accounting, the fair value of the consideration transferred is allocated to the tangible and intangible assets acquired and the liabilities assumed based on their estimated fair values as of the acquisition date.

The total fair value of the consideration transferred was determined as follows (in thousands, except stock price):

Shares of our common stock issued to Pioneer shareholders	26,274
Our common stock price on October 1, 2021	\$ 9.44
Fair value of common stock issued	\$ 248,025
Plus cash consideration	\$ 30,007
Total fair value of consideration transferred	\$ 278,032

A discounted cash flow model was used by a third-party specialist in determining the fair value of the property and equipment and intangible assets. We applied significant judgment in estimating the fair value of assets acquired and liabilities assumed, which involved the use of significant estimates and assumptions with respect to market day rates, direct operating costs, rig utilization percentages, expectations regarding the amount of future capital and operating costs, and discount rates. The purchase price allocation was finalized in the third quarter of 2022. The measurement period adjustments did not have a material impact on our consolidated financial statements.

Identifiable assets acquired	
Cash and cash equivalents	\$ 649
Accounts receivable	44,832
Inventory	8,513
Held for sale assets	73,649
Other current assets	4,479
Property and equipment	215,356
Other long-term assets	9,698
Total identifiable assets acquired	 357,176
Liabilities assumed	
Accounts payable and accrued liabilities	30,222
Held for sale liabilities	32,160
Deferred income taxes	11,832
Other long-term liabilities	4,930
Total liabilities assumed	79,144
Total net assets acquired	\$ 278,032

Approximately \$41.5 million of revenues and \$30.5 million of direct operating expenses attributed to the Pioneer acquisition are included in our consolidated statements of operations for the period from the closing date on October 1, 2021 through December 31, 2021, excluding the acquired well servicing rig business and the wireline businesses that have been presented as a discontinued operation in our consolidated statements of operations. Revenues and direct operating expenses for our discontinued operations are presented below.

Pro Forma

The results of Pioneer's operations since the Pioneer merger date of October 1, 2021, are included in our consolidated statements of operations. The following pro forma condensed combined financial information was derived from our and Pioneer's historical financial statements, excluding the well servicing rig business and wireline business that were disposed on December 31, 2021, and gives effect to the acquisition as if it had occurred on January 1, 2020. The below information reflects pro forma adjustments based on available information and certain assumptions we believe are reasonable, including (i) adjustments related to the depreciation and amortization of the fair value of acquired fixed assets, (ii) removal of the historical interest expense, loss on debt extinguishment and reorganization expenses of the acquired entities and (iv) the tax benefit of the aforementioned pro forma adjustments.

The pro forma results of operations do not include any cost savings or other synergies that may result from the Pioneer acquisition. The pro forma results of operations also do not include any estimated costs that have been or will be incurred to integrate Pioneer operations. The pro forma results of operations include our merger and integration-related costs of \$12.1 million and Pioneer's merger related costs of \$4.6 million for the year ended December 31, 2021.

The pro forma condensed combined financial information has been included for comparative purposes and is not necessarily indicative of the results that might have actually occurred had the Pioneer acquisition taken place on January 1, 2020; furthermore, the financial information is not intended to be a projection of future results. The following table summarizes our selected financial information on a pro forma basis (in thousands, except per share data):

	 2021		2020
	(Unau	dited)	
Revenues	\$ 1,464,351	\$	1,255,554
Net loss	\$ (666,032)	\$	(809,996)

During 2021, we incurred costs related to the Pioneer acquisition totaling \$12.1 million, which are included in our consolidated statements of operations as "Merger and integration expenses."

Discontinued Operations

On December 31, 2021, we completed the sale of the acquired well servicing rig business and wireline business to Clearwell Dynamics, LLC. The sale price was \$43.0 million in cash consideration, subject to customary purchase price adjustments at closing for cash and working capital. The results of operations of these businesses were presented as a discontinued operation in the consolidated financial statements during the fourth quarter of 2021.

Summarized operating results from discontinued operations that are included in our consolidated statements of operations for the year ended December 31, 2021 are shown below (in thousands):

Well servicing revenue19,6Total operating revenues29,5Operating costs and expenses:10,4Wireline10,4Well servicing16,5Total operating costs and expenses27,0Operating income2,4		 2021
Well servicing revenue19,6Total operating revenues29,5Operating costs and expenses:10,4Wireline10,4Well servicing16,5Total operating costs and expenses27,0Operating income2,4	perating revenues:	
Total operating revenues29,5Operating costs and expenses:Image: Cost of the servicing of the service of the ser	Wireline revenue	\$ 9,868
Operating costs and expenses: Wireline 10,4 Well servicing 16,5 Total operating costs and expenses 27,0 Operating income 2,4	Well servicing revenue	19,652
Wireline10,4Well servicing16,5Total operating costs and expenses27,0Operating income2,4	Total operating revenues	29,520
Wireline10,4Well servicing16,5Total operating costs and expenses27,0Operating income2,4		
Well servicing16,5Total operating costs and expenses27,0Operating income2,4	perating costs and expenses:	
Total operating costs and expenses27,0Operating income2,4	Wireline	10,465
Operating income 2,4	Well servicing	 16,585
	Total operating costs and expenses	27,050
Total other income (expense)	perating income	2,470
Total other income (expense)		
	otal other income (expense)	64
Income from discontinued operations before income taxes 2,5	come from discontinued operations before income taxes	2,534
Income tax benefit	come tax benefit	
Income from discontinued operations, net of tax \$ 2,5	come from discontinued operations, net of tax	\$ 2,534

3. Revenues

ASC Topic 606 Revenue from Contracts with Customers

Revenue is recognized based on our customers' ability to benefit from our services in an amount that reflects the consideration we expect to receive in exchange for those services. This typically happens when the service is performed. Services that primarily generate our earned revenue include the operating business segments of contract drilling, pressure pumping and directional drilling, which comprise our reportable segments. We also derive revenues from our other operations, which include our operating business segments of oilfield rentals, equipment servicing, electrical controls and automation, and oil and natural gas working interests. For more information on our business segments, including disaggregated revenue recognized from contracts with customers, see Note 17.

Within each of our operating segments, the services we provide represent a series of distinct services, generally provided daily, that are substantially the same, with the same pattern of transfer to the customer. Because our customers benefit equally throughout the

service period and our efforts in providing services are incurred relatively evenly over the period of performance, revenue is recognized over time as we provide services to the customer.

We are a non-operating working interest owner of oil and natural gas properties primarily located in Texas and New Mexico. The ownership terms are outlined in joint operating agreements for each well between the operator of the well and the various interest owners, including us, who are considered non-operators of the well. We receive revenue each period for our working interest in the well during the period. The revenue received for the working interests from these oil and gas properties does not fall under the scope of the new revenue standard, and therefore, will continue to be reported under current guidance ASC 932-323 *Extractive Activities – Oil and Gas, Investments – Equity Method and Joint Ventures*.

Reimbursement Revenue — Reimbursements for the purchase of supplies, equipment, personnel services, shipping and other services that are provided at the request of our customers are recorded as revenue when incurred. The related costs are recorded as operating expenses when incurred.

Operating Lease Revenue — Lease income from equipment that we lease to others is recognized on a straight-line basis over the lease term. Lease income recognized during the years ended December 31, 2022, 2021 and 2020 was not material.

Accounts Receivable and Contract Liabilities

Accounts receivable is our right to consideration once it becomes unconditional. Payment terms typically range from 30 to 60 days.

Accounts receivable balances were \$561 million and \$352 million as of December 31, 2022 and 2021, respectively. These balances do not include amounts related to our oil and gas working interests as those contracts are excluded from Topic 606. Accounts receivable balances are included in "Accounts receivable" in our consolidated balance sheets.

We do not have any significant contract asset balances. Contract liabilities include prepayments received from customers prior to the requested services being completed. Once the services are complete and have been invoiced, the prepayment is applied against the customer's account to offset the accounts receivable balance. Also included in contract liabilities are payments received from customers for the initial mobilization of newly constructed or upgraded rigs that were moved on location to the initial well site. These mobilization payments are allocated to the overall performance obligation and amortized over the initial term of the contract. During the year ended December 31, 2022, \$1.4 million of such payments were amortized and recorded in drilling revenue. During the year ended December 31, 2021, no such payments were amortized and recorded in drilling revenue.

Total contract liability balances were \$147.8 million and \$60.3 million as of December 31, 2022 and December 31, 2021, respectively. The \$87.5 million increase was primarily due to customer prepayments. In 2022, we recognized \$59.7 million of revenue that was included in the contract liability balance at the beginning of the period. Revenue related to our contract liabilities balance is expected to be recognized through 2026. The \$110.2 million current portion of our contract liability balance is included in "Accrued liabilities" and \$37.6 million noncurrent portion of our contract liability balance is included in "Other" in our consolidated balance sheets.

Contract Costs

Costs incurred for newly constructed rigs or rig upgrades based on a contract with a customer are considered capital improvements and are capitalized to drilling equipment and depreciated over the estimated useful life of the asset.

