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

Form 10-Q

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

For the quarterly period ended June 30, 2023

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

FOR THE TRANSITION PERIOD FROM __________ TO __________

Commission File No. 001-37917

Mammoth Energy Services, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**32-0498321**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

14201 Caliber Drive, Suite 300 Oklahoma City, Oklahoma	**(405) 608-6007**	**73134**
(Address of principal executive offices)	(Registrant’s telephone number, including area code)	(Zip Code)

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	TUSK	The Nasdaq Stock Market LLC NASDAQ Global Select Market

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 during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

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

As of August 9, 2023, there were 47,941,652 shares of common stock, $0.01 par value, outstanding.

TABLE OF CONTENTS

GLOSSARY OF OIL AND NATURAL GAS AND ELECTRICAL INFRASTRUCTURE TERMS

The following is a glossary of certain oil and natural gas and natural sand proppant industry terms used in this Quarterly Report on Form 10-Q (this "report" or "Quarterly Report"):

Acidizing	To pump acid into a wellbore to improve a well's productivity or injectivity.
Blowout	An uncontrolled flow of reservoir fluids into the wellbore, and sometimes catastrophically to the surface. A blowout may consist of salt water, oil, natural gas or a mixture of these. Blowouts can occur in all types of exploration and production operations, not just during drilling operations. If reservoir fluids flow into another formation and do not flow to the surface, the result is called an underground blowout. If the well experiencing a blowout has significant open-hole intervals, it is possible that the well will bridge over (or seal itself with rock fragments from collapsing formations) down-hole and intervention efforts will be averted.
Bottomhole assembly	The lower portion of the drillstring, consisting of (from the bottom up in a vertical well) the bit, bit sub, a mud motor (in certain cases), stabilizers, drill collar, heavy-weight drillpipe, jarring devices ("jars") and crossovers for various threadforms. The bottomhole assembly must provide force for the bit to break the rock (weight on bit), survive a hostile mechanical environment and provide the driller with directional control of the well. Oftentimes the assembly includes a mud motor, directional drilling and measuring equipment, measurements-while-drilling tools, logging-while-drilling tools and other specialized devices.
Cementing	To prepare and pump cement into place in a wellbore.
Coiled tubing	A long, continuous length of pipe wound on a spool. The pipe is straightened prior to pushing into a wellbore and rewound to coil the pipe back onto the transport and storage spool. Depending on the pipe diameter (1 in. to 4 1/2 in.) and the spool size, coiled tubing can range from 2,000 ft. to 23,000 ft. (610 m to 6,096 m) or greater length.
Completion	A generic term used to describe the assembly of down-hole tubulars and equipment required to enable safe and efficient production from an oil or gas well. The point at which the completion process begins may depend on the type and design of the well.
Directional drilling	The intentional deviation of a wellbore from the path it would naturally take. This is accomplished through the use of whipstocks, bottomhole assembly (BHA) configurations, instruments to measure the path of the wellbore in three-dimensional space, data links to communicate measurements taken down-hole to the surface, mud motors and special BHA components and drill bits, including rotary steerable systems, and drill bits. The directional driller also exploits drilling parameters such as weight on bit and rotary speed to deflect the bit away from the axis of the existing wellbore. In some cases, such as drilling steeply dipping formations or unpredictable deviation in conventional drilling operations, directional-drilling techniques may be employed to ensure that the hole is drilled vertically. While many techniques can accomplish this, the general concept is simple: point the bit in the direction that one wants to drill. The most common way is through the use of a bend near the bit in a down-hole steerable mud motor. The bend points the bit in a direction different from the axis of the wellbore when the entire drillstring is not rotating. By pumping mud through the mud motor, the bit turns while the drillstring does not rotate, allowing the bit to drill in the direction it points. When a particular wellbore direction is achieved, that direction may be maintained by rotating the entire drillstring (including the bent section) so that the bit does not drill in a single direction off the wellbore axis, but instead sweeps around and its net direction coincides with the existing wellbore. Rotary steerable tools allow steering while rotating, usually with higher rates of penetration and ultimately smoother boreholes.
Down-hole	Pertaining to or in the wellbore (as opposed to being on the surface).
Down-hole motor	A drilling motor located in the drill string above the drilling bit powered by the flow of drilling mud. Down-hole motors are used to increase the speed and efficiency of the drill bit or can be used to steer the bit in directional drilling operations. Drilling motors have become very popular because of horizontal and directional drilling applications and the day rates for drilling rigs.
Drilling rig	The machine used to drill a wellbore.
Drillpipe or Drill pipe	Tubular steel conduit fitted with special threaded ends called tool joints. The drillpipe connects the rig surface equipment with the bottomhole assembly and the bit, both to pump drilling fluid to the bit and to be able to raise, lower and rotate the bottomhole assembly and bit.
Drillstring or Drill string	The combination of the drillpipe, the bottomhole assembly and any other tools used to make the drill bit turn at the bottom of the wellbore.
Flowback	The process of allowing fluids to flow from the well following a treatment, either in preparation for a subsequent phase of treatment or in preparation for cleanup and returning the well to production.
Horizontal drilling	A subset of the more general term "directional drilling," used where the departure of the wellbore from vertical exceeds about 80 degrees. Note that some horizontal wells are designed such that after reaching true 90-degree horizontal, the wellbore may actually start drilling upward. In such cases, the angle past 90 degrees is continued, as in 95 degrees, rather than reporting it as deviation from vertical, which would then be 85 degrees. Because a horizontal well typically penetrates a greater length of the reservoir, it can offer significant production improvement over a vertical well.
Hydraulic fracturing	A stimulation treatment routinely performed on oil and gas wells in low permeability reservoirs. Specially engineered fluids are pumped at high pressure and rate into the reservoir interval to be treated, causing a vertical fracture to open. The wings of the fracture extend away from the wellbore in opposing directions according to the natural stresses within the formation. Proppant, such as grains of sand of a particular size, is mixed with the treatment fluid to keep the fracture open when the treatment is complete. Hydraulic fracturing creates high-conductivity communication with a large area of formation and bypasses any damage that may exist in the near-wellbore area.

Hydrocarbon	A naturally occurring organic compound comprising hydrogen and carbon. Hydrocarbons can be as simple as methane, but many are highly complex molecules, and can occur as gases, liquids or solids. Petroleum is a complex mixture of hydrocarbons. The most common hydrocarbons are natural gas, oil and coal.
Mesh size	The size of the proppant that is determined by sieving the proppant through screens with uniform openings corresponding to the desired size of the proppant. Each type of proppant comes in various sizes, categorized as mesh sizes, and the various mesh sizes are used in different applications in the oil and natural gas industry. The mesh number system is a measure of the number of equally sized openings per square inch of screen through which the proppant is sieved.
Mud motors	A positive displacement drilling motor that uses hydraulic horsepower of the drilling fluid to drive the drill bit. Mud motors are used extensively in directional drilling operations.
Natural gas liquids	Components of natural gas that are liquid at surface in field facilities or in gas processing plants. Natural gas liquids can be classified according to their vapor pressures as low (condensate), intermediate (natural gasoline) and high (liquefied petroleum gas) vapor pressure.
Nitrogen pumping unit	A high-pressure pump or compressor unit capable of delivering high-purity nitrogen gas for use in oil or gas wells. Two basic types of units are commonly available: a nitrogen converter unit that pumps liquid nitrogen at high pressure through a heat exchanger or converter to deliver high-pressure gas at ambient temperature, and a nitrogen generator unit that compresses and separates air to provide a supply of high pressure nitrogen gas.
Plugging	The process of permanently closing oil and gas wells no longer capable of producing in economic quantities. Plugging work can be performed with a well servicing rig along with wireline and cementing equipment; however, this service is typically provided by companies that specialize in plugging work.
Plug	A down-hole packer assembly used in a well to seal off or isolate a particular formation for testing, acidizing, cementing, etc.; also a type of plug used to seal off a well temporarily while the wellhead is removed.
Pounds per square inch	A unit of pressure. It is the pressure resulting from a one pound force applied to an area of one square inch.
Pressure pumping	Services that include the pumping of liquids under pressure.
Producing formation	An underground rock formation from which oil, natural gas or water is produced. Any porous rock will contain fluids of some sort, and all rocks at considerable distance below the Earth's surface will initially be under pressure, often related to the hydrostatic column of ground waters above the reservoir. To produce, rocks must also have permeability, or the capacity to permit fluids to flow through them.
Proppant	Sized particles mixed with fracturing fluid to hold fractures open after a hydraulic fracturing treatment. In addition to naturally occurring sand grains, man-made or specially engineered proppants, such as resin-coated sand or high-strength ceramic materials like sintered bauxite, may also be used. Proppant materials are carefully sorted for size and sphericity to provide an efficient conduit for production of fluid from the reservoir to the wellbore.
Resource play	Accumulation of hydrocarbons known to exist over a large area.
Shale	A fine-grained, fissile, sedimentary rock formed by consolidation of clay- and silt-sized particles into thin, relatively impermeable layers.
Tight oil	Conventional oil that is found within reservoirs with very low permeability. The oil contained within these reservoir rocks typically will not flow to the wellbore at economic rates without assistance from technologically advanced drilling and completion processes. Commonly, horizontal drilling coupled with multistage fracturing is used to access these difficult to produce reservoirs.
Tight sands	A type of unconventional tight reservoir. Tight reservoirs are those which have low permeability, often quantified as less than 0.1 millidarcies.
Tubulars	A generic term pertaining to any type of oilfield pipe, such as drill pipe, drill collars, pup joints, casing, production tubing and pipeline.
Unconventional resource/unconventional well	A term for the different manner by which resources are exploited as compared to the extraction of conventional resources. In unconventional drilling, the wellbore is generally drilled to specific objectives within narrow parameters, often across long, lateral intervals within narrow horizontal formations offering greater contact area with the producing formation. Typically, the well is then hydraulically fractured at multiple stages to optimize production.
Wellbore	The physical conduit from surface into the hydrocarbon reservoir.
Well stimulation	A treatment performed to restore or enhance the productivity of a well. Stimulation treatments fall into two main groups, hydraulic fracturing treatments and matrix treatments. Fracturing treatments are performed above the fracture pressure of the reservoir formation and create a highly conductive flow path between the reservoir and the wellbore. Matrix treatments are performed below the reservoir fracture pressure and generally are designed to restore the natural permeability of the reservoir following damage to the near wellbore area. Stimulation in shale gas reservoirs typically takes the form of hydraulic fracturing treatments.
Wireline	A general term used to describe well-intervention operations conducted using single-strand or multi-strand wire or cable for intervention in oil or gas wells. Although applied inconsistently, the term commonly is used in association with electric logging and cables incorporating electrical conductors.
Workover	The process of performing major maintenance or remedial treatments on an oil or gas well. In many cases, workover implies the removal and replacement of the production tubing string after the well has been killed and a workover rig has been placed on location. Through-tubing workover operations, using coiled tubing, snubbing or slickline equipment, are routinely conducted to complete treatments or well service activities that avoid a full workover where the tubing is removed. This operation saves considerable time and expense.

The following is a glossary of certain electrical infrastructure industry terms used in this report:

Distribution	The distribution of electricity from the transmission system to individual customers.
Substation	A part of an electrical transmission and distribution system that transforms voltage from high to low, or the reverse.
Transmission	The movement of electrical energy from a generating site, such as a power plant, to an electric substation.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Various statements contained in this report that express a belief, expectation, or intention, or that are not statements of historical fact, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. In particular, the factors discussed in this report and detailed under Part II, Item 1A. Risk Factors in this report and our Annual Report on Form 10–K for the year ended December 31, 2022 could affect our actual results and cause our actual results to differ materially from expectations, estimates or assumptions expressed, forecasted or implied in such forward-looking statements.

