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

Form 10-K/A
(Amendment No. 1)

(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	**75-2504748**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
10713 W. Sam Houston Pkwy N, Suite 800, Houston, Texas	**77064**
(Address of principal executive offices)	*(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	Trading 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

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

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

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

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

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

Large accelerated filer	☒	Accelerated filer	☐
		Smaller reporting company	☐
Non-accelerated filer	☐	Emerging growth company	☐

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

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

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2022, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $3.4 billion, calculated by reference to the closing price of $15.76 for the common stock on the Nasdaq Global Select Market on that date.

As of February 9, 2023, the registrant had outstanding 213,655,888 shares of common stock, $0.01 par value, its only class of common 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.

EXPLANATORY NOTE

Patterson-UTI Energy, Inc. (the “Company”) is filing this Amendment No. 1 (“Form 10-K/A”) to its Annual Report on Form 10-K for the year ended December 31, 2022, as filed with the Securities and Exchange Commission on February 13, 2023 (the “Original Form 10-K”), to:

1. Provide an amended report of its independent registered public accounting firm, in order to correct an administrative oversight related to the omission of references to the information contained in Schedule II - Valuation and Qualifying Accounts Financial Statement as required by Rule 5-04(c) of Regulation S-X; and
2. Provide an updated consent of its independent registered public accounting firm.

In accordance with applicable Securities and Exchange Commission rules and as required by Rule 12b-15 under the Securities Exchange Act of 1934, as amended, Form 10-K/A includes new certifications from our Principal Executive Officer and Principal Financial Officer dated as of the date of filing of Form 10-K/A.

This Form 10-K/A speaks as of the original filing date of the Original Form 10-K, does not reflect events that may have occurred subsequent to the original filing date, and does not modify or update in any way the Company's disclosures made in the Original Form 10-K. There are no changes to the Original Form 10-K other than to the report of the Company’s independent registered public accounting firm as specified above.

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

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PART II

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

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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 and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2022 appearing on page 37 (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.

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2022	2021
	(In thousands, except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 137,553	$ 117,524
Accounts receivable, net of allowance for credit losses of $2,875 and $8,493 at 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

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

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2022	2021	2020
	(In thousands, except per share data)		
Operating revenues:			
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):			
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	$ —	$ 0.01	$ —
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
Diluted	219,496	195,021	188,013

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

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,		
	2022	2021	2020
		(In 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)

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

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Common Stock		Additional		Accumulated Other Comprehensive		
	Number of Shares	Amount	Paid-in Capital	Retained Earnings (Deficit)	Income	Treasury Stock	Total
				(In thousands)			
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	—	—	—	—	—	(80,438)	(80,438)
Balance, December 31, 2022	302,326	$ 3,023	$ 3,202,973	$ (87,394)	$ —	$ (1,453,079)	$ 1,665,523

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

PATTERSON-UTI ENERGY, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Cash flows from operating activities:			
Net income (loss)	$ 154,658	$ (654,545)	$ (803,692)
Adjustments to reconcile net income (loss) to net cash provided by 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:			
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)	—	—
Repayment of senior notes	(19,760)	—	(12,525)
Repayment of term loan	—	(50,000)	(50,000)
Debt issuance costs	(455)	—	(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	117,524	224,915	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:			
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	—	—

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

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 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.

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 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. Under 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 estimate, 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
	(Unaudited)	
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):

	2021
Operating revenues:	
Wireline revenue	$ 9,868
Well servicing revenue	19,652
Total operating revenues	29,520
Operating costs and expenses:	
Wireline	10,465
Well servicing	16,585
Total operating costs and expenses	27,050
Operating income	2,470
Total other income (expense)	64
Income from discontinued operations before income taxes	2,534
Income tax benefit	—
Income 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		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying 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,	
2023	$ 1,454
2024	1,454
2025	1,269
2026	777
2027	777
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 as the 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 our entry into Amendment No.3. We incurred approximately $1.6 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 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 our 2028 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 pressure pumping equipment without fire suppression systems, a $10.0 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 excess automobile liability insurance coverage. 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.

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 for Cause (as defined in the Employment Agreement) by providing written notice 10 -30 days, depending on the nature of the cause trigger, 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, 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		2021		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:

	Shares	Weighted Average Exercise Price 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 weighted-average 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):

	2022	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	Weighted Average Grant Date Fair Value 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 performance period, when compared to the peer group, is at the 75th percentile or higher, then the recipients will receive two times 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 Unit Awards	2021 Performance Unit Awards	2020 Performance Unit Awards	2019 Performance Unit Awards	2018 Performance Unit Awards	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 Performance Unit Awards	2021 Performance Unit Awards	2020 Performance Unit Awards	2019 Performance Unit Awards	2018 Performance Unit Awards	2017 Performance 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 Performance Unit Awards	2021 Performance Unit Awards	2020 Performance Unit Awards	2019 Performance Unit Awards	2018 Performance Unit Awards	2017 Performance Unit Awards
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
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)	$ (127,326)