Remaining Performance Obligations

We maintain a backlog of commitments for contract drilling services under term contracts, which we define as contracts with a duration of six months or more. Our contract drilling backlog in the United States as of December 31, 2022 was approximately \$830 million. Approximately 32% of the total contract drilling backlog in the United States at December 31, 2022 is reasonably expected to remain at December 31, 2023. We generally calculate our backlog by multiplying the dayrate under our term drilling contracts by the number of days remaining under the contract. The calculation does not include any revenues related to fees for other services such as for mobilization, other than initial mobilization, demobilization and customer reimbursables, nor does it include potential reductions in rates for unscheduled standby or during periods in which the rig is moving or incurring maintenance and repair time in excess of what is permitted under the drilling contract. For contracts that contain variable dayrate pricing, our backlog calculation uses the dayrate in effect for periods where the dayrate is fixed, and, for periods that remain subject to variable pricing, uses commodity pricing or other related indices in effect at December 31, 2022. In addition, our term drilling contracts are generally subject to termination by the customer on short notice and provide for an early termination payment to us in the event that the contract is terminated by the customer. For contracts on which we have received notice for the rig to be placed on standby, our backlog calculation uses the standby rate for the period over which we expect to receive the standby rate. For contracts on which we have received an early termination notice, our backlog calculation includes the early termination rate, instead of the dayrate, for the period over which we expect to receive the lower rate.

4. Credit Losses

ASC Topic 326 Current Expected Credit Losses (CECL)

Our customers are primarily oil and natural gas exploration and production companies, which are collectively exposed to oil and natural gas commodity price risk. Our customers require services from us at various stages of the exploration and production process. Accordingly, we have aggregated our trade receivables by segment. We utilize an accounts receivable aging schedule and historical credit loss information to estimate expected credit losses. We evaluate our accounts receivable periodically through review of historical collection experience, current aging status of the customer accounts, financial condition of our customers, and the overall economic environment of the oil and gas industry. Any customers that have experienced a deterioration in credit quality are removed from the pool and evaluated individually.

During 2021, we reversed \$1.5 million of our credit loss provision related to certain customers who had previously experienced a deterioration in credit quality. Since initially recording loss provisions for these receivables, we have collected portions of the accounts that were deemed uncollectible. During 2022, we wrote-off \$5.6 million of our credit loss provision related to certain customers, as we reached final settlements.

The allowance for credit losses related to accounts receivable as of December 31, 2021 and 2022, and changes for the periods ended December 31, 2021 and 2022 are as follows (in thousands):

Balance at December 31, 2020	\$ 10,842
Provision for expected credit losses	(1,500)
Write-offs	 (849)
Balance at December 31, 2021	8,493
Write-offs	 (5,618)
Balance at December 31, 2022	\$ 2,875

5. Inventory

Inventory consisted of the following at December 31, 2022 and 2021 (in thousands):

	2022	 2021
Finished goods	\$ 28	\$ 515
Work-in-process	2,341	882
Raw materials and supplies	55,669	40,962
Inventory	\$ 58,038	\$ 42,359

We maintain certain surplus quantities of spare parts that serve as backup components and maintenance materials for our directional drilling and Colombia contract drilling operations. In 2021, advances in technologies rendered certain directional drilling equipment, and spare parts used to service that equipment, obsolete. Based on our assessment of limited alternative uses or active markets to recapture costs, we recorded a write-down of \$4.0 million. The write-down is recorded in "Operating costs and expenses - Directional drilling" in our consolidated statements of operations. There was no similar write-down in 2022.

6. Property and Equipment

Property and equipment consisted of the following at December 31, 2022 and 2021 (in thousands):

	 2022	2021
Equipment	\$ 7,551,099	\$ 7,742,101
Oil and natural gas properties	236,156	229,403
Buildings	175,212	182,280
Land	23,610	24,562
Total property and equipment	7,986,077	8,178,346
Less accumulated depreciation, depletion, amortization and impairment	(5,725,501)	(5,846,591)
Property and equipment, net	\$ 2,260,576	\$ 2,331,755

Depreciation, depletion, amortization and impairment — The following table summarizes depreciation, depletion, amortization and impairment expense related to property and equipment, intangible assets and liabilities for 2022, 2021 and 2020 (in thousands):

	 2022	2021	2020
Depreciation and impairment expense	\$ 472,969	\$ 818,999	\$ 644,943
Amortization expense	2,891	24,606	19,281
Depletion expense	8,085	5,573	6,686
Total	\$ 483,945	\$ 849,178	\$ 670,910

On a periodic basis, we evaluate our fleet of drilling rigs for marketability based on the condition of inactive rigs, expenditures that would be necessary to bring inactive rigs to working condition and the expected demand for drilling services by rig type. The components comprising rigs that will no longer be marketed are evaluated, and those components with continuing utility to our other marketed rigs are transferred to other rigs or to our yards to be used as spare equipment. The remaining components of these rigs are abandoned. There were no impairments in 2022. In the fourth quarter of 2021, we identified 43 legacy non-super-spec rigs and equipment to be abandoned. Based on the strong customer preference across the industry for super-spec drilling rigs, we believed the 43 rigs that were abandoned had limited commercial opportunity. We recorded a \$220 million charge related to this abandonment in the fourth quarter of 2021. In the second quarter of 2020, we recorded an impairment of \$8.3 million related to the closing of our Canadian drilling operations.

We also periodically evaluate our pressure pumping assets for marketability based on the condition of inactive equipment, expenditures that would be necessary to bring the equipment to working condition and the expected demand for such equipment. The components of equipment that will no longer be marketed are evaluated, and those components with continuing utility will be used as parts to support active equipment. The remaining components of this equipment are abandoned. In the fourth quarter of 2021, we recorded a charge of \$32.2 million related to the abandonment of approximately 0.2 million horsepower within our pressure pumping fleet. The majority of these units were frac pumps but also included pump down units. These units were abandoned due to changes in customer preferences for dual fuel, advancements in technology, and prohibitive reactivation costs. There were no similar charges in 2020 or 2022.

We also periodically evaluate our directional drilling assets. In the fourth quarter of 2021, we abandoned certain directional drilling equipment totaling \$2.5 million and recorded a charge on our developed technology intangible asset of \$11.4 million due to advances in technology that rendered those assets, and their related spare parts inventory, obsolete. There were no similar charges in 2020 or 2022.

7. Goodwill and Intangible Assets

Goodwill — As a result of a triggering event in the first quarter of 2020, we fully impaired our remaining goodwill balance, and as a result, we had no goodwill balance as of December 31, 2021 or December 31, 2022. At times when we have a goodwill balance, we are required to evaluate goodwill at least annually as of December 31, or when circumstances require, to determine if the fair value of recorded goodwill has decreased below its carrying value. For impairment testing purposes, goodwill is evaluated at the reporting unit level. Our reporting units for impairment testing are our operating segments. We determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value after considering qualitative, market and other factors, and if this is the case, any necessary goodwill impairment is determined using a quantitative impairment test. From time to time, we may perform quantitative testing for goodwill impairment in lieu of performing the qualitative assessment. If the resulting fair value of goodwill is less than the carrying value of goodwill, an impairment loss would be recognized for the amount of the shortfall.

Intangible Assets — Our intangible assets were recorded at fair value on the date of acquisition and are amortized on a straight-line basis. The following table identifies the segment and weighted average useful life of each of our intangible assets:

	Segment	Weighted Average Useful Life
		(in years)
Developed technology	Directional drilling	10.0
Other	Directional drilling and Other operations	5.5

During 2021, we achieved certain internal advancements in our directional drilling technology that have rendered obsolete certain technology acquired as part of the MS Directional acquisition. Accordingly, we recorded a charge of \$11.4 million to abandon these developed technology intangibles and certain related internal use software.

The gross carrying amount and accumulated amortization of intangible assets as of December 31, 2022 and 2021 are as follows (in thousands):

				2022						2021		
	Gro	oss Carrying	Ac	cumulated	N	et Carrying	Gi	ross Carrying	Ac	cumulated	Net	Carrying
		Amount	An	nortization		Amount		Amount	Ar	nortization	I	Amount
Developed technology	\$	7,772	\$	(3,773)	\$	3,999	\$	55,772	\$	(50,996)	\$	4,776
Other		3,250		(1,404)		1,846		4,135		(1,374)		2,761
Intangible assets, net	\$	11,022	\$	(5,177)	\$	5,845	\$	59,907	\$	(52,370)	\$	7,537

Amortization and impairment expense on intangible assets of approximately \$1.3 million, \$24.0 million, and \$19.3 million was recorded for the years ended December 31, 2022, 2021 and 2020, respectively, which included an \$11.4 million impairment in 2021. The remaining amortization expense associated with finite-lived intangible assets is expected to be as follows (in thousands):

Year ending December 31,

2024 1,4 2025 1,2 2026 7 2027 7 Thereafter 1	- • • • • • • • • • • • • • • • • • • •	
2024 1,4 2025 1,2 2026 7 2027 7 Thereafter 1	2023	\$ 1,454
2026 77 2027 77 Thereafter 1	2024	1,454
2026 77 2027 77 Thereafter 1	2025	1,269
Thereafter1	2026	777
	2027	777
Total \$5,8	Thereafter	114
	Total	\$ 5,845

8. Accrued Liabilities

Accrued expenses consisted of the following at December 31, 2022 and 2021 (in thousands):

	 2022		2021	
Salaries, wages, payroll taxes and benefits	\$ 73,308	\$	52,252	
Workers' compensation liability	67,853		67,921	
Property, sales, use and other taxes	10,119		9,673	
Insurance, other than workers' compensation	3,644		6,494	
Accrued interest payable	10,522		11,226	
Accrued restructuring expenses			7,884	
Deferred revenue	110,215		60,282	
Other	28,482		22,779	
Accrued liabilities	\$ 304,143	\$	238,511	

9. Long-Term Debt

Long-term debt consisted of the following at December 31, 2022 and 2021 (in thousands):

	Effective Interest Rate	December 31, 2022		December 31, 2021	
3.95% Senior Notes	4.03%	\$	488,505	\$	509,505
5.15% Senior Notes	5.26%		347,900		349,250
			836,405		858,755
Less deferred financing costs and discounts			(5,468)		(6,432)
Total		\$	830,937	\$	852,323

Credit Agreement — On March 27, 2018, we entered into an amended and restated credit agreement (as amended, the "Credit Agreement") among us, as borrower, Wells Fargo Bank, National Association, as administrative agent, letter of credit issuer, swing line lender and lender, each of the other lenders and letter of credit issuers party thereto, The Bank of Nova Scotia and U.S. Bank National Association, as Co-Syndication Agents, Royal Bank of Canada, as Documentation Agent and Wells Fargo Securities, LLC, The Bank of Nova Scotia and U.S. Bank National Association, as Co-Lead Arrangers and Joint Book Runners.