Forward-looking statements may include statements about:

- the levels of capital expenditures by our customers and the impact of reduced drilling and completions activity on utilization and pricing for our oilfield services;
- the volatility of oil and natural gas prices and actions by OPEC members and other oil exporting nations, or OPEC+, affecting commodity price and production levels;
- any continuing impacts of the COVID-19 pandemic on Mammoth's results of operations, financial condition or demand for Mammoth's services;
- employee retention and increasingly competitive labor market;
- the performance of contracts and supply chain disruptions during or following the COVID-19 pandemic;
- general economic, business or industry conditions and concerns over a potential economic slowdown or recession;
- conditions in the capital, financial and credit markets;
- conditions of U.S. oil and natural gas industry and the effect of U.S. energy, monetary and trade policies;
- U.S. and global economic conditions and political and economic developments, including the energy and environmental policies;
- inflationary pressure on the cost of services, equipment and other goods in our industries and other sectors;
- our ability to obtain capital or financing needed for our operations on favorable terms or at all;
- our ability to (i) continue to comply with or, if applicable, obtain a waiver of forecasted or actual non-compliance with certain financial covenants and other terms and conditions under our existing revolving credit facility or any replacement credit facilities, (ii) extend, repay or refinance our existing revolving credit facility at or prior to the October 19, 2023 maturity on terms acceptable to us or at all and (iii) meet our financial projections associated with refinancing and/or reducing our debt;
- our ability to execute our business and financial strategies;
- our plans with respect to any stock repurchases under the board of directors' authorized stock repurchase program following the expected repayment and refinancing of our existing revolving credit facility;
- our ability to continue to grow our infrastructure services segment or recommence certain of our suspended oilfield services;
- any loss of one or more of our significant customers and its impact on our revenue, financial condition and results of operations;
- asset impairments;
- our ability to identify, complete and integrate acquisitions of assets or businesses;
- our ability to receive, or delays in receiving, permits and governmental approvals and/or payments, and to comply with applicable governmental laws and regulations;
- the results of litigation relating to the contracts awarded to our subsidiary Cobra Acquisitions LLC, or Cobra, by the Puerto Rico Electric Power Authority, or PREPA;
- the outcome of our ongoing efforts to collect the amounts that remain unpaid to us by PREPA for electric grid restoration services performed by Cobra in Puerto Rico;
- any future litigation, indemnity or other claims;
- regional supply and demand factors, delays or interruptions of production, and any governmental order, rule or regulation that may impose production limits on our customers;
- shortages, delays in delivery and interruptions in supply of major components, replacement parts, or other equipment, supplies or materials;
- the availability of transportation, pipeline and storage facilities and any increase in related costs;
- extreme weather conditions, wild fires and other natural disasters in areas where we provide well completion, sand proppant, drilling and infrastructure services;
- access to and restrictions on use of sourced or produced water;
- technology;
- civil unrest, war, military conflicts or terrorist attacks;
- cyberattacks and any resulting loss of information;

- competition within the energy services industry;
- availability of equipment, materials or skilled personnel or other labor resources;
- payment of any future dividends;
- future operating results; and
- capital expenditures and other plans, objectives, expectations and intentions.

All of these types of statements, other than statements of historical fact included in this quarterly report, are forward-looking statements. These forward-looking statements may be found in the "Business," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and other sections of this quarterly report. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "could," "should," "would," "expect," "plan," "project," "budget," "intend," "anticipate," "believe," "estimate," "predict," "potential," "pursue," "target," "seek," "objective," "continue," "will be," "will benefit," or "will continue," the negative of such terms or other comparable terminology.

The forward-looking statements contained in this report are largely based on our expectations, which reflect estimates and assumptions made by our management. These estimates and assumptions reflect our best judgment based on currently known market conditions and other factors, which are difficult to predict and many of which are beyond our control. Although we believe such estimates and assumptions to be reasonable, they are inherently uncertain and involve a number of risks and uncertainties that are beyond our control. In addition, our management's assumptions about future events may prove to be inaccurate. Our management cautions all readers that the forward-looking statements contained in this report are not guarantees of future performance, and we cannot assure any reader that such statements will be realized or the forward-looking events and circumstances will occur. Actual results may differ materially from those anticipated or implied in the forward-looking statements due to many factors including those described in our Annual Report on Form 10–K for the year ended December 31, 2022 and Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this report. All forward-looking statements speak only as of the date of this report. We do not intend to publicly update or revise any forward-looking statements as a result of new information, future events or otherwise. These cautionary statements qualify all forward-looking statements attributable to us or persons acting on our behalf.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

MAMMOTH ENERGY SERVICES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (unaudited)

ASSETS	June 30, 2023	December 31, 2022
	(in thousands)	
CURRENT ASSETS		
Cash and cash equivalents	$ 8,850	$ 17,282
Accounts receivable, net	449,189	456,465
Receivables from related parties, net	205	223
Inventories	10,189	8,883
Prepaid expenses	7,993	13,219
Other current assets	613	620
Total current assets	477,039	496,692
Property, plant and equipment, net	127,190	138,066
Sand reserves	60,539	61,830
Operating lease right-of-use assets	11,513	10,656
Intangible assets, net	1,393	1,782
Goodwill	11,717	11,717
Other non-current assets	3,372	3,935
Total assets	$ 692,763	$ 724,678
LIABILITIES AND EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 49,863	$ 47,391
Accrued expenses and other current liabilities	36,788	52,297
Current operating lease liability	6,051	5,447
Current portion of long-term debt	59,356	83,520
Income taxes payable	53,089	48,557
Total current liabilities	205,147	237,212
Deferred income tax liabilities	425	471
Long-term operating lease liability	5,213	4,913
Asset retirement obligations	4,068	3,981
Other long-term liabilities	11,194	15,485
Total liabilities	226,047	262,062
COMMITMENTS AND CONTINGENCIES (Note 18)		
EQUITY		
Equity:		
Common stock, $0.01 par value, 200,000,000 shares authorized, 47,941,652 and 47,312,270 issued and outstanding at June 30, 2023 and December 31, 2022	479	473
Additional paid in capital	539,121	539,138
Accumulated deficit	(69,273)	(73,154)
Accumulated other comprehensive loss	(3,611)	(3,841)
Total equity	466,716	462,616
Total liabilities and equity	$ 692,763	$ 724,678

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

MAMMOTH ENERGY SERVICES, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME (unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
REVENUE	(in thousands, except per share amounts)			
Services revenue	$ 63,478	$ 75,459	$ 167,115	$ 129,126
Services revenue - related parties	369	395	589	669
Product revenue	11,584	13,824	24,047	22,181
Total revenue	75,431	89,678	191,751	151,976
COST AND EXPENSES				
Services cost of revenue (exclusive of depreciation, depletion, amortization and accretion of $10,270, $22,032, $15,404, and $30,759, respectively, for the three and six months ended June 30, 2023 and three and six months ended June 30, 2022)	52,846	58,433	133,823	105,000
Services cost of revenue - related parties	210	128	240	263
Product cost of revenue (exclusive of depreciation, depletion, amortization and accretion of $ 2,373, $3,559, $2,055, and $3,847, respectively, for the three and six months ended June 30, 2023 and three and six months ended June 30, 2022)	7,196	10,225	15,181	18,003
Selling, general and administrative (Note 11)	10,357	8,206	18,740	16,874
Depreciation, depletion, amortization and accretion	12,650	17,476	25,606	34,643
Gains on disposal of assets, net	(473)	(2,943)	(834)	(3,139)
Total cost and expenses	82,786	91,525	192,756	171,644
Operating loss	(7,355)	(1,847)	(1,005)	(19,668)
OTHER INCOME (EXPENSE)				
Interest expense, net	(3,220)	(2,659)	(6,509)	(5,008)
Other income, net	8,339	10,144	16,963	19,185
Total other income, net	5,119	7,485	10,454	14,177
(Loss) income before income taxes	(2,236)	5,638	9,449	(5,491)
Provision for income taxes	2,234	3,935	5,568	7,623
Net (loss) income	$ (4,470)	$ 1,703	$ 3,881	$ (13,114)
OTHER COMPREHENSIVE INCOME (LOSS)				
Foreign currency translation adjustment, net of tax of $0, $0, $0, and $0, respectively, for the three and six months ended June 30, 2023 and three and six months ended June 30, 2022	227	(448)	230	(250)
Comprehensive (loss) income	$ (4,243)	$ 1,255	$ 4,111	$ (13,364)
Net (loss) income per share (basic) (Note 14)	$ (0.09)	$ 0.04	$ 0.08	$ (0.28)
Net (loss) income per share (diluted) (Note 14)	$ (0.09)	$ 0.04	$ 0.08	$ (0.28)
Weighted average number of shares outstanding (basic) (Note 14)	47,718	47,225	47,581	47,036
Weighted average number of shares outstanding (diluted) (Note 14)	47,718	47,634	47,966	47,036

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

MAMMOTH ENERGY SERVICES, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (unaudited)

	Three Months Ended June 30, 2023					
	Common Stock		Accumulated	Additional Paid-In	Accumulated Other Comprehensive	
	Shares	Amount	Deficit	Capital	Loss	Total
	(in thousands)					
Balance at March 31, 2023	47,713	$ 477	$ (64,803)	$ 538,862	$ (3,838)	470,698
Stock based compensation	228	2	—	259	—	261
Net loss	—	—	(4,470)	—	—	(4,470)
Other comprehensive income	—	—	—	—	227	227
Balance at June 30, 2023	47,941	$ 479	$ (69,273)	$ 539,121	$ (3,611)	$ 466,716

	Three Months Ended June 30, 2022					
	Common Stock		Accumulated	Additional Paid-In	Accumulated Other Comprehensive	
	Shares	Amount	Deficit	Capital	Loss	Total
	(in thousands)					
Balance at March 31, 2022	47,184	$ 472	$ (87,352)	$ 538,457	$ (2,733)	$ 448,844
Stock based compensation	128	1	—	199	—	200
Net income	—	—	1,703	—	—	1,703
Other comprehensive loss	—	—	—	—	(448)	(448)
Balance at June 30, 2022	47,312	$ 473	$ (85,649)	$ 538,656	$ (3,181)	$ 450,299

	Six Months Ended June 30, 2023					
	Common Stock		Accumulated	Additional Paid-In	Accumulated Other Comprehensive	
	Shares	Amount	Deficit	Capital	Loss	Total
	(in thousands)					
Balance at December 31, 2022	47,312	473	$ (73,154)	$ 539,138	$ (3,841)	$ 462,616
Stock based compensation	795	8	—	900	—	908
Shares repurchased	(166)	(2)	—	(917)	—	(919)
Net income	—	—	3,881	—	—	3,881
Other comprehensive income	—	—	—	—	230	230
Balance at June 30, 2023	47,941	$ 479	$ (69,273)	$ 539,121	$ (3,611)	$ 466,716

	Six Months Ended June 30, 2022					
	Common Stock		Accumulated	Additional Paid-In	Accumulated Other Comprehensive	
	Shares	Amount	Deficit	Capital	Loss	Total
	(in thousands)					
Balance at December 31, 2021	46,684	$ 467	$ (72,535)	$ 538,221	$ (2,931)	$ 463,222
Stock based compensation	628	6	—	435	—	441
Net loss	—	—	(13,114)	—	—	(13,114)
Other comprehensive loss	—	—	—	—	(250)	(250)
Balance at June 30, 2022	47,312	$ 473	$ (85,649)	$ 538,656	$ (3,181)	$ 450,299

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

MAMMOTH ENERGY SERVICES, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited)

	Six Months Ended June 30,	
	2023	2022
	(in thousands)	
Cash flows from operating activities:		
Net income (loss)	$ 3,881	$ (13,114)
Adjustments to reconcile net income (loss) to cash used in operating activities:		
Stock based compensation	908	441
Depreciation, depletion, accretion and amortization	25,606	34,643
Amortization of debt origination costs	377	375
Bad debt recoveries	(425)	(115)
Gains on disposal of assets	(834)	(3,139)
Gains from sales of equipment damaged or lost down-hole	(46)	(511)
Deferred income taxes	(46)	6,612
Other	387	449
Changes in assets and liabilities:		
Accounts receivable, net	7,862	(22,480)
Receivables from related parties, net	18	(105)
Inventories	(1,306)	366
Prepaid expenses and other assets	5,162	4,567
Accounts payable	466	(2,132)
Accrued expenses and other liabilities	(13,924)	(7,407)
Income taxes payable	4,523	912
Net cash provided by (used in) operating activities	32,609	(638)
Cash flows from investing activities:		
Purchases of property and equipment	(10,539)	(3,968)
Proceeds from disposal of property and equipment	806	7,447
Net cash (used in) provided by investing activities	(9,733)	3,479
Cash flows from financing activities:		
Borrowings on long-term debt	118,900	83,000
Repayments of long-term debt	(143,064)	(84,241)
Proceeds from sale leaseback transaction	—	4,589
Payments on sale leaseback transaction	(2,449)	(2,094)
Principal payments on financing leases and equipment financing notes	(3,791)	(1,197)
Other	(919)	—
Net cash (used in) provided by financing activities	(31,323)	57
Effect of foreign exchange rate on cash	15	(68)
Net change in cash and cash equivalents	(8,432)	2,830
Cash and cash equivalents at beginning of period	17,282	9,899
Cash and cash equivalents at end of period	$ 8,850	$ 12,729
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 6,321	$ 3,792
Cash paid for income taxes, net of refunds received	$ 752	$ 98
Supplemental disclosure of non-cash transactions:		
Purchases of property and equipment included in accounts payable and accrued expenses	$ 6,732	$ 4,733
Right-of-use assets obtained for financing lease liabilities	$ 306	$ —

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

1. Organization and Nature of Business

Mammoth Energy Services, Inc. (“Mammoth Inc.”, “Mammoth” or the “Company”), together with its subsidiaries, is an integrated, growth-oriented company serving both the oil and gas and the electric utility industries in North America and US territories. Mammoth Inc.’s infrastructure division provides engineering, design, construction, upgrade, maintenance and repair services to various public and private owned utilities. Its oilfield services division provides a diversified set of services to the exploration and production industry including well completion, natural sand and proppant and drilling services. Additionally, the Company provides aviation services, equipment rentals, remote accommodation services and equipment manufacturing. The Company was incorporated in Delaware in June 2016.

Operations

The Company’s well completion services include equipment and personnel used in connection with the completion and early production of oil and natural gas wells. The Company’s infrastructure services include engineering, design, construction, upgrade, maintenance and repair services to the electrical infrastructure industry as well as repair and restoration services in response to storms and other disasters. The Company’s natural sand proppant services include the distribution and production of natural sand proppant that is used primarily for hydraulic fracturing in the oil and gas industry. The Company’s drilling services provide drilling rigs and directional tools for both vertical and horizontal drilling of oil and natural gas wells. The Company also provides other services, including aviation, equipment rentals, remote accommodations and equipment manufacturing.