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:		
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 2028 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, 2015 through December 31, 2021 are open for examination by Canadian taxing authorities. As of December 31, 2022, the tax years ended December 31, 2017 through December 31, 2021 are open for examination by Colombian 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
Property and equipment, net:			
United States [(1)]	$ 2,213,242	$ 2,292,448	$ 2,761,041
Colombia [(2)]	47,334	39,307	—
Property and equipment, net	$ 2,260,576	$ 2,331,755	$ 2,761,041
Revenue:			
United States [(1)]	$ 2,577,471	$ 1,341,330	$ 1,124,249
Colombia [(2)]	70,121	15,751	—
Total revenues	$ 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):

	Year Ended 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	—	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)
Depreciation, depletion, amortization and impairment:			
Contract drilling	$ 337,513	$ 618,879	$ 433,771
Pressure pumping	98,162	159,305	152,630
Directional drilling	15,428	40,270	36,504
Other operations	27,671	24,865	41,511
Corporate	5,171	5,859	6,494
Total depreciation, depletion, amortization and impairment	$ 483,945	$ 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	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

(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		December 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, 2022 and the 4.72% 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):

	Contract Drilling	Pressure Pumping	Directional Drilling	Other Operations	Corporate	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	Beginning Balance	Charged to Costs and Expenses	Deductions [1]	Ending Balance
		(In thousands)		
Year Ended December 31, 2022				
Deducted from asset accounts:				
Allowance for credit losses	$ 8,493	$ —	$ (5,618)	$ 2,875
Year Ended December 31, 2021				
Deducted from asset accounts:				
Allowance for credit losses	$ 10,842	$ (1,500)	$ (849)	$ 8,493
Year Ended December 31, 2020				
Deducted from asset accounts:				
Allowance for credit losses	$ 6,516	$ 5,606	$ (1,280)	$ 10,842

(1) Consists of uncollectible accounts written-off.

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 5 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.

PART IV

Item 15. ***Exhibits and Financial Statement Schedule.***

(a)(1) *Financial Statements*

See Index to Consolidated Financial Statements on page 4 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 5 of this Report.

(a)(3) *Financial Statement Schedule*

Schedule II — Valuation and qualifying accounts is filed herewith on page 37.

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 1-39270.

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 (filed November 9, 2022 as Exhibit 10.1 to our Current Report on Form 8-K and incorporated herein by reference).
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 (filed February 13, 2023 as Exhibit 21.1 to our Annual Report on Form 10-K and incorporated herein by reference).
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).

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* Management Contract or Compensatory Plan identified as required by Item 15(a)(3) of Form 10-K.
\+ Filed herewith.
++ Furnished herewith.

SIGNATURE

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 Amendment No. 1 to its Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

PATTERSON-UTI ENERGY, INC.

By: /s/ C. Andrew Smith
C. Andrew Smith
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: July 17, 2023

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-126016, 333-152705, 333-166434, 333-195410, 333-217414, 333-219063, 333-231988, 333-256752 and 333-272520) of Patterson-UTI Energy, Inc. of our report dated February 13, 2023 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K/A.

/s/ PricewaterhouseCoopers LLP

Houston, Texas
July 17, 2023

Exhibit 31.1

CERTIFICATIONS

I, William Andrew Hendricks, Jr., certify that:

1. I have reviewed this annual report on Form 10-K/A of Patterson-UTI Energy, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ William Andrew Hendricks, Jr.

William Andrew Hendricks, Jr.
President and Chief Executive Officer

Date: July 17, 2023

Exhibit 31.2

CERTIFICATIONS

I, C. Andrew Smith, certify that:

1. I have reviewed this annual report on Form 10-K/A of Patterson-UTI Energy, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ C. Andrew Smith

C. Andrew Smith
Executive Vice President and
Chief Financial Officer

Date: July 17, 2023

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

NOT FILED PURSUANT TO THE SECURITIES EXCHANGE ACT OF 1934

In connection with the Annual Report of Patterson-UTI Energy, Inc. (the "Company") on Form 10-K/A for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), William Andrew Hendricks, Jr., Chief Executive Officer, and C. Andrew Smith, Chief Financial Officer, of the Company, each certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission upon request. The foregoing is being furnished solely pursuant to said Section 906 and Rule 13a-14(b) promulgated under the Securities Exchange Act of 1934, as amended, and is not being filed as part of the Report or as a separate disclosure document.

/s/ William Andrew Hendricks, Jr.

William Andrew Hendricks, Jr.
Chief Executive Officer
July 17, 2023

/s/ C. Andrew Smith

C. Andrew Smith
Chief Financial Officer
July 17, 2023