The Credit Agreement is a committed senior unsecured revolving credit facility that permits aggregate borrowings of up to \$600 million, including a letter of credit facility that, at any time outstanding, is limited to \$100 million and a swing line facility that, at any time outstanding, is limited to the lesser of \$50 million and the unused portion of the commitment of the swing line provider at such time. Subject to customary conditions, we may request that the lenders' aggregate commitments be increased by up to \$300 million, not to exceed total commitments of \$900 million.

On November 9, 2022, we entered into Amendment No. 3 to Amended and Restated Credit Agreement ("Amendment No. 3") which, among other things, (i) revised the capacity under the letter of credit facility to \$100 million; (ii) revised the capacity under the swing line facility to the lesser of \$50 million and the amount of the swing line provider's unused commitment; (iii) changed the LIBOR reference rate to a SOFR reference rate; and (iv) extended the maturity date for \$416.7 million of revolving credit commitments of certain lenders under the Credit Agreement from March 27, 2025 to March 27, 2026. As a result, of the \$600 million of revolving credit commitments under the Credit Agreement, the maturity date for \$416.7 million of such commitments is March 27, 2026; the maturity date for \$133.3 million of such commitments is March 27, 2025; and the maturity date for the remaining \$50 million of such commitments is March 27, 2024.

Loans under the Credit Agreement bear interest by reference, at our election, to the SOFR rate or base rate. The applicable margin on SOFR rate loans varies from 1.00% to 2.00% and the applicable margin on base rate loans varies from 0.00% to 1.00%, in each case determined based upon our credit rating. As of December 31, 2022, the applicable margin on SOFR rate loans was 1.75% and the applicable margin on base rate loans was 0.75%. A letter of credit fee is payable by us equal to the applicable margin for SOFR rate loans times the daily amount available to be drawn under outstanding letters of credit. The commitment fee rate payable to the lenders varies from 0.10% to 0.30% based upon our credit rating.

None of our subsidiaries are currently required to be a guarantor under the Credit Agreement. However, if any subsidiary guarantees or incurs debt in excess of the Priority Debt Basket (as defined in the Credit Agreement), such subsidiary is required to become a guarantor under the Credit Agreement.

The Credit Agreement contains representations, warranties, affirmative and negative covenants and events of default and associated remedies that we believe are customary for agreements of this nature, including certain restrictions on our ability and the ability of each of our subsidiaries to incur debt and grant liens. If our credit rating is below investment grade at both Moody's and S&P, we will become subject to a restricted payment covenant, which would require us to have a Pro Forma Debt Service Coverage Ratio (as defined in the Credit Agreement) greater than or equal to 1.50 to 1.00 immediately before and immediately after making any restricted payment. Restricted payments include, among other things, dividend payments, repurchases of our common stock, distributions to holders of our common stock or any other payment or other distribution to third parties on account of our or our subsidiaries' equity interests. Our credit rating is currently investment grade at one of the two ratings agencies. The Credit Agreement also requires that our total debt to capitalization ratio, expressed as a percentage, not exceed 50%. The Credit Agreement generally defines the total debt to capitalization ratio of (a) total borrowed money indebtedness to (b) the sum of such indebtedness plus consolidated net worth, with consolidated net worth determined as of the end of the most recently ended fiscal quarter. We were in compliance with these covenants at December 31, 2022.

As of December 31, 2022, we had no borrowings outstanding under our revolving credit facility. We had no letters of credit outstanding under the Credit Agreement at December 31, 2022 and, as a result, had available borrowing capacity of \$600 million at that date.

2015 Reimbursement Agreement — On March 16, 2015, we entered into a Reimbursement Agreement (the "Reimbursement Agreement") with The Bank of Nova Scotia ("Scotiabank"), pursuant to which we may from time to time request that Scotiabank issue an unspecified amount of letters of credit. As of December 31, 2022, we had \$65.0 million in letters of credit outstanding under the Reimbursement Agreement.

Under the terms of the Reimbursement Agreement, we will reimburse Scotiabank on demand for any amounts that Scotiabank has disbursed under any letters of credit. Fees, charges and other reasonable expenses for the issuance of letters of credit are payable by us at the time of issuance at such rates and amounts as are in accordance with Scotiabank's prevailing practice. We are obligated to pay to Scotiabank interest on all amounts not paid by us on the date of demand or when otherwise due at the LIBOR rate plus 2.25% per annum, calculated daily and payable monthly, in arrears, on the basis of a calendar year for the actual number of days elapsed, with interest on overdue interest at the same rate as on the reimbursement amounts. A letter of credit fee is payable by us equal to 1.50% times the amount of outstanding letters of credit.

We have also agreed that if obligations under the Credit Agreement are secured by liens on any of our or our subsidiaries' property, then our reimbursement obligations and (to the extent similar obligations would be secured under the Credit Agreement) other obligations under the Reimbursement Agreement and any letters of credit will be equally and ratably secured by all property subject to such liens securing the Credit Agreement.

Pursuant to a Continuing Guaranty dated as of March 16, 2015, our payment obligations under the Reimbursement Agreement are jointly and severally guaranteed as to payment and not as to collection by our subsidiaries that from time to time guarantee payment under the Credit Agreement. None of our subsidiaries are currently required to guarantee payment under the Credit Agreement.

2028 Senior Notes and 2029 Senior Notes — On January 19, 2018, we completed an offering of \$525 million in aggregate principal amount of our 3.95% Senior Notes due 2028 (the "2028 Notes"). On November 15, 2019, we completed an offering of \$350 million in aggregate principal amount of our 5.15% Senior Notes due 2029 (the "2029 Notes").

During the fourth quarter of 2020, we elected to repurchase portions of our 2028 Notes and 2029 Notes in the open market. The principal amounts retired through these transactions totaled \$15.5 million of our 2028 Notes and \$0.8 million of our 2029 Notes, plus accrued interest. We recorded corresponding gains on the extinguishment of these amounts totaling \$3.4 million and \$0.2 million, respectively, net of the proportional write-off of associated deferred financing costs and original issuance discounts. These gains are included in "Interest expense, net of amount capitalized" in our consolidated statements of operations.

During the fourth quarter of 2022, we elected to repurchase portions of our 2028 Notes and 2029 Notes in the open market. The principal amounts retired through these transactions totaled \$21.0 million of our 2028 Notes and \$1.4 million of our 2029 Notes, plus accrued interest. We recorded corresponding gains on the extinguishment of these amounts totaling \$2.3 million and \$0.1 million, respectively, net of the proportional write-off of associated deferred financing costs and original issuance discounts. These gains are included in "Interest expense, net of amount capitalized" in our consolidated statements of operations.

We pay interest on the 2028 Notes on February 1 and August 1 of each year. The 2028 Notes will mature on February 1, 2028. The 2028 Notes bear interest at a rate of 3.95% per annum.

We pay interest on the 2029 Notes on May 15 and November 15 of each year. The 2029 Notes will mature on November 15, 2029. The 2029 Notes bear interest at a rate of 5.15% per annum.

The 2028 Notes and 2029 Notes (together, the "Senior Notes") are our senior unsecured obligations, which rank equally with all of our other existing and future senior unsecured debt and will rank senior in right of payment to all of our other future subordinated debt. The Senior Notes will be effectively subordinated to any of our future secured debt to the extent of the value of the assets securing such debt. In addition, the Senior Notes will be structurally subordinated to the liabilities (including trade payables) of our subsidiaries that do not guarantee the Senior Notes. None of our subsidiaries are currently required to be a guarantor under the Senior Notes. If our subsidiaries guarantee the Senior Notes in the future, such guarantees (the "Guarantees") will rank equally in right of payment with all of the guarantors' future unsecured senior debt and senior in right of payment to all of the guarantors' future subordinated debt. The Guarantees will be effectively subordinated to any of the guarantors' future secured debt to the extent of the value of the assets securing such debt.

At our option, we may redeem the Senior Notes in whole or in part, at any time or from time to time at a redemption price equal to 100% of the principal amount of such Senior Notes to be redeemed, plus accrued and unpaid interest, if any, on those Senior Notes to the redemption date, plus a "make-whole" premium. Additionally, commencing on November 1, 2027, in the case of the 2028 Notes, and on August 15, 2029, in the case of the 2029 Notes, at our option, we may redeem the respective Senior Notes in whole or in part, at a redemption price equal to 100% of the principal amount of the Senior Notes to be redeemed, plus accrued and unpaid interest, if any, on those Senior Notes to the redemption date.