The Company’s operations are concentrated in North America. The Company operates its oil and natural gas businesses in the Permian Basin, the Utica Shale, the Eagle Ford Shale, the Marcellus Shale, the Granite Wash, the SCOOP, the STACK, the Cana-Woodford Shale, the Cleveland Sand and the oil sands located in Northern Alberta, Canada. The Company’s oil and natural gas business depends in large part on the conditions in the oil and natural gas industry and, specifically, on the amount of capital spending by its customers. Any prolonged increase or decrease in oil and natural gas prices affects the levels of exploration, development and production activity, as well as the entire health of the oil and natural gas industry. Decreases in the commodity prices for oil and natural gas would have a material adverse effect on the Company’s results of operations and financial condition. During the periods presented in this report, the Company provided its infrastructure services primarily in the northeastern, southwestern, midwestern and western portions of the United States. The Company’s infrastructure business depends on infrastructure spending on maintenance, upgrade, expansion and repair and restoration. Any prolonged decrease in spending by electric utility companies, delays or reductions in government appropriations or the failure of customers to pay their receivables could have a material adverse effect on the Company’s results of operations and financial condition.

2. Basis of Presentation and Significant Accounting Policies

Basis of Presentation
The accompanying unaudited condensed consolidated interim financial statements include the accounts of the Company and its subsidiaries and the variable interest entities (“VIE”) for which the Company is the primary beneficiary. All material intercompany accounts and transactions have been eliminated.

This report has been prepared in accordance with the rules and regulations of the Securities and Exchange Commission, and reflects all adjustments, which in the opinion of management are necessary for the fair presentation of the results for the interim periods, on a basis consistent with the annual audited consolidated financial statements. All such adjustments are of a normal, recurring nature. Certain information, accounting policies and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles (“GAAP”) have been omitted pursuant to such rules and regulations, although the Company believes that the disclosures are adequate to make the information presented not misleading. These unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and the summary of significant accounting policies and notes thereto included in the Company’s most recent annual report on Form 10-K.

Reclassifications
Certain reclassifications have been made to prior period amounts to conform to the current period financial statement presentation. Previously, the Company included gains and losses on disposal of assets within Other income, net on the

unaudited condensed consolidated statements of comprehensive (loss) income. The Company now presents gains and losses on disposal of assets as a separate line titled "Gains on disposal of assets, net".

Accounts Receivable
Accounts receivable include amounts due from customers for services performed or goods sold. The Company grants credit to customers in the ordinary course of business and generally does not require collateral. Prior to granting credit to customers, the Company analyzes the potential customer's risk profile by utilizing a credit report, analyzing macroeconomic factors and using its knowledge of the industry, among other factors. Most areas in the continental United States in which the Company operates provide for a mechanic's lien against the property on which the service is performed if the lien is filed within the statutorily specified time frame. Customer balances are generally considered delinquent if unpaid by the 30th day following the invoice date and credit privileges may be revoked if balances remain unpaid. Interest on delinquent accounts receivable is recognized in other income when chargeable and collectability is reasonably assured.

During the period October 2017 through March 2019, the Company provided infrastructure services in Puerto Rico under master services agreements entered into by Cobra Acquisitions LLC ("Cobra"), one of the Company's subsidiaries, with the Puerto Rico Electric Power Authority ("PREPA") to perform repairs to PREPA's electrical grid as a result of Hurricane Maria. During the three and six months ended June 30, 2023 and the three and six months ended June 30, 2022, the Company charged interest on delinquent accounts receivable pursuant to the terms of its agreements with PREPA totaling $11.3 million, $22.5 million, $10.2 million and $20.0 million, respectively. These amounts are included in "other income, net" on the unaudited condensed consolidated statements of comprehensive (loss) income. Included in "accounts receivable, net" on the unaudited condensed consolidated balance sheets as of June 30, 2023 and December 31, 2022 were interest charges of $174.5 million and $152.0 million, respectively.

The Company regularly reviews receivables and provides for expected losses through an allowance for doubtful accounts. In evaluating the level of established reserves, the Company makes judgments regarding its customers' ability to make required payments, economic events and other factors. As the financial condition of customers changes, circumstances develop, or additional information becomes available, adjustments to the allowance for doubtful accounts may be required. In the event the Company expects that a customer may not be able to make required payments, the Company would increase the allowance through a charge to income in the period in which that determination is made. If it is determined that previously reserved amounts are collectible, the Company would decrease the allowance through a credit to income in the period in which that determination is made. Uncollectible accounts receivable are periodically charged against the allowance for doubtful accounts once a final determination is made regarding their collectability.

Following is a roll forward of the allowance for doubtful accounts for the year ended December 31, 2022 and the six months ended June 30, 2023 (in thousands):

Balance, January 1, 2022	$	18,085
Additions charged to bad debt expense		3,550
Recoveries of receivables previously charged to bad debt expense		(161)
Deductions for uncollectible receivables written off		(17,887)
Balance, December 31, 2022		3,587
Additions charged to bad debt expense		23
Additions charged to revenue		63
Recoveries of receivables previously charged to bad debt expense		(31)
Deductions for uncollectible receivables written off		(3,476)
Balance, June 30, 2023	$	166

During the six months ended June 30, 2023 and 2022, the Company has made specific reserves consistent with Company policy which resulted in nominal additions to allowance for doubtful accounts. These additions were charged to bad debt expense based on the factors described above.

PREPA

As of June 30, 2023, PREPA owed Cobra approximately $216.2 million for services performed, excluding $174.5 million of interest charged on these delinquent balances. PREPA is currently subject to bankruptcy proceedings, which were filed in July 2017 and are currently pending in the U.S. District Court for the District of Puerto Rico. As a result, PREPA's ability to meet its payment obligations is largely dependent upon funding from the Federal Emergency Management Agency ("FEMA") or other sources. On September 30, 2019, Cobra filed a motion with the U.S. District Court for the District of Puerto Rico seeking recovery of the amounts owed to Cobra by PREPA, which motion was stayed by the Court. On March 25, 2020, Cobra filed an urgent motion to modify the stay order and allow the recovery of approximately $61.7 million in claims related to a tax gross-up provision contained in the emergency master service agreement, as amended, that was entered into with PREPA on October 19, 2017. This emergency motion was denied on June 3, 2020 and the Court extended the stay of our motion. On December 9, 2020, the Court again extended the stay of our motion and directed PREPA to file a status report by June 7, 2021. On April 6, 2021, Cobra filed a motion to lift the stay order. Following this filing, PREPA initiated discussion with Cobra, which resulted in PREPA and Cobra filing a joint motion to adjourn all deadlines relative to the April 6, 2021 motion until the June 16, 2021 omnibus hearing as a result of PREPA's understanding that FEMA would be releasing a report in the near future relating to the emergency master service agreement between PREPA and Cobra that was executed on October 19, 2017. The joint motion was granted by the Court on April 14, 2021. On May 26, 2021, FEMA issued a Determination Memorandum related to the first contract between Cobra and PREPA in which, among other things, FEMA raised two contract compliance issues and, as a result, concluded that approximately $47 million in costs were not authorized costs under the contract. On June 14, 2021, the Court issued an order adjourning Cobra's motion to lift the stay order to a hearing on August 4, 2021 and directing Cobra and PREPA to meet and confer in good faith concerning, among other things, (i) the May 26, 2021 Determination Memorandum issued by FEMA and (ii) whether and when a second determination memorandum is expected. The parties were further directed to file an additional status report, which was filed on July 20, 2021. On July 23, 2021, with the aid of Mammoth, PREPA filed an appeal of the entire $47 million that FEMA de-obligated in the May 26, 2021 Determination Memorandum. FEMA approved the appeal in part and denied the appeal in part. FEMA found that staffing costs of $24.4 million are eligible for funding. On August 4, 2021, the Court denied Cobra's April 6, 2021 motion to lift the stay order, extended the stay of our motion seeking recovery of amounts owed to Cobra and directed the parties to file an additional joint status report, which was filed on January 22, 2022. On January 26, 2022, the Court extended the stay and directed the parties to file a further status report by July 25, 2022. On June 7, 2022, Cobra filed a motion to lift the stay order. On June 29, 2022 the Court denied Cobra's motion and extended the stay to January 2023. On November 21, 2022, FEMA issued a Determination Memorandum related to the 100% federal funded portion of the second contract between Cobra and PREPA in which FEMA concluded that approximately $5.6 million in costs were not authorized costs under the contract. On December 21, 2022, FEMA issued a Determination Memorandum related to the 90% federal cost share portion of the second contract between Cobra and PREPA in which FEMA concluded that approximately $68.1 million in costs were not authorized costs under the contract. PREPA has filed first-level administrative appeals of the November 21, 2022 and December 21, 2022 Determination Memorandums. On January 7, 2023, Cobra and PREPA filed a joint status report with the Court, in which PREPA requested that the Court continue the stay through July 31, 2023 and Cobra requested that the stay be lifted. On January 18, 2023, the Court entered an order extending the stay and directing the parties to file a further status report addressing (i) the status of any administrative appeals in connection with the November and December determination memorandums regarding the second contract, (ii) the status of the criminal case against the former Cobra president and the FEMA official that concluded in December 2022, and (iii) a summary of the outstanding and unpaid amounts arising from the first and second contracts and whether PREPA disputes Cobra's entitlement to these amounts with the Court by July 31, 2023. On March 27, 2023, Cobra was notified that FEMA had approved $233 million in Cobra invoices related to the December 21, 2022 Determination Memorandum. The 90% federal cost share of this approved amount was $210 million, which was obligated and made available for draw down on March 27, 2023. Of this $210 million, approximately $99 million has been represented by both PREPA and FEMA as intended to pay Cobra for outstanding invoices and the remaining $111 million is a reimbursement to PREPA for payments already made on Cobra invoices. On May 16, 2023, Cobra filed a motion to lift the stay order. In a June 8, 2023 hearing, the Court ordered PREPA to provide Cobra a detailed report on the status of their review of the invoices that make up the aforementioned $99 million. On June 14, 2023, PREPA paid Cobra approximately $10.8 million, all of which was used to reduce outstanding borrowings under the Company's existing revolving credit facility, as required under the terms thereof. Additionally, on June 14, 2023, PREPA filed a report noting a portion of the approved, but unpaid invoices would be submitted to COR3 within two weeks of the filing and the remainder of the invoices would be submitted to COR3 within four weeks of the filing. Following the passage of the two-week and four-week periods contained in the June 14, 2023 report, Cobra filed an informative motion with the Court regarding the passage of the respective periods and PREPA's failure to meet the deadlines. The Court ordered PREPA to respond to Cobra's informative motion, which PREPA did on July 21, 2023. In this Court ordered response, PREPA informed the Court that an additional $8.4 million of invoices had been submitted for payment and that $72 million in FEMA approved costs were awaiting engineer certification. On August 2, 2023, following submission of a joint status report by Cobra and FEMA on July 31, 2023, in which, among other things, PREPA requested the stay be continued and Cobra requested the stay be lifted, the Court entered an order continuing the stay until October 31, 2023 and requiring another joint status report be filed on October 10, 2023.

On January 20, 2023, Cobra submitted a certified claim for approximately $379 million to FEMA pursuant to the federal Contract Disputes Act. On February 1, 2023, FEMA notified Cobra that it had reviewed the claim and determined that no contract, expressed or implied, exists between FEMA and Cobra. On March 29, 2023, Cobra filed a notice of appeal with the Civilian Board of Contract Appeals related to the certified claim submitted in January 2023. On April 25, 2023, FEMA filed a motion to dismiss Cobra's appeal alleging lack of jurisdiction.

The Company believes all amounts charged to PREPA, including interest charged on delinquent accounts receivable, were in accordance with the terms of the contracts. Further, there have been multiple reviews prepared by or on behalf of FEMA that have concluded that the amounts Cobra charged PREPA were reasonable, that PREPA adhered to Puerto Rican legal statutes regarding emergency situations, and that PREPA engaged in a reasonable procurement process. The Company believes these receivables are collectible and no allowance was deemed necessary at June 30, 2023 or December 31, 2022. However, in the event PREPA (i) does not have or does not obtain the funds necessary to satisfy its obligations to Cobra under the contracts, (ii) obtains the necessary funds but refuses to pay the remaining amounts owed to the Company or (iii) otherwise does not pay amounts owed to the Company, the receivable may not be collectible.

Concentrations of Credit Risk and Significant Customers

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents in excess of federally insured limits and trade receivables. Following is a summary of our significant customers based on percentages of total accounts receivable balances at June 30, 2023 and December 31, 2022 and percentages of total revenues derived for the three and six months ended June 30, 2023 and 2022:

	REVENUES				ACCOUNTS RECEIVABLE	
	Three Months Ended June 30,		Six Months Ended June 30,		At June 30,	At December 31,
	2023	2022	2023	2022	2023	2022
Customer A[(a)]	— %	— %	— %	— %	87 %	83 %
Customer B[(b)]	8 %	1 %	9 %	11 %	— %	— %
Customer C[(c)]	6 %	22 %	12 %	14 %	1 %	— %

a. Customer A is a third-party customer. Revenues and the related accounts receivable balances earned from Customer A were derived from the Company's infrastructure services segment. Accounts receivable for Customer A also includes receivables due for interest charged on delinquent accounts receivable.
b. Customer B is a third-party customer. Revenues and the related accounts receivable balances earned from Customer B were derived from the Company's well completion services segment.
c. Customer C is a third-party customer. Revenues and the related accounts receivable balances earned from Customer C were derived from the Company's well completion services segment.

Fair Value of Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, trade receivables, trade payables, amounts receivable or payable to related parties and debt. The carrying amount of cash and cash equivalents, trade receivables, receivables from related parties and trade payables approximates fair value because of the short-term nature of the instruments. The fair value of debt approximates its carrying value because the cost of borrowing fluctuates based upon market conditions.

3. Revenue

The Company's primary revenue streams include infrastructure services, well completion services, natural sand proppant services, drilling services and other services, which includes aviation, equipment rentals, remote accommodations and equipment manufacturing. See Note 19 for the Company's revenue disaggregated by type.

Certain of the Company's customer contracts include provisions entitling the Company to a termination penalty when the customer invokes its contractual right to terminate prior to the contract's nominal end date. The termination penalties in the customer contracts vary, but are generally considered substantive for accounting purposes and create enforceable rights and obligations throughout the stated duration of the contract. The Company accounts for a contract cancellation as a contract modification in the period in which the customer invokes the termination provision. The determination of the contract termination penalty is based on the terms stated in the related customer agreement. As of the modification date, the Company updates its estimate of the transaction price using the expected value method, subject to constraints, and recognizes the amount over the remaining performance period.

Well Completion Services
Well completion services are typically provided based upon a purchase order, contract or on a spot market basis. Services are provided on a day rate, contracted or hourly basis. Generally, the Company accounts for well completion services as a single performance obligation satisfied over time. In certain circumstances, the Company supplies proppant that is utilized for pressure pumping as part of the agreement with the customer. The Company accounts for these pressure pumping agreements as multiple performance obligations satisfied over time. Jobs for these services are typically short-term in nature and range from a few hours to multiple days. Generally, revenue is recognized over time upon the completion of each segment of work based upon a completed field ticket, which includes the charges for the services performed, mobilization of the equipment to the location and personnel.

Additional revenue is generated through labor charges and the sale of consumable supplies that are incidental to the service being performed. Such amounts are recognized ratably over the period during which the corresponding goods and services are consumed.

Infrastructure Services
Infrastructure services are typically provided pursuant to master service agreements, repair and maintenance contracts or fixed price and non-fixed price installation contracts. Pricing under these contracts may be unit priced, cost-plus/hourly (or time and materials basis) or fixed price (or lump sum basis). Generally, the Company accounts for infrastructure services as a single performance obligation satisfied over time. In certain circumstances, the Company supplies materials that are utilized during the jobs as part of the agreement with the customer. The Company accounts for these infrastructure agreements as multiple performance obligations satisfied over time. Revenue is recognized over time as work progresses based on the days completed or as the contract is completed. Under certain customer contracts in our infrastructure services segment, the Company warranties equipment and labor performed for a specified period following substantial completion of the work.

Natural Sand Proppant Services
The Company sells natural sand proppant through sand supply agreements with its customers. Under these agreements, sand is typically sold at a flat rate per ton or a flat rate per ton with an index-based adjustment. The Company recognizes revenue at the point in time when the customer obtains legal title to the product, which may occur at the production facility, rail origin or at the destination terminal.

Certain of the Company’s sand supply agreements contain a minimum volume commitment related to sand purchases whereby the Company charges a shortfall payment if the customer fails to meet the required minimum volume commitment. These agreements may also contain make-up provisions whereby shortfall payments can be applied in future periods against purchased volumes exceeding the minimum volume commitment. If a make-up right exists, the Company has future performance obligations to deliver excess volumes of product in subsequent months. In accordance with ASC 606, if the customer fails to meet the minimum volume commitment, the Company will assess whether it expects the customer to fulfill its unmet commitment during the contractually specified make-up period based on discussions with the customer and management’s knowledge of the business. If the Company expects the customer will make-up deficient volumes in future periods, revenue related to shortfall payments will be deferred and recognized on the earlier of the date on which the customer utilizes make-up volumes or the likelihood that the customer will exercise its right to make-up deficient volumes becomes remote. If the Company does not expect the customer will make-up deficient volumes in future periods, the breakage model will be applied and revenue related to shortfall payments will be recognized when the model indicates the customer’s inability to take delivery of excess volumes. The Company did not recognize any shortfall revenue during the three and six months ended June 30, 2023 and did not have any deferred revenue related to shortfall payments. The Company recognized shortfall revenue totaling $2.6 million during the three and six months ended June 30, 2022, respectively.

In certain of the Company’s sand supply agreements, the customer obtains control of the product when it is loaded into rail cars and the customer reimburses the Company for all freight charges incurred. The Company has elected to account for shipping and handling as activities to fulfill the promise to transfer the sand. If revenue is recognized for the related product before the shipping and handling activities occur, the Company accrues the related costs of those shipping and handling activities.

Drilling Services
Contract drilling services were provided under daywork contracts. Directional drilling services, including motor rentals, are provided on a day rate or hourly basis, and revenue is recognized as work progresses. Performance obligations are satisfied over time as the work progresses based on the measure of output. Mobilization revenue and costs were recognized over the days of actual drilling. As a result of market conditions, the Company temporarily shut down its contract land drilling operations beginning in December 2019 and rig hauling operations beginning in April 2020.

Other Services
The Company also provided aviation, equipment rentals, remote accommodations and equipment manufacturing, which are reported under other services. The Company's other services are typically provided based upon a purchase order, contract or on a spot market basis. Services are provided on a day rate, contracted or hourly basis. Performance obligations for these services are satisfied over time and revenue is recognized as the work progresses based on the measure of output. Jobs for these services are typically short-term in nature and range from a few hours to multiple days.

Practical Expedients
The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts in which variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied distinct good or service that forms part of a single performance obligation.

Contract Balances
Following is a rollforward of the Company's contract liabilities (in thousands):

Balance, December 31, 2021	$ 3,250
Deduction for recognition of revenue	(3,207)
Deduction for rebate credit recognized	(140)
Increase for deferral of customer prepayments	7,647
Balance, December 31, 2022	7,550
Deduction for recognition of revenue	(7,042)
Deduction for rebate credit recognized	(375)
Increase for deferral of customer prepayments	467
Balance, June 30, 2023	$ 600

The Company did not have any contract assets as of June 30, 2023 or December 31, 2022.

Performance Obligations
Revenue recognized in the current period from performance obligations satisfied in previous periods was a nominal amount for the three and six months ended June 30, 2023 and 2022. As of June 30, 2023, the Company had unsatisfied performance obligations totaling $16.4 million, which will be recognized over the next 19 months.

4. Inventories

Inventories consist of raw sand and processed sand available for sale, chemicals and other products sold as a bi-product of completion and production operations and supplies used in performing services. Inventory is stated at the lower of cost or net realizable value on an average cost basis. The Company assesses the valuation of its inventories based upon specific usage, future utility, obsolescence and other factors. A summary of the Company's inventories is shown below (in thousands):

	June 30, 2023	December 31, 2022
Supplies	$ 5,833	$ 5,167
Raw materials	1,830	974
Work in process	1,740	2,221
Finished goods	786	521
Total inventories	$ 10,189	$ 8,883

5. Property, Plant and Equipment

Property, plant and equipment include the following (in thousands):

	Useful Life	June 30, 2023	December 31, 2022
Pressure pumping equipment	3-5 years	$ 251,051	$ 230,760
Drilling rigs and related equipment	3-15 years	110,818	110,724
Machinery and equipment	7-20 years	159,801	162,634
Buildings[(a)]	15-39 years	40,909	40,316
Vehicles, trucks and trailers	5-10 years	101,201	101,580
Coil tubing equipment	4-10 years	6,908	6,908
Land	N/A	12,393	12,393
Land improvements	15 years or life of lease	10,066	10,053
Rail improvements	10-20 years	13,793	13,793
Other property and equipment[(b)]	3-12 years	18,375	18,296
		725,315	707,457
Deposits on equipment and equipment in process of assembly[(c)]		8,077	13,885
		733,392	721,342
Less: accumulated depreciation[(d)]		606,202	583,276
Total property, plant and equipment, net		$ 127,190	$ 138,066

a. Included in Buildings at each of June 30, 2023 and December 31, 2022 are costs of $ 7.6 million related to assets under operating leases.
b. Included in Other property and equipment at each of June 30, 2023 and December 31, 2022 are costs of $ 6.0 million related to assets under operating leases.
c. Deposits on equipment and equipment in process of assembly represents deposits placed with vendors for equipment that is in the process of assembly and purchased equipment that is being outfitted for its intended use. The equipment is not yet placed in service.
d. Includes accumulated depreciation of $8.7 million and $8.0 million at June 30, 2023 and December 31, 2022, respectively, related to assets under operating leases.

Disposals

Proceeds from customers for horizontal and directional drilling services equipment damaged or lost down-hole are reflected in revenue with the carrying value of the related equipment charged to cost of service revenues and are reported as cash inflows from investing activities in the unaudited condensed consolidated statements of cash flows. For the three and six months ended June 30, 2023 and 2022, proceeds from the sale of equipment damaged or lost down-hole were a nominal amount and $0.1 million, respectively, and gains from the sale of equipment damaged or lost down-hole were a nominal amount and $0.5 million, respectively.

Proceeds from assets sold or disposed of as well as the carrying value of the related equipment are reflected in “gains on disposal of assets, net” on the unaudited condensed consolidated statements of comprehensive (loss) income. For the three and six months ended June 30, 2023 and 2022, proceeds from the sale of equipment were $0.5 million, $0.9 million, $6.7 million and $7.2 million, respectively, and gains from the sale or disposal of equipment were $0.5 million, $0.8 million, $2.9 million and $3.1 million, respectively.

Depreciation, depletion, amortization and accretion

A summary of depreciation, depletion, amortization and accretion expense is below (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Depreciation expense	$ 11,130	$ 16,759	$ 23,857	$ 33,685
Amortization expense	195	195	389	389
Accretion and depletion expense	1,325	522	1,360	569
Depreciation, depletion, amortization and accretion	$ 12,650	$ 17,476	$ 25,606	$ 34,643

6. Goodwill and Intangible Assets

Goodwill

Changes in the net carrying amount of goodwill by reporting segment (see Note 19) for the six months ended June 30, 2023 and year ended December 31, 2022 are presented below (in thousands):

	Well Completions	Other	Total
Balance as of January 1, 2022			
Goodwill	$ 86,043	$ 14,830	$ 100,873
Accumulated impairment losses	(76,829)	(12,327)	(89,156)
	9,214	2,503	11,717
Acquisitions	—	—	—
Impairment losses	—	—	—
Balance as of December 31, 2022			
Goodwill	86,043	14,830	100,873
Accumulated impairment losses	(76,829)	(12,327)	(89,156)
	9,214	2,503	11,717
Acquisitions	—	—	—
Impairment losses	—	—	—
Balance as of June 30, 2023			
Goodwill	86,043	14,830	100,873
Accumulated impairment losses	(76,829)	(12,327)	(89,156)
	$ 9,214	$ 2,503	$ 11,717

Intangible Assets

The Company had the following definite lived intangible assets recorded (in thousands):

	June 30, 2023	December 31, 2022
Trade names	7,850	7,850
Less: accumulated amortization - trade names	(6,457)	(6,068)
Intangible assets, net	$ 1,393	$ 1,782

Amortization expense for intangible assets was $0.2 million, and $0.4 million for each of the three and six months ended June 30, 2023 and 2022, respectively. The original life of trade names ranges from 10 to 20 years as of June 30, 2023 with a remaining average useful life of3 years.

Aggregated expected amortization expense for the future periods is expected to be as follows (in thousands):

Remainder of 2023	$ 390
2024	710
2025	91
2026	91
2027	45
Thereafter	66
	$ 1,393

7. Equity Method Investment

On December 21, 2018, Cobra Aviation Services LLC ("Cobra Aviation") and Wexford Partners Investment Co. LLC ("Wexford Investment"), a related party, formed a joint venture under the name of Brim Acquisitions LLC ("Brim Acquisitions") to acquire all outstanding equity interest in Brim Equipment Leasing, Inc. ("Brim Equipment") for a total purchase price of approximately $2.0 million. Cobra Aviation owns a 49% economic interest and Wexford Investment owns a 51% economic interest in Brim Acquisitions, and each member contributed its pro rata portion of Brim Acquisitions' initial capital of $2.0 million. Brim Acquisitions, through Brim Equipment, owns four commercial helicopters and leases five commercial helicopters for operations, which it uses to provide a variety of services, including short haul, aerial ignition, hoist operations, aerial photography, fire suppression, construction services, animal/capture/survey, search and rescue, airborne law enforcement, power line construction, precision long line operations, pipeline construction and survey, mineral and seismic exploration, and aerial seeding and fertilization.