The indentures pursuant to which the Senior Notes were issued include covenants that, among other things, limit our and our subsidiaries' ability to incur certain liens, engage in sale and lease-back transactions or consolidate, merge, or transfer all or substantially all of their assets. These covenants are subject to important qualifications and limitations set forth in the indentures.

Upon the occurrence of a change of control triggering event, as defined in the indentures, each holder of the Senior Notes may require us to purchase all or a portion of such holder's Senior Notes at a price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to, but excluding, the repurchase date.

The indentures also provide for events of default which, if any of them occurs, would permit or require the principal of, premium, if any, and accrued interest, if any, on the Senior Notes to become or to be declared due and payable.

Debt issuance costs — We incurred approximately \$4.6 million in debt issuance costs in connection with the Credit Agreement. We also incurred an additional \$0.4 million in debt issuance costs in connection with our entry into Amendment No. 2 and \$0.5 million in debt issuance costs in connection with the 2028 Notes and approximately \$1.0 million in debt issuance costs in connection with the 2029 Notes. These costs were deferred and are being recognized as interest expense over the term of the underlying debt. Debt issuance costs, except those related to line-of-credit arrangements, are presented in the balance sheet as a direct reduction of the carrying amount of the related debt. Debt issuance costs related to line-of-credit arrangements are included in "Other non-current assets" in our consolidated balance sheets. Amortization of debt issuance costs is reported as interest expense.

Interest expense related to the amortization of debt issuance costs was approximately \$1.0 million, \$1.0 million, and \$1.1 million for the years ended December 31, 2022, 2021 and 2020, respectively. Amortization of debt issuance costs for the year ended December 31, 2022 includes \$0.1 million of debt issuance costs that were expensed as a result of the early redemption of a portion of our 2028 Notes and 2029 Notes and \$0.5 million of debt issuance costs that was incurred as a result of the entry into Amendment No. 3. Amortization of debt issuance costs for the year ended December 31, 2021 includes minimal debt issuance costs that were expensed as a result of the early redemption of a portion of the complete prepayment of our borrowings under our Term Loan Agreement. Amortization of debt issuance costs for the year ended December 31, 2020 includes \$0.1 million of debt issuance costs that were expensed as a result of the early redemption of a portion of a portion of a portion of our 2028 Notes and 2029 Notes and 2029 Notes as well as the partial repayment of our borrowings under our Term Loan Agreement.

Presented below is a schedule of the principal repayment requirements of long-term debt by fiscal year as of December 31, 2022 (in thousands):

Year ending December 31,	
2023	\$
2024	_
2025	_
2026	_
2027	_
Thereafter	836,405
Total	\$ 836,405

10. Commitments, Contingencies and Other Matters

Commitments – As of December 31, 2022, we maintained letters of credit in the aggregate amount of \$65.0 million primarily for the benefit of various insurance companies as collateral for retrospective premiums and retained losses which could become payable under the terms of the underlying insurance contracts. These letters of credit expire annually at various times during the year and are typically renewed. As of December 31, 2022, no amounts had been drawn under the letters of credit.

As of December 31, 2022, we had commitments to purchase major equipment totaling approximately \$130 million for our contract drilling, pressure pumping, directional drilling and oilfield rentals businesses.

Our pressure pumping business has entered into agreements to purchase minimum quantities of proppants and chemicals from certain vendors. As of December 31, 2022, the remaining minimum obligation under these agreements was approximately \$25.6 million, of which approximately \$22.6 million and \$3.0 million relate to the remainder of 2023 and 2024, respectively.

Contingencies – Our operations are subject to many hazards inherent in the businesses in which it operates, including inclement weather, blowouts, explosions, fires, loss of well control, motor vehicle accidents, equipment failure, pollution, exposure and reservoir damage. These hazards could cause personal injury or death, work stoppage, and serious damage to equipment and other property, as well as significant environmental and reservoir damages. These risks could expose us to substantial liability for personal injury, wrongful death, property damage, loss of oil and natural gas production, pollution and other environmental damages. An accident or other event resulting in significant environmental or property damage, or injuries or fatalities involving our employees or other persons could also trigger investigations by federal, state or local authorities. Such an accident or other event could cause us to incur substantial expenses in connection with the investigation, remediation and resolution, as well as cause lasting damage to our reputation, loss of customers and an inability to obtain insurance.

We have indemnification agreements with many of our customers, and also maintain liability and other forms of insurance. In general, our contracts typically contain provisions requiring our customers to indemnify us for, among other things, reservoir and certain pollution damage. Our right to indemnification may, however, be unenforceable or limited due to negligent or willful acts or omissions by us, our subcontractors and/or suppliers. In addition, certain states, including Louisiana, New Mexico, Texas and Wyoming, have enacted statutes generally referred to as "oilfield anti-indemnity acts" expressly prohibiting certain indemnity agreements contained in or related to oilfield services agreements. Such oilfield anti-indemnity acts may restrict or void a party's indemnification of us.

Our customers and other third parties may dispute, or be unable to meet, their indemnification obligations to us due to financial, legal or other reasons. Accordingly, we may be unable to transfer these risks to our customers and other third parties by contract or indemnification agreements. Incurring a liability for which we are not fully indemnified or insured could have a material adverse effect on our business, financial condition, cash flows and results of operations.

We maintain insurance coverage of types and amounts that we believe to be customary in the industry, but are not fully insured against all risks, either because insurance is not available or because of the high premium costs. The insurance coverage that we maintain includes insurance for fire, windstorm and other risks of physical loss to our equipment and certain other assets, employer's liability,

automobile liability, commercial general liability, workers' compensation and insurance for other specific risks. We cannot assure, however, that any insurance obtained will be adequate to cover any losses or liabilities, or that this insurance will continue to be available, or available on terms that are acceptable to us. While we carry insurance to cover physical damage to, or loss of, a substantial portion of our equipment and certain other assets, such insurance does not cover the full replacement cost of such equipment or other assets. We have also elected in some cases to accept a greater amount of risk through increased deductibles on certain insurance policies. For example, in the United States we generally maintain a \$1.5 million per occurrence deductible on our workers' compensation insurance coverage, a \$1.0 million per occurrence deductible on our equipment insurance coverage, a \$5.0 million per occurrence deductible on our general liability coverage, a \$2.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance coverage, and a \$5.0 million per occurrence deductible on our primary automobile liability insurance to cover risks, including loss of earnings and business interruption and most cybersecurity risks, and do not carry a significant amount of insurance to cover risks of underground reservoir damage.

We are party to various legal proceedings arising in the normal course of our business. We do not believe that the outcome of these proceedings, either individually or in the aggregate, will have a material adverse effect on our financial condition, cash flows or results of operations.

Other Matters — We have a Change in Control Agreement with one of our Executive Vice Presidents (the "Specified Employee"). The Change in Control Agreement generally has an initial term with automatic twelve-month renewals unless we notify the Specified Employee at least ninety days before the end of such renewal period that the term will not be extended. If a change in control occurs during the term of the agreement and the Specified Employee's employment is terminated (i) by us other than for cause or other than automatically as a result of death, disability or retirement, or (ii) by the Specified Employee for good reason (as those terms are defined in the Change in Control Agreement), then the Specified Employee shall generally be entitled to, among other things:

- a bonus payment equal to the highest bonus paid after the Change in Control Agreement was entered into (such bonus payment prorated for the portion of the fiscal year preceding the termination date);
- a payment equal to 2 times the sum of (i) the highest annual salary in effect for such Specified Employee and (ii) the average of the three annual bonuses earned by the Specified Employee for the three fiscal years preceding the termination date and
- continued coverage under our welfare plans for up to two years.

The Change in Control Agreement provides the Specified Employee with a full gross-up payment for any excise taxes imposed on payments and benefits received under the Change in Control Agreements or otherwise, including other taxes that may be imposed as a result of the gross-up payment.

We have Employment Agreements with our Chief Executive Officer, Chief Financial Officer, Chief Operating Officer and General Counsel. Each Employment Agreement generally has an initial three-year term, subject to automatic annual renewal. The executive may terminate his employment under his Employment Agreement by providing written notice of such termination at least 30 days before the effective date of such termination. Under specified circumstances, we may terminate the executive's employment under his Employment Agreement) by providing written notice 10 -30 days, depending on the nature of the cause trigger, before the effective date of such termination or (ii) by providing written notice of such termination at least 30 days before the effective date of such termination or (ii) by providing written notice of such termination at least 30 days before the effective date of such termination and granting at least 10 - 20 days, depending on the nature of the cause trigger, to cure the cause for such termination or (ii) by providing written notice of such termination at least 30 days before the effective date of such termination and by granting at least 20 days to cure the cause for such termination and by granting at least 20 days to cure the cause for such termination, provided that if the matter is reasonably determined by us to not be capable of being cured, the executive may be terminated for cause on the date the written notice is delivered. The Employment Agreement also provides for, among other things, severance payments and the continuation of certain benefits following our decision to terminate the executive other than for Cause, or termination by the executive for Good Reason (as defined in each Employment Agreement). Under these provisions, if the executive's employment is terminated by us without Cause, or the executive terminates his employment for Good Reason:

- the executive will have the right to receive a lump-sum payment consisting of 3 times (in the case of the Chief Executive Officer) or 2.5 times (in the case of the Chief Financial Officer, Chief Operating Officer and General Counsel) the sum of (i) his base salary and (ii) the average annual cash bonus received by him for the three years prior to the date of termination;
- the executive will have the right to receive a pro-rated lump-sum payment equal to his annual cash bonus based on actual results for the year, payable at the same time as annual cash bonuses are paid to active employees;
- we will accelerate vesting of all time-based equity, phantom equity and long-term cash incentive awards on the 60th day following the executive's termination and will cause all performance-based equity, phantom equity and long-term cash incentive awards to continue in effect through the end of the applicable performance period and vest based on actual results as if the executive had remained employed through the end of the applicable performance period; and
- we will pay the executive certain accrued obligations and certain obligations pursuant to the terms of employee benefit plans.