The Company uses the equity method of accounting to account for its investment in Brim Acquisitions, which had a carrying value of approximately $3.1 million and $3.5 million at June 30, 2023 and December 31, 2022, respectively. The investment is included in "other non-current assets" on the unaudited condensed consolidated balance sheets. The Company recorded equity method adjustments to its investment of $0.2 million and $0.4 million for the three and six months ended June 30, 2023, respectively, and $0.1 million and ($0.4) million for the three and six months ended June 30, 2022, respectively, which is included in "other income, net" on the unaudited condensed consolidated statements of comprehensive (loss) income.

8. Accrued Expenses and Other Current Liabilities and Other Long-Term Liabilities

Accrued expenses and other current liabilities and other long-term liabilities included the following (in thousands):

		June 30, 2023	December 31, 2022
State and local taxes payable	$	13,178	$ 13,336
Financed insurance premiums[(a)]		4,210	10,136
Deferred revenue		600	7,550
Accrued compensation and benefits		6,103	6,743
Sale-leaseback liability[(b)]		4,691	4,501
Financing leases		2,115	4,003
Equipment financing note		2,374	2,329
Insurance reserves		1,493	1,509
Other		2,024	2,190
Total accrued expenses and other current liabilities	$	36,788	$ 52,297
Other Long-Term Liabilities			
Equipment financing note[(c)]	$	4,859	$ 6,047
Sale-leaseback liability[(b)]		4,275	6,836
Financing leases		2,060	2,602
Total other long-term liabilities	$	11,194	$ 15,485

a. Financed insurance premiums are due in monthly installments, are unsecured and mature within the twelve-month period following the close of the year. As of June 30, 2023, the applicable interest rates associated with financed insurance premiums ranged from 5.13% to 6.75%. As of December 31, 2022, the applicable interest rates associated with financed insurance premiums ranged from 1.95% to 5.13%.

b. On December 30, 2020, the Company entered into an agreement with First National Capital, LLC ("FNC") whereby the Company agreed to sell certain assets from its infrastructure segment to FNC for aggregate proceeds of $5.0 million. Concurrent with the sale of assets, the Company entered into a 36 month lease agreement whereby the Company agreed to lease back the assets at a monthly rental rate of $0.1 million. On June 1, 2021, the Company entered into another agreement with FNC whereby the Company sold additional assets from its infrastructure segment to FNC for aggregate proceeds of $9.5 million and entered into a 42-month lease agreement whereby the Company agreed to lease back the assets at a monthly rental rate of $0.2 million. On June 1, 2022, the Company entered into another agreement with FNC whereby the Company sold additional assets from its infrastructure segment to FNC for aggregate proceeds of $4.6 million and entered into a 42-month lease agreement whereby the Company agreed to lease back the assets at a monthly rental rate of $0.1 million. Under the agreements, the Company has the option to purchase the assets at the end of the lease terms. The Company recorded liabilities for the proceeds received and will continue to depreciate the assets. The Company has imputed an interest rate so that the carrying amount of the financial liabilities will be the expected repurchase price at the end of the initial lease terms.

c. In December 2022, the Company entered into a 42 month financing arrangement with FNC for the purchase of seven new pressure pumping units for an aggregate value of $9.7 million. Under this arrangement, the Company has agreed to make monthly principal and interest payments totaling $0.3 million over the term of the agreement. This note is secured by the seven pressure pumping units and bears interest at an imputed rate of approximately 15.0%.

9. Debt

On October 19, 2018, Mammoth Inc. and certain of its direct and indirect subsidiaries, as borrowers, entered into an amended and restated revolving credit and security agreement with the lenders party thereto and PNC Bank, National Association, as a lender and as administrative agent for the lenders, as subsequently further amended (the "existing revolving credit facility"). Borrowings under the existing revolving credit facility are secured by the assets of Mammoth Inc., inclusive of the subsidiary companies, and are subject to a borrowing base calculation prepared monthly. The existing revolving credit facility also contains various affirmative and restrictive covenants.

In particular, under the existing revolving credit facility, the Company is required, among other things, to mandatorily remit to PNC all amounts that constitute PREPA Claim Proceeds, as such term is defined in the existing revolving credit facility, including the $10.8 million received from PREPA on June 14, 2023, all of which was used to reduce outstanding borrowings under the existing revolving credit facility, as required under the terms thereof. Further, the existing revolving credit facility provides for a reduction in the maximum revolving advance amount in an amount equal to 50% of the PREPA Claims Proceeds remitted to PNC, subject to a floor equal to the sum of eligible billed and unbilled accounts receivables.

As of June 30, 2023, the applicable financial covenants under the existing revolving credit facility were as follows:

- the fixed charge coverage ratio was 1.1 to 1.0; and
- the minimum excess availability covenant was $10.0 million.

The Company was in compliance with the applicable financial covenants under its revolving credit facility in effect as of June 30, 2023 and December 31, 2022.

At June 30, 2023, there were outstanding borrowings under the existing revolving credit facility of $59.4 million, the borrowing base was $89.4 million and there was $13.6 million of available borrowing capacity under the facility, after giving effect to $6.4 million of outstanding letters of credit and the requirement to maintain a $10.0 million reserve out of the available borrowing capacity. At December 31, 2022, there were outstanding borrowings under the existing revolving credit facility of $83.5 million, the borrowing base was $119.8 million and there was $19.7 million of borrowing capacity under the facility, after giving effect to $6.5 million of outstanding letters of credit and the requirement to maintain a $10.0 million reserve out of the available borrowing capacity.

If an event of default occurs under the existing revolving credit facility and remains uncured, it could have a material adverse effect on the Company’s business, financial condition, liquidity and results of operations. The lenders (i) would not be required to lend any additional amounts to the Company, (ii) could elect to increase the interest rate by 200 basis points, (iii) could elect to declare all outstanding borrowings, together with accrued and unpaid interest and fees, to be due and payable, (iv) may have the ability to require the Company to apply all of its available cash to repay outstanding borrowings, and (v) may foreclose on substantially all of the Company’s assets. The existing revolving credit facility is currently scheduled to mature on October 19, 2023. See "Subsequent Events--Pending Repayment and Refinancing of Existing Revolving Credit Facility" for additional information.

Aviation Note

On November 6, 2020, Leopard and Cobra Aviation entered into a 39 month promissory note agreement with Bank7 (the “Aviation Note”) in an aggregate principal amount of $4.6 million and received net proceeds of $4.5 million. The Aviation Note bore interest at a rate based on the Wall Street Journal Prime Rate plus a margin of 1%. The Aviation Note was paid off on September 30, 2022.

10. Variable Interest Entities

Dire Wolf Energy Services LLC (“Dire Wolf”) and Predator Aviation LLC (“Predator Aviation”), wholly owned subsidiaries of the Company, are party to Voting Trust Agreements with TVPX Aircraft Solutions Inc. (the “Voting Trustee”). Under the Voting Trust Agreements, Dire Wolf transferred 100% of its membership interest in Cobra Aviation and Predator Aviation transferred 100% of its membership interest in Leopard to the respective Voting Trustees in exchange for Voting Trust Certificates. Dire Wolf and Predator Aviation retained the obligation to absorb all expected returns or losses of Cobra Aviation and Leopard. Prior to the transfer of the membership interest to the Voting Trustee, Cobra Aviation was a wholly owned subsidiary of Dire Wolf and Leopard was a wholly owned subsidiary of Predator Aviation. Cobra Aviation owns two helicopters and support equipment, 100% of the equity interest in Air Rescue Systems Corporation (“ARS”) and 49% of the equity interest in Brim Acquisitions. See Note 20. Leopard owns one helicopter. Dire Wolf and Predator Aviation entered into the Voting Trust Agreements in order to meet certain registration requirements.

Dire Wolf’s and Predator Aviation’s voting rights are not proportional to their respective obligations to absorb expected returns or losses of Cobra Aviation and Leopard, respectively, and all of Cobra Aviation’s and Leopard’s activities are conducted on behalf of Dire Wolf and Predator Aviation, which have disproportionately fewer voting rights; therefore, Cobra Aviation and Leopard meet the criteria of a VIE. Cobra Aviation and Leopard’s operational activities are directed by Dire Wolf's and Predator Aviation's officers and Dire Wolf and Predator Aviation have the option to terminate the Voting Trust Agreements at any time. Therefore, the Company, through Dire Wolf and Predator Aviation, is considered the primary beneficiary of the VIEs and consolidates Cobra Aviation and Leopard at June 30, 2023.

11. Selling, General and Administrative Expense

Selling, general and administrative ("SG&A") expense includes of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Cash expenses:				
Compensation and benefits	$ 3,996	$ 3,137	$ 8,273	$ 6,120
Professional services	4,276	2,724	6,205	6,361
Other[a]	1,868	2,162	3,779	4,068
Total cash SG&A expense	10,140	8,023	18,257	16,549
Non-cash expenses:				
Bad debt recoveries	(44)	(16)	(425)	(115)
Stock based compensation	261	199	908	440
Total non-cash SG&A expense	217	183	483	325
Total SG&A expense	$ 10,357	$ 8,206	$ 18,740	$ 16,874

a. Includes travel-related costs, information technology expenses, rent, utilities and other general and administrative-related costs.

12. Income Taxes

The Company recorded income tax expense of $5.6 million for the six months ended June 30, 2023 compared to income tax expense of $7.6 million for the six months ended June 30, 2022. The Company's effective tax rates were 59% and (139%) for the six months ended June 30, 2023 and 2022, respectively.

The effective tax rates for the six months ended June 30, 2023 and 2022 differed from the statutory rate of 21% primarily due to the mix of earnings between the United States and Puerto Rico as well as changes in the valuation allowance.

13. Leases

Lessee Accounting

The Company recognizes a lease liability equal to the present value of the lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term for all leases with a term in excess of 12 months. For operating leases, lease expense for lease payments is recognized on a straight-line basis over the lease term, while finance leases include both an operating expense and an interest expense component. For all leases with a term of 12 months or less, the Company has elected the practical expedient to not recognize lease assets and liabilities and recognizes lease expense for these short-term leases on a straight-line basis over the lease term.

The Company's operating leases are primarily for rail cars, real estate, and equipment and its finance leases are primarily for machinery and equipment. Generally, the Company does not include renewal or termination options in its assessment of the leases unless extension or termination of certain assets is deemed to be reasonably certain. The accounting for some of the Company's leases may require significant judgment, which includes determining whether a contract contains a lease, determining the incremental borrowing rates to utilize in the net present value calculation of lease payments for lease agreements which do not provide an implicit rate and assessing the likelihood of renewal or termination options. Lease agreements that contain a lease and non-lease component are generally accounted for as a single lease component.

The rate implicit in the Company's leases is not readily determinable. Therefore, the Company uses its incremental borrowing rate based on information available at the commencement date of its leases in determining the present value of lease payments. The Company's incremental borrowing rate reflects the estimated rate of interest that it would pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment.

Lease expense consisted of the following for the three and six months ended June 30, 2023 and 2022 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Operating lease expense	$ 1,871	$ 1,774	$ 3,640	$ 3,521
Short-term lease expense	19	22	439	58
Finance lease expense:				
Amortization of right-of-use assets	569	402	1,134	805
Interest on lease liabilities	40	45	97	94
Total lease expense	$ 2,499	$ 2,243	$ 5,310	$ 4,478

Supplemental balance sheet information related to leases as of June 30, 2023 and December 31, 2022 is as follows (in thousands):

	June 30, 2023	December 31, 2022
Operating leases:		
Operating lease right-of-use assets	$ 11,513	$ 10,656
Current operating lease liability	6,051	5,447
Long-term operating lease liability	5,213	4,913
Finance leases:		
Property, plant and equipment, net	$ 4,400	$ 7,267
Accrued expenses and other current liabilities	2,115	4,003
Other liabilities	2,060	2,602

Other supplemental information related to leases for the three and six months ended June 30, 2023 and 2022 and as of June 30, 2023 and December 31, 2022 is as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 1,843	$ 1,923	$ 3,593	$ 3,595
Operating cash flows from finance leases	40	45	97	94
Financing cash flows from finance leases	1,184	457	2,677	909
Right-of-use assets obtained in exchange for lease obligations:				
Operating leases	$ 1,299	$ 1,436	$ 4,216	$ 2,819
Finance leases	306	—	306	—

	June 30, 2023	December 31, 2022
Weighted-average remaining lease term:		
Operating leases	2.5 years	2.9 years
Finance leases	2.3 years	2.0 years
Weighted-average discount rate:		
Operating leases	7.5 %	4.1 %
Finance leases	4.1 %	4.3 %

Maturities of lease liabilities as of June 30, 2023 are as follows (in thousands):

	Operating Leases	Finance Leases
Remainder of 2023	$ 3,624	$ 1,410
2024	5,679	1,267
2025	2,263	760
2026	396	944
2027	19	—
Thereafter	448	—
Total lease payments	12,429	4,381
Less: Present value discount	1,165	206
Present value of lease payments	$ 11,264	$ 4,175

Lessor Accounting

Certain of the Company’s agreements with its customers for drilling services, aviation services and remote accommodation services contain an operating lease component under ASC 842 because (i) there are identified assets, (ii) the customer obtains substantially all of the economic benefits of the identified assets throughout the period of use and (iii) the customer directs the use of the identified assets throughout the period of use. The Company has elected to apply the practical expedient provided to lessors to combine the lease and non-lease components of a contract where the revenue recognition pattern is the same and where the lease component, when accounted for separately, would be considered an operating lease. The practical expedient also allows a lessor to account for the combined lease and non-lease components under ASC 606, Revenue from Contracts with Customers, when the non-lease component is the predominant element of the combined component.

The Company’s lease agreements are generally short-term in nature and lease revenue is recognized over time based on a monthly, daily or hourly rate basis. The Company does not provide an option for the lessee to purchase the rented assets at the end of the lease and the lessees do not provide residual value guarantees on the rented assets. The Company recognized lease revenue of $0.9 million for each of the three months ended June 30, 2023 and 2022, respectively, and $1.6 million for each of the six months ended June 30, 2023 and 2022, respectively, which is included in “services revenue” and “services revenue - related parties” on the unaudited condensed consolidated statements of comprehensive (loss) income.

14. (Loss) Earnings Per Share

Reconciliations of the components of basic and diluted net (loss) earnings per common share are presented in the table below (in thousands, except per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Basic (loss) earnings per share:				
Allocation of (loss) earnings:				
Net (loss) income	$ (4,470)	$ 1,703	$ 3,881	$ (13,114)
Weighted average common shares outstanding	47,718	47,225	47,581	47,036
Basic (loss) earnings per share	$ (0.09)	$ 0.04	$ 0.08	$ (0.28)
Diluted (loss) earnings per share:				
Allocation of (loss) earnings:				
Net (loss) income	$ (4,470)	$ 1,703	$ 3,881	$ (13,114)
Weighted average common shares, including dilutive effect[a]	47,718	47,634	47,966	47,036
Diluted (loss) earnings per share	$ (0.09)	$ 0.04	$ 0.08	$ (0.28)

a. No incremental shares of potentially dilutive restricted stock awards were included for the three months ended June 30, 2023 and the six months ended June 30, 2022 as their effect was antidilutive under the treasury stock method.

15. Equity Based Compensation

Upon formation of certain operating entities by Wexford and Gulfport, specified members of management (the “Specified Members”) and certain non-employee members (the “Non-Employee Members”) were granted the right to receive distributions from the operating entities after the contribution member’s unreturned capital balance was recovered (referred to as “Payout” provision).

On November 24, 2014, the awards were modified in conjunction with the contribution of the operating entities to Mammoth. These awards were not granted in limited or general partner units. The awards are for interests in the distributable earnings of the members of MEH Sub, Mammoth’s majority equity holder.

On the closing date of Mammoth Inc.’s initial public offering (“IPO”), the unreturned capital balance of Mammoth’s majority equity holder was not fully recovered from its sale of common stock in the IPO. As a result, Payout did not occur and no compensation cost was recorded.

Payout for the remaining awards is expected to occur as the contributing member’s unreturned capital balance is recovered from additional sales by MEH Sub of its shares of the Company’s common stock or from dividend distributions, which is not considered probable until the event occurs. For the Specified Member awards, the unrecognized amount, which represents the fair value of the award as of the modification dates or grant date, was $5.6 million.

For the Company’s Non-Employee Member awards, the unrecognized amount, which represents the fair value of the awards as of the date of adoption of ASU 2018-07 was $18.9 million.

16. Stock Based Compensation

The 2016 Plan authorizes the Company’s Board of Directors or the compensation committee of the Company’s Board of Directors to grant restricted stock, restricted stock units, stock appreciation rights, stock options and performance awards. There was a maximum of 4.5 million shares of common stock reserved for issuance under the 2016 Plan, of which 0.6 million shares of common stock remain available for future grants under the 2016 plan as of June 30, 2023.

Restricted Stock Units

The fair value of restricted stock unit awards was determined based on the fair market value of the Company’s common stock on the date of the grant. This value is amortized over the vesting period.

A summary of the status and changes of the unvested shares of restricted stock under the 2016 Plan is presented below.

	Number of Unvested Restricted Shares	Weighted Average Grant-Date Fair Value
Unvested shares as of January 1, 2022	1,128,205	$ 1.27
Granted	228,310	2.19
Vested	(628,205)	1.54
Forfeited	—	—
Unvested shares as of December 31, 2022	728,310	1.32
Granted	369,050	5.17
Vested	(794,977)	1.69
Forfeited	—	—
Unvested shares as of June 30, 2023	302,383	$ 5.06

As of June 30, 2023, there was $1.4 million of total unrecognized compensation cost related to the unvested restricted stock. The cost is expected to be recognized over a weighted average period of approximately two years.

Included in cost of revenue and selling, general and administrative expenses is stock-based compensation expense of $0.3 million and $0.9 million for the three and six months ended June 30, 2023, respectively, and $0.2 million and $0.4 million for the three and six months ended June 30, 2022, respectively.

17. Related Party Transactions

Transactions between the subsidiaries of the Company, including Panther Drilling Systems LLC ("Panther Drilling"), Cobra Aviation, ARS and Leopard and the following companies are included in Related Party Transactions: Wexford, El Toro Resources LLC ("El Toro"), Elk City Yard LLC ("Elk City Yard"), Double Barrel Downhole Technologies LLC ("DBDHT"), Caliber Investment Group LLC ("Caliber") and Brim Equipment.

Following is a summary of related party transactions (in thousands):

		Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	At June 30, 2023	At December 31, 2022
		REVENUES				ACCOUNTS RECEIVABLE	
Cobra Aviation/ARS/Leopard and Brim Equipment	(a)	$ 78	$ 92	298	152	$ 60	$ 217
Panther and El Toro	(b)	291	303	291	517	139	—
Other Relationships		—	—	—	—	6	6
		$ 369	$ 395	$ 589	$ 669	$ 205	$ 223

a. Cobra Aviation, ARS and Leopard lease helicopters to Brim Equipment pursuant to aircraft lease and management agreements.
b. Panther provides directional drilling services for El Toro, an entity controlled by Wexford, pursuant to a master service agreement.

		Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022	At June 30, 2023	At December 31, 2022
		COST OF REVENUE				ACCOUNTS PAYABLE	
Cobra Aviation/ARS/Leopard and Brim Equipment	(a)	$ —	$ 21	$ 7	$ 40	$ —	$ 3
The Company and Caliber	(b)	157	90	180	179	—	—
Other Relationships		53	17	53	44	—	—
		$ 210	$ 128	$ 240	$ 263	$ —	$ 3

a. Cobra Aviation, ARS and Leopard lease helicopters to Brim Equipment pursuant to aircraft lease and management agreements.
b. Caliber, an entity controlled by Wexford, leases office space to the Company.

On December 21, 2018, Cobra Aviation acquired all outstanding equity interest in ARS and purchased two commercial helicopters, spare parts, support equipment and aircraft documents from Brim Equipment. Following these transactions, and also on December 21, 2018, Cobra Aviation formed a joint venture with Wexford Investments named Brim Acquisitions to acquire all outstanding equity interests in Brim Equipment. Cobra Aviation owns a 49% economic interest and Wexford Investment owns a 51% economic interest in Brim Acquisitions, and each member contributed its pro rata portion of Brim Acquisitions' initial capital of $2.0 million. Wexford Investments is an entity controlled by Wexford, which owns approximately 47% of the Company's outstanding common stock. ARS leases a helicopter to Brim Equipment and Cobra Aviation leases the two helicopters purchased as part of these transactions to Brim Equipment under the terms of aircraft lease and management agreements. See Note 7 for further discussion.

18. Commitments and Contingencies

Commitments

From time to time, the Company may enter into agreements with suppliers that contain minimum purchase obligations and agreements to purchase capital equipment. The Company did not have any unconditional purchase obligations as of June 30, 2023.

Letters of Credit

The Company has various letters of credit that were issued under the Company's revolving credit agreement which is collateralized by substantially all of the assets of the Company. The letters of credit are categorized below (in thousands):

	June 30, 2023	December 31, 2022
Environmental remediation	$ 3,569	$ 3,694
Insurance programs	2,800	2,800
Total letters of credit	$ 6,369	$ 6,494

Insurance

The Company has insurance coverage for physical partial loss to its assets, employer's liability, automobile liability, commercial general liability, workers' compensation and insurance for other specific risks. The Company has also elected in some cases to accept a greater amount of risk through increased deductibles on certain insurance policies. At each of June 30, 2023 and December 31, 2022, the workers' compensation and automobile liability policies require a deductible per occurrence of up to $0.3 million and $0.1 million, respectively. As of June 30, 2023 and December 31, 2022, the workers' compensation and auto liability policies contained an aggregate stop loss of $5.4 million. The Company establishes liabilities for the unpaid deductible portion of claims incurred based on estimates. As of each of June 30, 2023 and December 31, 2022, accrued claims were $1.5 million.

The Company also has insurance coverage for directors and officers liability. As of June 30, 2023 and December 31, 2022, the directors and officers liability policy had a deductible per occurrence of $1.0 million and an aggregate deductible of $10.0 million. As of June 30, 2023 and December 31, 2022, the Company did not have any accrued claims for directors and officers liability.

The Company also self-insures its employee health insurance. The Company has coverage on its self-insurance program in the form of a stop loss of $0.2 million per participant and an aggregate stop-loss of $5.8 million for the calendar year ending December 31, 2022. As of June 30, 2023 and December 31, 2022, accrued claims were $1.8 million and $1.5 million, respectively. These estimates may change in the near term as actual claims continue to develop.

Warranty Guarantees

Pursuant to certain customer contracts in our infrastructure services segment, the Company warrants equipment and labor performed under the contracts for a specified period following substantial completion of the work. Generally, the warranty is for one year or less. No liabilities were accrued as of June 30, 2023 and December 31, 2022 and no expense was recognized during the six months ended June 30, 2023 or 2022 related to warranty claims. However, if warranty claims occur, the Company could be required to repair or replace warrantied items, which in most cases are covered by warranties extended from the manufacturer of the equipment. In the event the manufacturer of equipment failed to perform on a warranty obligation or denied a warranty claim made by the Company, the Company could be required to pay for the cost of the repair or replacement.

Bonds

In the ordinary course of business, the Company is required to provide bid bonds to certain customers in the infrastructure services segment as part of the bidding process. These bonds provide a guarantee to the customer that the Company, if awarded the project, will perform under the terms of the contract. Bid bonds are typically provided for a percentage of the total contract value. Additionally, the Company may be required to provide performance and payment bonds for contractual commitments related to projects in process. These bonds provide a guarantee to the customer that the Company will perform under the terms of a contract and that the Company will pay subcontractors and vendors. If the Company fails to perform under a contract or to pay subcontractors and vendors, the customer may demand that the surety make payments or provide services under the bond. The Company must reimburse the surety for expenses or outlays it incurs. As of June 30, 2023 and December 31, 2022, outstanding performance and payment bonds totaled $9.5 million and $8.6 million, respectively. The estimated cost to complete projects secured by the performance and payment bonds totaled $0.8 million as of June 30, 2023. There were $0.6 million in outstanding bid bonds as of June 30, 2023 and no outstanding bid bonds as of December 31, 2022.