If our decision to terminate other than for Cause or by the executive for Good Reason occurs following a Change in Control (as defined in his Employment Agreement, the executive will generally be entitled to the same severance payments and benefits described above except that the pro-rated lump-sum payment for annual cash bonuses will be based on his highest annual cash bonus for the last three years, and the executive will be entitled to 36 months (in the case of the Chief Executive Officer) or 30 months (in the case of the Chief Financial Officer, Chief Operating Officer and General Counsel) of subsidized benefits continuation coverage.

11. Stockholders' Equity

Cash Dividend — On February 8, 2023, our Board of Directors approved a cash dividend on our common stock in the amount of \$0.08 per share to be paid on March 16, 2023 to holders of record as of March 2, 2023. The amount and timing of all future dividend payments, if any, are subject to the discretion of the Board of Directors and will depend upon business conditions, results of operations, financial condition, terms of our debt agreements and other factors. Our Board of Directors may, without advance notice, reduce or suspend our dividend to improve our financial flexibility and position our company for long-term success. There can be no assurance that we will pay a dividend in the future.

Share Repurchases and Acquisitions — In September 2013, our Board of Directors approved a stock buyback program. In October 2022, our Board of Directors approved an increase of the authorization under the stock buyback program to allow for an aggregate of \$300 million of future share repurchases. All purchases executed to date have been through open market transactions. Purchases under the program are made at management's discretion, at prevailing prices, subject to market conditions and other factors. Purchases may be made at any time without prior notice. There is no expiration date associated with the buyback program. As of December 31, 2022, we had remaining authorization to purchase approximately \$243 million of our outstanding common stock under the stock buyback program. Shares of stock purchased under the buyback program are held as treasury shares.

We acquired shares of stock from employees during 2022, 2021 and 2020 that are accounted for as treasury stock. Certain of these shares were acquired to satisfy the exercise price and employees' tax withholding obligations upon the exercise of stock options. The remainder of these shares were acquired to satisfy payroll withholding obligations upon the settlement of performance unit awards and the vesting of restricted stock units. These shares were acquired at fair market value. These acquisitions were made pursuant to the terms of the Patterson-UTI Energy, Inc. Amended and Restated 2014 Long-Term Incentive Plan, as amended (the "2014 Plan") and the Patterson-UTI Energy, Inc. 2021 Long-Term Incentive Plan (the "2021 Plan"), and not pursuant to the stock buyback program. Upon the issuance of shares for the Pioneer acquisition in October 2021, we withheld shares with respect to Pioneer employees' tax withholding obligations.

Treasury stock acquisitions during the years ended December 31, 2022, 2021 and 2020 were as follows (dollars in thousands):

	2022		202	21	2020	
	Shares	Cost	Shares	Cost	Shares	Cost
Treasury shares at beginning of period	84,128,995	\$1,372,641	83,402,322	\$1,366,313	77,336,387	\$1,345,134
Purchases pursuant to stock buyback program	3,254,599	57,173	—		5,826,266	20,000
Acquisitions pursuant to long-term incentive plan	1,372,101	23,237	451,196	3,727	239,669	1,179
Purchases in connection with Pioneer acquisition	—		275,477	2,601	—	—
Other	3,027	28				
Treasury shares at end of period	88,758,722	\$1,453,079	84,128,995	\$1,372,641	83,402,322	\$1,366,313

Release of Cumulative Translation Adjustment — In April 2022, we sold certain assets to substantially complete our exit from our Canadian operations. We used the Canadian dollar as our functional currency for our Canadian operations. Prior to the substantial completion of our exit, the effects of exchange rate changes were reflected in accumulated other comprehensive income, which is a separate component of stockholders' equity. Upon substantial completion of our exit, we released the \$7.7 million cumulative translation adjustment, net of tax of \$3.8 million, from accumulated other comprehensive income into net income (loss) in the second quarter of 2022. The release resulted in an \$11.5 million pre-tax gain, which was recorded in other operating income, net.

12. Stock-based Compensation

We use share-based payments to compensate employees and non-employee directors. We recognize the cost of share-based payments under the fair-value-based method. Share-based awards include equity instruments in the form of stock options, restricted stock, or restricted stock units that have included service conditions and, in certain cases, performance conditions. Our share-based awards also include share-settled performance unit awards. Share-settled performance unit awards are accounted for as equity awards. In 2020, we granted performance-based cash-settled phantom units, which are accounted for as a liability classified award. We issue shares of common stock when vested stock options are exercised, when restricted stock is granted and after restricted stock units and share-settled performance unit awards vest.

On June 3, 2021, our stockholders approved the 2021 Plan. No additional awards will be granted under any of our previously existing plans after such date. The aggregate number of shares of Common Stock authorized for grant under the 2021 Plan is approximately 13.5 million, which includes approximately 4.9 million shares previously authorized for issuance under our 2014 Plan.

Our share-based compensation plans at December 31, 2022 are as follows:

Plan Name	Shares Authorized for Grant	Shares Underlying Awards Outstanding	Shares Available for Grant
2021 Plan	13,467,480	3,851,825	3,689,156
2014 Plan	_	3,588,486	_
Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan, as amended	_	672,500	—

A summary of the 2021 Plan follows:

- The Compensation Committee of the Board of Directors administers the Plan other than the awards to directors.
- All employees, officers and directors are eligible for awards.
- The Compensation Committee determines the vesting schedule for awards. Awards typically vest over one year for non-employee directors and three years for employees.
- The Compensation Committee sets the term of awards and no option term can exceed 10 years.
- The Plan provides that the total compensation paid to each non-employee director for their service as such, whether in cash or in equity awards under the 2021 Plan (based on the grant date fair value of any such awards) during a single fiscal year may not exceed \$750,000; however, the foregoing limit will instead be \$1,000,000 for any fiscal year in which the non-employee director is first appointed to the Board of Directors or any fiscal year in which the non-employee director serves as chairman or lead director.
- All options granted under the 2021 Plan are granted with an exercise price equal to or greater than fair market value of our common stock at the time the option is granted.
- The Plan provides for awards of incentive and non-incentive stock options, stock appreciation rights ("SARs"), restricted stock awards, other stock unit awards, performance share awards, performance unit awards and dividend equivalent rights.

Options granted under the Patterson-UTI Energy, Inc. 2005 Long-Term Incentive Plan, as amended, and 2014 Plan typically vested over one year for non-employee directors and three years for employees. All options were granted with an exercise price equal to the fair market value of the related common stock at the time of grant.

Stock Options — We estimate the grant date fair values of stock options using the Black-Scholes-Merton valuation model. Volatility assumptions are based on the historic volatility of our common stock over the most recent period equal to the expected term of the options as of the date such options are granted. The expected term assumptions are based on our experience with respect to employee stock option activity. Dividend yield assumptions are based on the expected dividends at the time the options are granted. The risk-free interest rate assumptions are determined by reference to United States Treasury yields. No options were granted during the years ended December 31, 2022, 2021 and 2020.

Stock option activity for the year ended December 31, 2022 follows:

		Weightee	d Average
	Shares	Exercise Pri	ice Per Share
Outstanding at beginning of year	3,720,150	\$	20.93
Exercised	(640,000)	\$	16.20
Expired	(175,000)	\$	17.37
Outstanding at end of year	2,905,150	\$	22.19
Exercisable at end of year	2,905,150	\$	22.19

Options outstanding and exercisable at December 31, 2022 have an intrinsic value of approximately \$0.1 million and a weightedaverage remaining contractual term of 2.04 years. Additional information with respect to options granted, vested and exercised during the years ended December 31, 2022, 2021 and 2020 follows (in thousands, except per share data):

	20)22	2021	2020
Weighted-average grant date fair value of stock options granted (per share)		NA	NA	NA
Aggregate grant date fair value of stock options vested during the year	\$		\$ 89	\$ 89
Aggregate intrinsic value of stock options exercised	\$	410	\$ —	\$

As of December 31, 2022, no options to purchase shares were outstanding and unvested.

Restricted Stock Units — For all restricted stock unit awards made to date, shares of common stock are not issued until the units vest. Restricted stock units are subject to forfeiture for failure to fulfill service conditions and, in certain cases, performance conditions. Forfeitable dividend equivalents are accrued on certain restricted stock units that will be paid upon vesting. We use the straight-line method to recognize periodic compensation cost over the vesting period.

Restricted stock unit activity for the year ended December 31, 2022 follows:

	Time Based	Performance Based	Grant	ed Average Date Fair Per Share
Non-vested restricted stock units outstanding at beginning of year	3,044,719	359,315	\$	8.31
Granted	1,554,849		\$	17.37
Vested	(1,437,286)	—	\$	7.32
Forfeited	(71,436)		\$	13.15
Non-vested restricted stock units outstanding at end of year	3,090,846	359,315	\$	12.71

As of December 31, 2022, approximately 3.2 million non-vested restricted stock units outstanding are expected to vest. Additional information as of December 31, 2022 with respect to these non-vested restricted stock units follows (dollars in thousands):

Aggregate intrinsic value	\$ 54,672
Weighted-average remaining vesting period	1.40 years
Unrecognized compensation cost	\$ 25,998

Performance Unit Awards — We have granted share-settled performance unit awards to certain employees (the "Performance Units") on an annual basis since 2010. The Performance Units provide for the recipients to receive a grant of shares of common stock upon the achievement of certain performance goals during a specified period established by the Compensation Committee. The performance period for the Performance Units is generally the three-year period commencing on April 1 of the year of grant.