Litigation

As of June 30, 2023, PREPA owed the Company approximately $216.2 million for services performed, excluding $174.5 million of interest charged on these delinquent balances as of June 30, 2023. The Company believes these receivables are collectible. PREPA, however, is currently subject to bankruptcy proceedings, which were filed in July 2017 and are currently pending in the U.S. District Court for the District of Puerto Rico. As a result, PREPA's ability to meet its payment obligations is largely dependent upon funding from FEMA or other sources. On September 30, 2019, Cobra filed a motion with the U.S. District Court for the District of Puerto Rico seeking recovery of the amounts owed to Cobra by PREPA, which motion was stayed by the Court. On March 25, 2020, Cobra filed an urgent motion to modify the stay order and allow the recovery of approximately $61.7 million in claims related to a tax gross-up provision contained in the emergency master service agreement, as amended, that was entered into with PREPA on October 19, 2017. This emergency motion was denied on June 3, 2020 and the Court extended the stay of our motion. On December 9, 2020, the Court again extended the stay of our motion and directed PREPA to file a status motion by June 7, 2021. On April 6, 2021, Cobra filed a motion to lift the stay order. Following this filing, PREPA initiated discussion, which resulted in PREPA and Cobra filing a joint motion to adjourn all deadlines relative to the April 6, 2021 motion until the June 16, 2021 omnibus hearing as a result of PREPA's understanding that FEMA would release a report in the near future relating to the emergency master service agreement between PREPA and Cobra that was executed on October 19, 2017. The joint motion was granted by the Court on April 14, 2021. On May 26, 2021, FEMA issued a Determination Memorandum related to the first contract between Cobra and PREPA in which, among other things, FEMA raised two contract compliance issues and, as a result, concluded that approximately $47 million in costs were not authorized costs under the contract. On June 14, 2021, the Court issued an order adjourning Cobra's motion to lift the stay order to a hearing on August 4, 2021 and directing Cobra and PREPA to meet and confer in good faith concerning, among other things, (i) the May 26, 2021 Determination Memorandum issued by FEMA and (ii) whether and when a second determination memorandum is expected. The parties were further directed to file an additional status report, which was filed on July 20, 2021. On July 23, 2021, with the aid of Mammoth, PREPA filed an appeal of the entire $47 million that FEMA de-obligated in the May 26, 2021 Determination Memorandum. FEMA approved the appeal in part and denied the appeal in part. FEMA found that staffing costs of $24.4 million are eligible for funding. On August 4, 2021, the Court extended the stay and directed that an additional status report be filed, which was done on January 22, 2022. On January 26, 2022, the Court extended the stay and directed the parties to file a further status report by July 25, 2022. On June 7, 2022, Cobra filed a motion to lift the stay order. On June 29, 2022 the Court denied Cobra's motion and extended the stay to January 2023. On November 21, 2022, FEMA issued a Determination Memorandum related to the 100% federal funded portion of the second contract between Cobra and PREPA in which FEMA concluded that approximately $5.6 million in costs were not authorized costs under the contract. On December 21, 2022, FEMA issued a Determination Memorandum related to the 90% federal cost share portion of the second contract between Cobra and PREPA in which FEMA concluded that approximately $68.1 million in costs were not authorized costs under the contract. PREPA has filed first-level administrative appeals of the November 21, 2022 and December 21, 2022 Determination Memorandums. On January 7, 2023, Cobra and PREPA filed a joint status report with the Court, in which PREPA requested that the Court continue the stay through July 31, 2023 and Cobra requested that the stay be lifted. On January 18, 2023, the Court entered an order extending the stay and directing the parties to file a further status report addressing (i) the status of any administrative appeals in connection with the November and December determination memorandums regarding the second contract, (ii) the status of the criminal case against the former Cobra president and the FEMA official that concluded in December 2022, and (iii) a summary of the outstanding and unpaid amounts arising from the first and second contracts and whether PREPA disputes Cobra's entitlement to these amounts with the Court by July 31, 2023. On March 27, 2023, Cobra was notified that FEMA had approved $233 million in Cobra invoices related to the December 21, 2022 Determination Memorandum. The 90% federal cost share of this approved amount was $210 million, which was obligated and made available for draw down on March 27, 2023. Of this $210 million, approximately $99 million has been represented by both PREPA and FEMA as intended to pay Cobra for outstanding invoices and the remaining $111 million is a reimbursement to PREPA for payments already made on Cobra invoices. On May 16, 2023, Cobra filed a motion to lift the stay order. In a June 8, 2023 hearing, the Court ordered PREPA to provide Cobra a detailed report on the status of their review of the invoices that make up the aforementioned $99 million. On June 14, 2023, PREPA paid Cobra approximately $10.8 million, all of which was used to reduce outstanding borrowings under the Company's existing revolving credit facility, as required under the terms thereof. Additionally, on June 14, 2023, PREPA filed a report noting a portion of the approved, but unpaid invoices would be submitted to COR3 within two weeks of the filing and the remainder of the invoices would be submitted to COR3 within four weeks of the filing. Following the passage of the two-week and four-week periods contained in the June 14, 2023 report, Cobra filed an informative motion with the Court regarding the passage of the respective periods and PREPA's failure to meet the deadlines. The Court ordered PREPA to respond to Cobra's informative motion, which PREPA did on July 21, 2023. In this Court ordered response, PREPA informed the Court that an additional $8.4 million of invoices had been submitted for payment and that $72 million in FEMA approved costs were awaiting engineer certification. On August 2, 2023, following submission of a joint status report by Cobra and FEMA on July 31, 2023, in which, among other things, PREPA requested the stay be continued and Cobra requested the stay be lifted, the Court entered an order continuing the stay until October 31, 2023 and requiring another joint status report be filed on October 10, 2023.

On January 20, 2023, Cobra submitted a certified claim for approximately $379 million to FEMA pursuant to the federal Contract Disputes Act. On February 1, 2023, FEMA notified Cobra that it had reviewed the claim and determined that no contract, expressed or implied, exists between FEMA and Cobra. On March 29, 2023, Cobra filed a notice of appeal with the Civilian Board of Contract Appeals related to the certified claim submitted in January 2023. On April 25, 2023, FEMA filed a motion to dismiss Cobra's appeal alleging lack of jurisdiction. In the event PREPA (i) does not have or does not obtain the funds necessary to satisfy its obligations to Cobra under the contracts, (ii) obtains the necessary funds but refuses to pay the amounts owed to the Company or (iii) otherwise does not pay amounts owed to the Company, the receivable may not be collectible.

On May 13, 2021, Foreman Electric Services, Inc. ("Foreman") filed a petition against Mammoth Inc. and Cobra in the Oklahoma County District Court (Oklahoma State Court). The petition asserted claims against the Company and Cobra under federal RICO statutes and certain state-law causes of action. Foreman alleged that it sustained injuries to its business and property in the amount of $250 million due to the Company's and Cobra's alleged wrongful interference by means of inducements to a FEMA official. On May 18, 2021, the Company removed this action to the United States District Court for the Western District of Oklahoma and filed a motion to dismiss on July 8, 2021. On July 29, 2021, Foreman voluntarily dismissed the action without prejudice. On December 14, 2021, Foreman re-filed its petition against Mammoth Inc. and Cobra in the Oklahoma County District Court (Oklahoma State Court). On December 16, 2021, the Company again removed this action to the United States District Court for the Western District of Oklahoma. Foreman filed a motion to remand this action back to Oklahoma County District Court, which was granted on May 5, 2022. The case will now proceed according to a schedule that will be set by the Oklahoma County District Court. In a related matter, on January 12, 2022, a Derivative Complaint on behalf of nominal defendant Machine Learning Integration, LLC ("MLI"), which alleges it would have served as a sub-contractor to Foreman in Puerto Rico, was filed against the Company and Cobra in the U.S. District Court for the District of Puerto Rico alleging essentially the same facts as Foreman's action and asserting violations of federal RICO statutes and certain non-federal claims. MLI alleges it sustained injuries to its business and property in an unspecified amount because the Company's and Cobra's wrongful interference by means of inducements to a FEMA official prevented Foreman from obtaining work, and thereby prevented MLI, as Foreman's subcontractor, from obtaining work. These matters are still in the early stages and at this time, the Company is not able to predict the outcome of these claims or whether they will have a material impact on the Company's business, financial condition, results of operations or cash flows.

The Company is routinely involved in state and local tax audits. During 2015, the State of Ohio assessed taxes on the purchase of equipment the Company believes is exempt under state law. The Company appealed the assessment and a hearing was held in 2017. As a result of the hearing, the Company received a decision from the State of Ohio, which the Company appealed. On February 25, 2022, the Company received an unfavorable decision on the appeal. The Company appealed the decision. On August 2, 2023, the Ohio Supreme court affirmed the ruling in part and reversed the ruling in part. The Company is currently awaiting the final assessment. It is not expected to have a material adverse effect on the Company's business, financial condition, results of operations or cash flows.

Cobra has been served with ten lawsuits from municipalities in Puerto Rico alleging failure to pay construction excise and volume of business taxes. On November 14, 2022, the Court entered judgment against Cobra in connection with one of the lawsuits ordering payment of approximately $9.0 million. On January 9, 2023, Cobra appealed the judgment and, on March 20, 2023, the Court confirmed the imposition of approximately $8.5 million related to construction excise taxes. On April 10, 2023, Cobra appealed this judgment, which was denied on May 5, 2023. Cobra filed a motion for reconsideration on May 15, 2023, which was denied. Cobra filed a second motion for reconsideration on June 22, 2023 and is currently awaiting a decision. To the extent Cobra receives an unfavorable judgment, the Company believes that any such taxes in the judgment that relate to the Emergency Master Service Agreement with PREPA executed on October 19, 2017, would be reimbursable to Cobra. At this time, the Company is not able to predict the outcome of these matters or whether they will have a material impact on the Company's business, financial condition, results of operations or cash flows.

On April 16, 2019, Christopher Williams, a former employee of Higher Power Electrical, LLC, filed a putative class and collective action complaint titled Christopher Williams, individually and on behalf of all others similarly situated v. Higher Power Electrical, LLC, Cobra Acquisitions LLC, and Cobra Energy LLC in the U.S. District Court for the District of Puerto Rico. On June 24, 2019, the complaint was amended to replace Mr. Williams with Matthew Zeisset as the named plaintiff. The plaintiff alleges the defendant failed to pay overtime wages to a class of workers in compliance with the Fair Labor Standards Act and Puerto Rico law. On August 21, 2019, upon request of the parties, the Court stayed proceedings in the lawsuit and administratively closed the case pending completion of individual arbitration proceedings initiated by Mr. Zeisset and opt-in plaintiffs. Other claimants have subsequently initiated additional individual arbitration proceedings asserting similar claims. During the six months ended June 30, 2023, the Company agreed to settlements in principle with a portion of the claimants. Arbitrations remain pending for the remaining claimants. The Company will continue to vigorously defend the arbitrations. During the six months ended June 30, 2023, the Company recognized an estimated liability related to these complaints, which is included in "Accounts payable" in the unaudited condensed consolidated balance sheet at June 30, 2023. The amount required to resolve these matters may ultimately increase or decrease from our estimated amount as the matters progress.

On September 10, 2019, the U.S. District Court for the District of Puerto Rico unsealed an indictment that charged the former president of Cobra Acquisitions LLC with conspiracy, wire fraud, false statements and disaster fraud. Two other individuals were also charged in the indictment. The indictment was focused on the interactions between a former FEMA official and the former president of Cobra. Neither the Company nor any of its subsidiaries were charged in the indictment. On May 18, 2022, the former FEMA official and the former president of Cobra each pled guilty to one-count information charging gratuities related to a project that Cobra never bid upon and was never awarded or received any monies for. On December 13, 2022, the Court sentenced the former Cobra president to custody of the Bureau of Prisons for six months and one day, a term of supervised release of six months and one day and a fine of $25,000. The Court sentenced the FEMA official to custody of the Bureau of Prisons for six months and one day, a term of supervised release of six months and a fine of $15,000. The Court also dismissed the indictment against the two defendants. The Company does not expect any additional activity in the criminal proceeding. Given the uncertainty inherent in criminal litigation, however, it is not possible at this time to determine the potential impacts that the sentencings could have on the Company. PREPA has stated in Court filings that it may contend the alleged criminal activity affects Cobra's entitlement to payment under its contracts with PREPA. It is unclear what PREPA's position will be going forward. Subsequent to the indictment, Cobra received a civil investigative demand ("CID") from the United States Department of Justice ("DOJ"), which requests certain documents and answers to specific interrogatories relevant to an ongoing investigation it is conducting. The aforementioned DOJ investigation is in connection with the issues raised in the criminal matter. Cobra is cooperating with the DOJ and is not able to predict the outcome of this investigation or if it will have a material impact on Cobra's or the Company's business, financial condition, results of operations or cash flows. With regard to the previously disclosed SEC investigation, on July 6, 2022, the SEC sent a letter saying that it had concluded its investigation as to the Company and that based on information the SEC has as of this date, it does not intend to recommend an enforcement action against the Company.

On September 12, 2019, AL Global Services, LLC ("Alpha Lobo") filed a second amended third-party petition against the Company in an action styled Jim Jorrie v. Craig Charles, Julian Calderas, Jr., and AL Global Services, LLC v. Jim Jorrie v. Cobra Acquisitions LLC v. ESPADA Logistics & Security Group, LLC, ESPADA Caribbean LLC, Arty Straehla, Ken Kinsey, Jennifer Jorrie, and Mammoth Energy Services, Inc., in the 57th Judicial District in Bexar County, Texas. The petition alleges that the Company should be held vicariously liable under alter ego, agency and respondeat superior theories for Alpha Lobo's alleged claims against Cobra and Arty Straehla for aiding and abetting, knowing participation in and conspiracy to breach fiduciary duty in connection with Cobra's execution of an agreement with ESPADA

Caribbean, LLC for security services related to Cobra's work in Puerto Rico. The trial court granted Cobra, Mammoth and Straehla's motion to compel Alpha Lobo's claims against them to arbitration. However, Alpha Lobo has not yet brought its claims in arbitration. Instead, on March 22, 2022, Alpha Lobo filed a Petition for Writ of Mandamus in the Fourth Court of Appeals, San Antonio, Texas, seeking to overturn the order compelling arbitration. The appellate court denied the Mandamus on May 4, 2022, without requesting a response. On June 28, 2022, Alpha Lobo filed a Petition for Writ of Mandamus in the Texas Supreme Court, seeking to overturn the order compelling arbitration. The Texas Supreme Court denied the Mandamus on August 5, 2022, without requesting a response. The Company believes these claims are without merit and will vigorously defend the action. However, at this time, the Company is not able to predict the outcome of this lawsuit or whether it will have a material impact on the Company's business, financial condition, results of operations or cash flows. Additionally, there was a parallel arbitration proceeding in which certain Defendants were seeking a declaratory judgment regarding Cobra's rights to terminate the Alpha Lobo contract and enter into a new contract with a third-party. On June 24, 2021, the arbitration panel ruled in favor of Cobra.

The Company is involved in various other legal proceedings in the ordinary course of business. Although the Company cannot predict the outcome of these proceedings, legal matters are subject to inherent uncertainties and there exists the possibility that the ultimate resolution of these matters could have a material impact on the Company's business, financial condition, results of operations or cash flows.