The performance goals for the Performance Units are tied to our total shareholder return for the performance period as compared to total shareholder return for a peer group determined by the Compensation Committee. For the performance units granted in April 2021 and April 2022, the peer group also includes three market indices and one market index, respectively. These goals are considered to be market conditions under the relevant accounting standards and the market conditions were factored into the determination of the fair value of the respective Performance Units. Under the Performance Units granted beginning in April 2019, the recipients will receive the target number of shares if our total shareholder return during the performance period, when compared to the peer group, is at the 55th percentile. If our total shareholder return during the target number of shares. If our total shareholder return during the target number of shares. If our total shareholder return during the performance period, when compared to the peer group, is at the 25th percentile, then the recipients will only receive one-half of the target number of shares. If our total shareholder return during the performance period, when compared to the peer group, is at the 25th percentile, then the recipients will only receive one-half of the target number of shares. If our total shareholder return during the performance period, when compared to the peer group, is at the 25th percentile, then the recipients will only receive one-half of the target number of shares. If our total shareholder return during the performance period, when compared to the peer group, is between the 25th and 55th percentile, or the 55th and 75th percentile, then the shares to be received by the recipients will be determined using linear interpolation for levels of achievement between these points.

Under the Performance Units granted beginning in April 2019, the payout shall not exceed the target number of shares if our absolute total shareholder return is negative or zero. Additionally, the Performance Units granted in April 2020 will not pay out if our total shareholder return is not equal to or greater than the total stockholder return of the S&P 500 Index for the performance period.

The total target number of shares with respect to the Performance Units for the years 2017-2022 is set forth below:

	2022 Performance	2021 Performance	2020 Performance	2019 Performance	2018 Performance	2017 Performance
	Unit Awards					
Target number of shares	414,000	843,000	500,500	489,800	310,700	186,198

In May 2020, 332,773 shares were issued to settle the 2017 Performance Units. In April 2021, 621,400 shares were issued to settle the 2018 Performance Units. In April 2022, 979,600 shares were issued to settle the 2019 Performance Units. The Performance Units granted in 2020, 2021 and 2022 have not reached the end of their respective performance periods.

Because the Performance Units are share-settled awards, they are accounted for as equity awards and measured at fair value on the date of grant using a Monte Carlo simulation model. The fair value of the Performance Units is set forth below (in thousands):

		2022		2021	2	020		2019		2018		2017
	Per	formance	Pert	formance	Perfo	rmance	Perf	ormance	Perf	formance	Perf	ormance
	Un	it Awards	Uni	t Awards	Unit .	Awards	Unit	Awards	Uni	t Awards	Unit	Awards
Aggregate fair value at date of grant	\$	10,743	\$	7,225	\$	826	\$	9,958	\$	8,004	\$	5,780

The weighted-average fair value calculations for performance units granted during the years ended December 31, 2022, 2021 and 2020 were based on the following weighted-average assumptions set forth below:

	2022	2021	2020
Risk-free interest rate ⁽¹⁾	2.9%	0.4%	0.4%
Expected stock volatility ⁽²⁾	86.5%	83.2%	66.2%
Expected dividend yield ⁽³⁾	1.0%	1.3%	7.7%
Expected term (in years)	3	3	3

⁽¹⁾ The risk-free interest rate is based on U.S. Treasury securities for the expected term of the performance units.

⁽²⁾ Expected volatilities are based on the daily closing price of our stock based upon historical experience over a three-year period.

⁽³⁾ Expected dividend yield is based on the annualized dividend in effect on the measurement date and the stock price on the grant date.

These fair value amounts are charged to expense on a straight-line basis over the performance period. Compensation expense associated with the Performance Units is set forth below (in thousands):

		2022		2021		2020		2019		2018	20	17
	Per	ormance	Per	formance	Perf	ormance	Per	formance	Perf	ormance	Perfor	mance
	Uni	t Awards	Uni	it Awards	Unit	Awards	Uni	t Awards	Unit	Awards	Unit A	wards
Year ended December 31, 2022	\$	2,686	\$	2,408	\$	275	\$	830		NA		NA
Year ended December 31, 2021		NA	\$	1,806	\$	275	\$	3,319	\$	667		NA
Year ended December 31, 2020		NA		NA	\$	206	\$	3,319	\$	2,668	\$	642

As of December 31, 2022, we had unrecognized compensation cost of \$11.1 million related to our unvested Performance Units. The weighted-average remaining vesting period for these unvested Performance Units was 1.20 years as of December 31, 2022.

Dividends on Equity Awards – Dividend equivalents are paid or accrued on certain restricted stock units. These dividends are recognized as reductions of retained earnings for the portion of restricted stock units expected to vest.

Phantom Units — In May 2020, the Compensation Committee approved a grant of long-term performance-based phantom units to our Chief Executive Officer and President, William A. Hendricks, Jr (the "Phantom Units"). The Phantom Units were granted outside of the 2014 Plan. Pursuant to this phantom unit grant, Mr. Hendricks may earn from 0% to 200% of a target award of 298,500 phantom units based on our achievement of the same performance conditions over the same performance period that applies to the Performance Units granted in April 2020, as described above. Earned Phantom Units, if any, will be settled in 2023, following completion of the three-year performance period, in a cash payment equal to the number of earned phantom units multiplied by our average trading price per share over the twenty consecutive trading days ending March 31, 2023. Because the Phantom Units are cash-settled awards, they are accounted for as a liability classified award. The grant date fair value of the Phantom Units was \$1.2 million. Compensation expense is recognized on a straight-line basis over the performance period, with the amount recognized fluctuating as a result of the Phantom Units being remeasured to fair value at the end of each reporting period due to their liability-award classification. We recognized \$6.0

million, \$1.8 million, and \$0.6 million in compensation expense associated with the Phantom Units in 2022, 2021, and 2020, respectively.

13. Leases

ASC Topic 842 Leases

We have entered into operating leases for operating locations, corporate offices and certain operating equipment. These leases have remaining lease terms of approximately two months to eleven years as of December 31, 2022. Currently, we do not have any finance leases.

Lease expense consisted of the following for the years ended December 31, 2022, 2021, and 2020 (in thousands):

	Year Ended December 31,					
	2022		2021		2020	
Operating lease cost	\$ 5,664	\$	4,984	\$	6,911	
Short-term lease expense ⁽¹⁾			41		2	
Total lease expense ⁽²⁾	\$ 5,664	\$	5,025	\$	6,913	

⁽¹⁾ Short-term lease expense represents expense related to leases with a contract term of one year or less.

⁽²⁾ Total lease expense is recorded in operating costs for the respective segments and within "selling, general and administrative" in our consolidated statements of operations.

Supplemental cash flow information related to leases for the years ended December 31, 2022, 2021 and 2020 is as follows (in thousands):

	Year Ended December 31,						
		2022		2021		2020	
Cash paid for amounts included in the measurement of lease liabilities:							
Operating cash flows from operating leases	\$	6,858	\$	7,323	\$	11,576	
Right of use assets obtained in exchange for lease obligations:							
Operating leases	\$	6,530	\$	6,413	\$	1,763	

Supplemental balance sheet information related to leases as of December 31, 2022 and 2021 is as follows:

	December 31, 2022	December 31, 2021
Weighted Average Remaining Lease Term:		
Operating leases	6.1 years	4.8 years
Weighted Average Discount Rate:		
Operating leases	4.1%	3.8%

Maturities of operating lease liabilities as of December 31, 2022 are as follows (in thousands):

Year ending December 31,	
2023	\$ 5,928
2024	5,114
2025	4,432
2026	3,785
2027	3,144 5,848
Thereafter	5,848
Total lease payments	28,251
Less imputed interest	(3,534)
Total	\$ 24,717

14. Income Taxes

Income before income taxes for the United States for the year ended December 31, 2022 was \$166 million. Loss before income taxes for the United States for the years ended December 31, 2021 and 2020 was \$721 million and \$917 million, respectively. Income before income taxes for non-U.S. jurisdictions for the years ended December 31, 2022 and 2021 was \$2 million and \$0.9 million, respectively. Loss before income taxes for non-U.S. jurisdictions for years ended December 31, 2020 was \$14.2 million.

Components of the income tax provision applicable to federal, state and foreign income taxes for the years ended December 31, 2022, 2021 and 2020 are as follows (in thousands):

	2022	2021	2020
Federal income tax expense (benefit):			
Current	\$ 480	\$	\$ (1,977)
Deferred	11,820	(86,878)	(107,334)
	12,300	(86,878)	(109,311)
State income tax expense (benefit):			
Current	2,647	144	225
Deferred	(4,896)	23,028	(17,949)
	(2,249)	23,172	(17,724)
Foreign income tax expense (benefit):	·		
Current	2,750	134	(291)
Deferred	403	870	
	3,153	1,004	(291)
Total income tax expense (benefit):			
Current	5,877	278	(2,043)
Deferred	7,327	(62,980)	(125,283)
Total income tax expense (benefit)	\$ 13,204	\$ (62,702)	<u>\$ (127,326)</u>

The difference between the statutory U.S. federal income tax rate and the effective income tax rate for the years ended December 31, 2022, 2021 and 2020 is summarized as follows:

	2022	2021	2020
Statutory tax rate	21.0%	21.0%	21.0%
State income taxes - net of the federal income tax benefit	3.0	3.0	1.7
State deferred tax remeasurement	9.4	(0.8)	
Goodwill impairment	—	—	(8.2)
Valuation allowance	(33.4)	(13.3)	(0.2)
U.S. impact of foreign operations	1.3	—	
Effect of foreign taxes	1.6	(0.1)	(0.1)
Non-deductible compensation	4.3	(0.3)	
Share-based compensation	(1.9)	(0.3)	(0.5)
Non-deductible expenses	1.2	(0.2)	(0.1)
Other differences, net	1.4	(0.3)	0.1
Effective tax rate	7.9%	8.7%	13.7%

Our effective income tax rate fluctuates based on, among other factors, changes in pre-tax income in countries with varying statutory tax rates, changes in valuation allowances, and the impacts of various other permanent adjustments.

The ability to recognize a portion of our U.S. federal and state net operating losses resulted in a significant impact, through changes in valuation allowances, in our effective tax rate for the year ended December 31, 2022. This benefit was partly offset by state and local income taxes and various other permanent adjustments.

The tax effect of temporary differences and tax attributes representing deferred tax assets and liabilities at December 31, 2022 and 2021 are as follows (in thousands):

	2022		2021
Deferred tax assets:			
Net operating loss carryforwards	\$	382,936	\$ 457,362
Tax credits		4,222	4,453
Expense associated with stock options and restricted stock		8,178	9,364
Workers' compensation allowance		15,770	14,833
Other deferred tax asset		25,020	26,483
		436,126	512,495
Less:			
Allowance to reduce deferred tax asset to expected realizable value		(91,685)	(189,737)
Total deferred tax assets		344,441	322,758
Deferred tax liabilities:		<u> </u>	<u> </u>
Property and equipment basis difference		(355,129)	(335,980)
Other		(14,840)	(12,037)
Total deferred tax liabilities		(369,969)	(348,017)
Net deferred tax liability	\$	(25,528)	\$ (25,259)

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized, and when necessary, valuation allowances are provided. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. We assess the realizability of our deferred tax assets quarterly and consider carryback availability, the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. During 2022, we reduced the valuation allowance against our net deferred tax assets by \$98.1 million, which primarily related to U.S. federal and state activity.

For income tax purposes, we have approximately \$1.4 billion of gross U.S. federal net operating losses, approximately \$48.3 million of gross Canadian net operating losses, approximately \$18.8 million of gross Colombian net operating losses and approximately \$1.0 billion of post-apportionment U.S. state net operating losses as of December 31, 2022, before valuation allowances. The majority of U.S. federal net operating losses will expire in varying amounts, if unused, between 2030 and 2037. U.S. federal net operating losses generated after 2017 can be carried forward indefinitely. Canadian net operating losses will expire in varying amounts, if unused, between 2037 and 2042. Colombian net operating losses will expire in varying amounts, if unused, between 2023 and 2032. U.S. state net operating losses will expire in varying amounts, if unused, between 2023 and 2042.

As of December 31, 2022, we had no unrecognized tax benefits. We have established a policy to account for interest and penalties related to uncertain income tax positions as operating expenses. As of December 31, 2022, the tax years ended December 31, 2014 through December 31, 2021 are open for examination by U.S. taxing authorities. As of December 31, 2022, the tax years ended December 31, 2021 are open for examination by Canadian taxing authorities. As of December 31, 2022, the tax years ended December 31, 2021 are open for examination by Canadian taxing authorities. As of December 31, 2022, the tax years ended December 31, 2021 are open for examination by Canadian taxing authorities.

We continue to monitor income tax developments in the United States and other countries where we have legal entities. We will incorporate into our future financial statements the impacts, if any, of future regulations and additional authoritative guidance when finalized.

We continue to elect permanent reinvestment of unremitted earnings in foreign jurisdictions and we intend to do so for the foreseeable future. If we were to repatriate earnings, in the form of dividends or otherwise, we may be subject to certain income and/or withholding taxes (subject to an adjustment for foreign tax credits).

15. Earnings Per Share

We provide a dual presentation of our net income (loss) per common share in our consolidated statements of operations: basic net income (loss) per common share ("Basic EPS") and diluted net income (loss) per common share ("Diluted EPS").

Basic EPS excludes dilution and is determined by dividing the earnings attributable to common stockholders by the weighted average number of common shares outstanding during the period.

Diluted EPS is based on the weighted average number of common shares outstanding plus the dilutive effect of potential common shares, including stock options, non-vested shares of restricted stock, performance units and restricted stock units. The dilutive effect of stock options, performance units and restricted stock units is determined using the treasury stock method.

The following table presents information necessary to calculate net income (loss) per share for the years ended December 31, 2022, 2021 and 2020, as well as potentially dilutive securities excluded from the weighted average number of diluted common shares outstanding because their inclusion would have been anti-dilutive (in thousands, except per share amounts):

	2022	2021	2020
BASIC EPS:			
Net income (loss) from continuing operations attributed to common			
stockholders	\$ 154,658	\$ (657,079)	\$ (803,692)
Net income from discontinued operations attributed to common stockholders	\$ 	\$ 2,534	\$
Net income (loss) attributed to common stockholders	\$ 154,658	\$ (654,545)	\$ (803,692)
Weighted average number of common shares outstanding, excluding		 	
non-vested shares of restricted stock	215,935	195,021	188,013
Basic income (loss) from continuing operations per common share	\$ 0.72	\$ (3.37)	\$ (4.27)
Basic income from discontinued operations per common share	\$ 	\$ 0.01	\$
Basic net income (loss) per common share	\$ 0.72	\$ (3.36)	\$ (4.27)
DILUTED EPS:			
Net income (loss) from continuing operations attributed to common			
stockholders	\$ 154,658	\$ (657,079)	\$ (803,692)
Net income from discontinued operations attributed to common stockholders	\$ 	\$ 2,534	\$
Net income (loss) attributed to common stockholders	\$ 154,658	\$ (654,545)	\$ (803,692)
Weighted average number of common shares outstanding, excluding	 		
non-vested shares of restricted stock	219,496	195,021	188,013
Diluted income (loss) from continuing operations per common share	\$ 0.70	\$ (3.37)	\$ (4.27)
Diluted income from discontinued operations per common share	\$ 	\$ 0.01	\$ ·
Diluted net income (loss) per common share	\$ 0.70	\$ (3.36)	\$ (4.27)
Potentially dilutive securities excluded as anti-dilutive	3,541	9,551	8,747

16. Employee Benefits

We maintain a 401(k) plan for all eligible employees. Our operating results include expenses of approximately \$11.0 million in 2022, \$7.6 million in 2021 and \$7.7 million in 2020 for our contributions to the plan.

17. Business Segments

At December 31, 2022, we had three reportable business segments: (i) contract drilling of oil and natural gas wells, (ii) pressure pumping services and (iii) directional drilling services. Each of these segments represents a distinct type of business and has a separate management team that reports to our chief operating decision maker. The results of operations in these segments are regularly reviewed by the chief operating decision maker for purposes of determining resource allocation and assessing performance. We also disclose our identifiable assets for these segments, which are primarily comprised of long-lived assets.

Our acquisition of Pioneer in 2021 expanded our geographic footprint into Latin America with the addition of eight SCR drilling rigs in Colombia. Property and equipment, net and revenue for our domestic and international operations for the years ended December 31, 2022, 2021 and 2020 are as follows (in thousands):

	_	Year Ended December 31, 2022 2021 2020 \$ 2,213,242 \$ 2,292,448 \$ 2,761,0 47,334 39,307 \$ 39,307							
			2022		2021		2020		
Property and equipment, net:									
United States ⁽¹⁾	\$	5	2,213,242	\$	2,292,448	\$	2,761,041		
Colombia ⁽²⁾			47,334		39,307				
Property and equipment, net	\$	5	2,260,576	\$	2,331,755	\$	2,761,041		
	=								
Revenue:									
United States ⁽¹⁾	\$	5	2,577,471	\$	1,341,330	\$	1,124,249		
Colombia ⁽²⁾			70,121		15,751				
Total revenues	\$	5	2,647,592	\$	1,357,081	\$	1,124,249		
	=								

- ⁽¹⁾ Our Canadian operations in 2021 and 2020 were included in the United States amounts as they were not material individually. In April 2022, we substantially completed our exit from our Canadian operations.
- ⁽²⁾ Our Colombian operations are included as part of our contract drilling segment.

Contract Drilling — We market our contract drilling services to major and independent oil and natural gas operators. As of December 31, 2022, we had 184 marketed land-based drilling rigs in the continental United States and eight in Colombia.

Pressure Pumping — We provide pressure pumping services to oil and natural gas operators primarily in Texas and the Appalachian region. Substantially all of the revenue in the pressure pumping segment is from well stimulation services (such as hydraulic fracturing) for the completion of new wells and remedial work on existing wells. Well stimulation involves processes inside a well designed to enhance the flow of oil, natural gas, or other desired substances from the well. We also provide cementing services through our pressure pumping segment. Cementing is the process of inserting material between the wall of the well bore and the casing to support and stabilize the casing.

Directional Drilling — We provide a comprehensive suite of directional drilling services in most major producing onshore oil and gas basins in the United States. Substantially all of the revenue in the directional drilling segment is from directional drilling, downhole performance motors and measurement-while-drilling services, which are sold as a bundle.

Major Customer — During 2022, one customer accounted for approximately \$476 million or 18% of our consolidated operating revenues. These revenues in 2022 were earned in our contract drilling, pressure pumping, and directional drilling businesses. During 2021, one customer accounted for approximately \$216 million or 16% of our consolidated operating revenues. These revenues were earned in both our contract drilling and pressure pumping businesses. No single customer accounted for more than 10% of our consolidated revenues in 2020.

The following tables summarize selected financial information relating to our business segments (in thousands):

		Y	nded December 3	d December 31,				
		2022		2021		2020		
Revenues:								
Contract drilling	\$	1,329,092	\$	667,918	\$	670,357		
Pressure pumping		1,022,413		523,756		336,111		
Directional drilling		216,498		111,481		73,356		
Other operations ⁽¹⁾		117,607		75,505		57,962		
Elimination of intercompany revenues - Contract drilling (2)		(12,420)		(3,888)		(1,231)		
Elimination of intercompany revenues - Other operations (2)		(25,598)		(17,691)		(12,306)		
Total revenues	\$	2,647,592	\$	1,357,081	\$	1,124,249		
Income (loss) before income taxes:								
Contract drilling	\$	140,239	\$	(423,029)	\$	(543,438)		
Pressure pumping	+	134,103	*	(118,863)	+	(166,666)		
Directional drilling		15,534		(35,301)		(40,612)		
Other operations		7,810		(9,905)		(41,685)		
Corporate		(86,655)		(92,152)		(94,251)		
Credit loss expense		(00,000)		1,500		(5,606)		
Interest income		360		222		1,254		
Interest expense		(40,256)		(41,978)		(40,770)		
Other		(3,273)		(275)		756		
Income (loss) before income taxes	\$	167,862	\$	(719,781)	\$	(931,018)		
	<u> </u>	107,002	Ψ	(/1),/01)		())),010		
Depreciation, depletion, amortization and impairment:								
Contract drilling	\$	337,513	\$	618,879	\$	433,771		
Pressure pumping	ψ	98,162	ψ	159,305	ψ	152,630		
Directional drilling		15,428		40,270		36,504		
Other operations		27,671		24,865		41,511		
Corporate		5,171						
1	¢		¢	5,859	¢	6,494		
Total depreciation, depletion, amortization and impairment	<u>\$</u>	483,945	<u>\$</u>	849,178	\$	670,910		
Capital expenditures:								
Contract drilling	\$	255,634	\$	109,894	\$	105,037		
Pressure pumping		137,935		34,676		21,678		
Directional drilling		16,598		8,591		4,681		
Other operations		25,504		11,638		12,378		
Corporate		1,126		1,521		1,707		
Total capital expenditures	\$	436,797	\$	166,320	\$	145,481		
					_			
Identifiable assets:								
Contract drilling	\$	2,197,137	\$	2,169,501	\$	2,315,318		
Pressure pumping	*	541,975	4	458,202	÷	486,702		
Directional drilling		121,111		87,285		107,807		
Other operations		93,947		85,932		88,676		
Corporate ⁽³⁾		189,653		156,928		300,566		
Total assets	\$	3,143,823	\$	2,957,848	\$	3,299,069		
	φ	5,175,025	ψ	2,757,040	Ψ	5,299,009		

⁽¹⁾ Other operations includes our oilfield rentals business, drilling equipment service business, the electrical controls and automation business and our oil and natural gas working interests.

(2) Intercompany revenues consist of revenues from contract drilling for services provided to our other operations, and revenues from other operations for services provided to contract drilling, pressure pumping and within other operations. These revenues are generally based on estimated external selling prices and are eliminated during consolidation.

⁽³⁾ Corporate assets primarily include cash on hand and certain property and equipment.

18. Concentrations of Credit Risk

Financial instruments which potentially subject us to concentrations of credit risk consist primarily of demand deposits, temporary cash investments and trade receivables.

We believe we have placed our demand deposits and temporary cash investments with high credit-quality financial institutions. At December 31, 2022 and 2021, our demand deposits and temporary cash investments consisted of the following (in thousands):

	 2022	2021
Deposits in FDIC and SIPC-insured institutions under insurance limits	\$ 601	\$ 2,043
Deposits in FDIC and SIPC-insured institutions over insurance limits	149,769	125,405
Deposits in foreign banks	 6,406	 9,342
	 156,776	136,790
Less outstanding checks and other reconciling items	(19,223)	(19,266)
Cash and cash equivalents	\$ 137,553	\$ 117,524

Concentrations of credit risk with respect to trade receivables are primarily focused on companies involved in the exploration and development of oil and natural gas properties. The concentration is somewhat mitigated by the diversification of customers for which we provide services. As is general industry practice, we typically do not require customers to provide collateral.

19. Fair Values of Financial Instruments

The carrying values of cash and cash equivalents, trade receivables and accounts payable approximate fair value due to the short-term maturity of these items. These fair value estimates are considered Level 1 fair value estimates in the fair value hierarchy of fair value accounting.

The estimated fair value of our outstanding debt balances as of December 31, 2022 and 2021 is set forth below (in thousands):

	December 31, 2022					Decembe	r 31, 2021		
	(Carrying Value		Fair Value		Carrying Value		Fair Value	
3.95% Senior Notes	\$	488,505	\$	431,556	\$	509,505	\$	511,652	
5.15% Senior Notes		347,900		313,164		349,250		359,142	
Total debt	\$	836,405	\$	744,720	\$	858,755	\$	870,794	

The fair values of the 3.95% Senior Notes and the 5.15% Senior Notes at December 31, 2022 and December 31, 2021 are based on quoted market prices, which are considered Level 1 fair value estimates in the fair value hierarchy of fair value accounting. The fair values of the 3.95% Senior Notes implied a 6.69% market rate of interest at December 31, 2022 and the 3.87% market rate of interest at December 31, 2021, based on their quoted market prices. The fair values of the 5.15% Senior Notes implied a 7.01% market rate of interest at December 31, 2021, based on their quoted market prices. The fair values of the 5.15% Senior Notes implied a 7.01% market rate of interest at December 31, 2021, based on their quoted market prices.

20. Restructuring Expenses

During the second quarter of 2020, we implemented a restructuring plan to improve operating margins, achieve operational efficiencies and reduce indirect support costs. The restructuring included workforce reductions, changes to management structure and facility consolidations and closures. We recorded \$38.3 million of charges associated with this plan in the second quarter of 2020. There were no restructuring charges in the comparable periods of 2022 and 2021. We completed the restructuring plan during the third quarter of 2020 and did not incur additional expenses related to the plan.

Contract termination costs related primarily to agreements to purchase minimum quantities of proppants (sand) from certain vendors. These costs were primarily comprised of a \$5.3 million negotiated settlement and termination of a contract to purchase minimum quantities of sand and \$14.0 million of contractual future payments under two contracts to purchase minimum quantities of sand without future economic benefit to us. We will not receive any sand under these contracts. Other exit costs related primarily to facility closure costs and moving expenses.

The right-of-use asset abandonments related to facility and equipment right-of-use assets abandoned as a result of restructuring.

The following table presents restructuring expenses by reportable segment for the year ended December 31, 2020 (in thousands):

	ontract Frilling	Pressure Pumping	 ectional rilling	Other erations	Co	rporate	Total
Severance costs	\$ 1,821	\$ 3,460	\$ 503	\$ 501	\$	215	\$ 6,500
Contract termination costs		20,373					20,373
Other exit costs	523	194	827				1,544
Right-of-use asset abandonments	86	7,304	1,845			686	9,921
Total	\$ 2,430	\$ 31,331	\$ 3,175	\$ 501	\$	901	\$ 38,338

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Description	 Charged to Beginning Costs and Balance Expenses Deductions (In thousands)				eductions ⁽¹⁾ ds)	 Ending Balance
Year Ended December 31, 2022						
Deducted from asset accounts:						
Allowance for credit losses	\$ 8,49	3 \$		\$	(5,618)	\$ 2,875
Year Ended December 31, 2021						
Deducted from asset accounts:						
Allowance for credit losses	\$ 10,84	2 \$	(1,500)	\$	(849)	\$ 8,493
Year Ended December 31, 2020						
Deducted from asset accounts:						
Allowance for credit losses	\$ 6,51	6 \$	5,606	\$	(1,280)	\$ 10,842

(1) Consists of uncollectible accounts written-off.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, Patterson-UTI Energy, Inc. has duly caused this Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

PATTERSON-UTI ENERGY, INC.

By: /s/ William Andrew Hendricks, Jr. William Andrew Hendricks, Jr. President and Chief Executive Officer

Date: February 13, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed by the following persons on behalf of Patterson-UTI Energy, Inc. and in the capacities indicated as of February 13, 2023.

Signature

/s/ Curtis W. Huff Curtis W. Huff

/s/ William Andrew Hendricks, Jr. William Andrew Hendricks, Jr. (Principal Executive Officer)

/s/ C. Andrew Smith

C. Andrew Smith (Principal Financial and Accounting Officer)

> /s/ Tiffany Thom Cepak Tiffany Thom Cepak

/s/ Michael W. Conlon Michael W. Conlon

> /s/ Terry H. Hunt Terry H. Hunt

/s/ Cesar Jaime Cesar Jaime

/s/ Janeen S. Judah Janeen S. Judah

/s/ Julie J. Robertson Julie J. Robertson Chairman of the Board

Title

President, Chief Executive Officer and Director

Executive Vice President and Chief Financial Officer

Director

Director

Director

Director

Director

Director