Defined Contribution Plan

The Company sponsors a 401(k) defined contribution plan for the benefit of substantially all employees at their date of hire. The plan allows eligible employees to contribute up to 92% of their annual compensation, not to exceed annual limits established by the federal government. The Company makes discretionary matching contributions of up to 3% of an employee's compensation and may make additional discretionary contributions for eligible employees. For the six months ended June 30, 2023 and 2022, the Company paid $1.1 million and $0.9 million, respectively, in contributions to the plan.

19. Reporting Segments

As of June 30, 2023, the Company's revenues, income before income taxes and identifiable assets are primarily attributable to four reportable segments. The Company's Chief Executive Officer and Chief Financial Officer comprise the Company's Chief Operating Decision Maker function ("CODM"). Segment information is prepared on the same basis that the CODM manages the segments, evaluates the segment financial statements and makes key operating and resource utilization decisions. Segment evaluation is determined on a quantitative basis based on a function of operating loss less impairment expense, as well as a qualitative basis, such as nature of the product and service offerings and types of customers.

As of June 30, 2023, the Company's four reportable segments include well completion services ("Well Completion"), infrastructure services ("Infrastructure"), natural sand proppant services ("Sand") and drilling services ("Drilling"). The Well Completion segment provides hydraulic fracturing and water transfer services primarily in the Utica Shale of Eastern Ohio, Marcellus Shale in Pennsylvania and the mid-continent region. The Infrastructure segment provides electric utility infrastructure services to government-funded utilities, private utilities, public investor-owned utilities and co-operative utilities in the northeastern, southwestern, midwestern and western portions of the United States. The Sand segment mines, processes and sells sand for use in hydraulic fracturing. The Sand segment primarily services the Utica Shale, Permian Basin, SCOOP, STACK and Montney Shale in British Columbia and Alberta, Canada. During certain of the periods presented, the Drilling segment provided contract land and directional drilling services primarily in the Permian Basin and mid-continent region.

The Company also provided aviation services, equipment rental services, crude oil hauling services, remote accommodation and equipment manufacturing. The businesses that provide these services are distinct operating segments, which the CODM reviews independently when making key operating and resource utilization decisions. None of these operating segments meet the quantitative thresholds of a reporting segment and do not meet the aggregation criteria set forth in ASC 280 *Segment Reporting.* Therefore, results for these operating segments are included in the column titled "All Other" in the tables below. Additionally, assets for corporate activities, which primarily include cash and cash equivalents, inter-segment accounts receivable, prepaid insurance and certain property and equipment, are included in the All Other column. Although Mammoth Energy Partners LLC, which holds these corporate assets, meets one of the quantitative thresholds of a reporting segment, it does not engage in business activities from which it may earn revenues and its results are not regularly reviewed by the Company's CODM when making key operating and resource utilization decisions. Therefore, the Company does not include it as a reportable segment.

Sales from one segment to another are generally priced at estimated equivalent commercial selling prices. Total revenue and total cost of revenue amounts included in the Eliminations column in the following tables include inter-segment transactions conducted between segments. Receivables due for sales from one segment to another and for corporate allocations to each segment are included in the Eliminations column for total assets in the following tables. All transactions conducted between segments are eliminated in consolidation. Transactions conducted by companies within the same reporting segment are eliminated within each reporting segment. The following tables set forth certain financial information with respect to the Company's reportable segments (in thousands):

Three months ended June 30, 2023	Well Completion	Infrastructure	Sand	Drilling	All Other	Eliminations	Total
Revenue from external customers	$ 27,466	$ 28,315	$ 11,567	$ 3,329	$ 4,754	$ —	$ 75,431
Intersegment revenues	118	—	—	6	365	(489)	—
Total revenue	27,584	28,315	11,567	3,335	5,119	(489)	75,431
Cost of revenue, exclusive of depreciation, depletion, amortization and accretion	23,594	23,292	7,067	2,725	3,574	—	60,252
Intersegment cost of revenues	227	9	—	108	145	(489)	—
Total cost of revenue	23,821	23,301	7,067	2,833	3,719	(489)	60,252
Selling, general and administrative	1,776	6,385	954	337	905	—	10,357
Depreciation, depletion, amortization and accretion	4,500	2,436	2,374	1,284	2,056	—	12,650
Gains on disposal of assets, net	—	—	—	—	(473)	—	(473)
Operating (loss) income	(2,513)	(3,807)	1,172	(1,119)	(1,088)	—	(7,355)
Interest expense, net	824	1,869	149	170	208	—	3,220
Other expense (income), net	1	(8,557)	(4)	—	221	—	(8,339)
(Loss) income before income taxes	$ (3,338)	$ 2,881	$ 1,027	$ (1,289)	$ (1,517)	$ —	$ (2,236)

Three months ended June 30, 2022	Well Completion	Infrastructure	Sand	Drilling	All Other	Eliminations	Total
Revenue from external customers	$ 43,574	$ 25,587	$ 13,841	$ 1,952	$ 4,724	$ —	$ 89,678
Intersegment revenues	243	—	1,618	19	306	(2,186)	—
Total revenue	43,817	25,587	15,459	1,971	5,030	(2,186)	89,678
Cost of revenue, exclusive of depreciation, depletion, amortization and accretion	31,486	21,808	9,707	2,034	3,751	—	68,786
Intersegment cost of revenues	1,985	15	—	160	103	(2,263)	—
Total cost of revenue	33,471	21,823	9,707	2,194	3,854	(2,263)	68,786
Selling, general and administrative	1,884	4,443	870	277	732	—	8,206
Depreciation, depletion, amortization and accretion	6,747	4,211	2,058	1,651	2,809	—	17,476
Gains on disposal of assets, net	(157)	(863)	(16)	—	(1,907)	—	(2,943)
Operating income (loss)	1,872	(4,027)	2,840	(2,151)	(458)	77	(1,847)
Interest expense, net	422	1,755	178	121	183	—	2,659
Other income, net	—	(10,062)	(3)	—	(79)	—	(10,144)
Income (loss) before income taxes	$ 1,450	$ 4,280	$ 2,665	$ (2,272)	$ (562)	$ 77	$ 5,638

Six months ended June 30, 2023	Well Completion	Infrastructure	Sand	Drilling	All Other	Eliminations	Total
Revenue from external customers	$ 94,644	$ 56,596	$ 24,009	$ 5,153	$ 11,349	$ —	$ 191,751
Intersegment revenues	240	—	25	7	801	(1,073)	—
Total revenue	94,884	56,596	24,034	5,160	12,150	(1,073)	191,751
Cost of revenue, exclusive of depreciation, depletion, amortization and accretion	75,630	45,768	14,927	4,648	8,271	—	149,244
Intersegment cost of revenues	704	20	—	217	132	(1,073)	—
Total cost of revenue	76,334	45,788	14,927	4,865	8,403	(1,073)	149,244
Selling, general and administrative	4,268	10,595	1,458	650	1,769	—	18,740
Depreciation, depletion, amortization and accretion	9,317	5,810	3,561	2,651	4,267	—	25,606
Gains on disposal of assets, net	—	(127)	(16)	—	(691)	—	(834)
Operating income (loss)	4,965	(5,470)	4,104	(3,006)	(1,598)	—	(1,005)
Interest expense, net	1,753	3,714	305	330	407	—	6,509
Other expense (income), net	1	(17,365)	(6)	—	407	—	(16,963)
Income (loss) before income taxes	$ 3,211	$ 8,181	$ 3,805	$ (3,336)	$ (2,412)	$ —	$ 9,449

Six months ended June 30, 2022	Well Completion	Infrastructure	Sand	Drilling	All Other	Eliminations	Total
Revenue from external customers	$ 67,202	$ 48,596	$ 22,189	$ 4,804	$ 9,185	$ —	$ 151,976
Intersegment revenues	489	—	2,450	22	576	(3,537)	—
Total revenue	67,691	48,596	24,639	4,826	9,761	(3,537)	151,976
Cost of revenue, exclusive of depreciation, depletion, amortization and accretion	53,325	40,695	17,495	4,406	7,345	—	123,266
Intersegment cost of revenues	3,016	31	—	321	172	(3,540)	—
Total cost of revenue	56,341	40,726	17,495	4,727	7,517	(3,540)	123,266
Selling, general and administrative	3,923	9,088	1,698	569	1,596	—	16,874
Depreciation, depletion, amortization and accretion	13,191	8,525	3,852	3,331	5,744	—	34,643
Gains on disposal of assets, net	(206)	(868)	(91)	—	(1,974)	—	(3,139)
Operating (loss) income	(5,558)	(8,875)	1,685	(3,801)	(3,122)	3	(19,668)
Interest expense, net	793	3,298	340	225	352	—	5,008
Other (income) expense, net	—	(19,644)	(7)	—	466	—	(19,185)
(Loss) income before income taxes	$ (6,351)	$ 7,471	$ 1,352	$ (4,026)	$ (3,940)	$ 3	$ (5,491)

	Well Completion	Infrastructure	Sand	Drilling	All Other	Eliminations	Total
As of June 30, 2023:							
Total assets	$ 64,766	$ 453,656	$ 129,609	$ 18,916	$ 84,772	$ (58,956)	$ 692,763
As of December 31, 2022:							
Total assets	$ 82,897	$ 450,841	$ 129,467	$ 21,755	$ 120,164	$ (80,446)	$ 724,678

20. Subsequent Events

Sale of Equity Interests in ARS

On July 13, 2023, the Company sold all of the equity interests in its subsidiary ARS for $3.3 million in cash plus $0.3 million in consideration to be paid by the seller in 90 days subject to certain conditions. The Company expects to recognize a gain of approximately $2.1 million on the sale.

Pending Repayment and Refinancing of Existing Revolving Credit Facility

On August 10, 2023, the Company entered into two non-binding agreements with lenders to repay and refinance its existing revolving credit facility. The Company expects to close these refinancing transactions prior to the maturity of its existing revolving credit facility on October 19, 2023, subject to customary closing conditions and closing deliverables; however, no assurance can be provided that these transactions will close on the currently anticipated timelines or at all.

Repurchase Program Authorization

On August 10, 2023, the Company's board of directors approved a stock repurchase program pursuant to which the Company would be authorized to repurchase up to the lesser of $55 million or 10 million shares of its common stock, subject to the expected repayment and refinancing of its existing revolving credit facility and other factors discussed below. Following the completion of the refinancing transactions, any stock repurchases under this program may be made opportunistically from time to time in open market or privately negotiated transactions in compliance with Rule 10b-18 under the Securities Act of 1934, as amended, including any 10b5-1 plan, and will be subject to market conditions, applicable legal and contractual restrictions, liquidity requirements and other factors. The repurchase program has no time limit, does not require the Company to repurchase any specific number of shares and may be suspended from time to time, modified or discontinued by the Company's board of directors at any time. Any common stock repurchased as part of such stock repurchase program will be cancelled and retired.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the unaudited condensed consolidated financial statements and related notes thereto presented in this Quarterly Report and the consolidated financial statements and related notes thereto included in our Annual Report on Form 10-K. This discussion contains forward-looking statements reflecting our current expectations, estimates and assumptions concerning events and financial trends that may affect our future operating results or financial position. Actual results and the timing of events may differ materially from those contained in these forward-looking statements due to a number of factors, including those discussed in Item 1A. “Risk Factors” in our Form 10-K for the year ended December 31, 2022, filed with the Securities and Exchange Commission, or the SEC, on February 24, 2023 and the section entitled “Forward-Looking Statements” appearing elsewhere in this Quarterly Report.

Overview

We are an integrated, growth-oriented energy services company focused on providing products and services to enable the exploration and development of North American onshore unconventional oil and natural gas reserve as well as the construction and repair of the electric grid for private utilities, public investor-owned utilities and co-operative utilities through our infrastructure services businesses. Our primary business objective is to grow our operations and create value for stockholders through organic growth opportunities and accretive acquisitions. Our suite of services includes well completion services, infrastructure services, natural sand proppant services, drilling services and other services. Our well completion services division provides hydraulic fracturing, sand hauling and water transfer services. Our infrastructure services division provides engineering, design, construction, upgrade, maintenance and repair services to the electrical infrastructure industry. Our natural sand proppant services division mines, processes and sells natural sand proppant used for hydraulic fracturing. Our drilling services division currently provides rental equipment, such as mud motors and operational tools, for both vertical and horizontal drilling. In addition to these service divisions, we also provide aviation services, equipment rentals, crude oil hauling services, remote accommodations and equipment manufacturing. We believe that the services we offer play a critical role in increasing the ultimate recovery and present value of production streams from unconventional resources as well as in maintaining and improving electrical infrastructure. Our complementary suite of services provides us with the opportunity to cross-sell our services and expand our customer base and geographic positioning.

The growth of our industrial businesses is ongoing. We offer infrastructure engineering services focused on the transmission and distribution industry and also have equipment manufacturing operations and offer fiber optic services. Our equipment manufacturing operations provide us with the ability to repair much of our existing equipment in-house, as well as the option to manufacture certain new equipment we may need in the future. Our fiber optic services include the installation of both aerial and buried fiber. We are continuing to explore other opportunities to expand our industrial business lines.

We continue to address the external challenges in today’s economic environment as we remain disciplined with our spending and are focused on continuing to improve our operational efficiencies and cost structure and on enhancing value for our stockholders.

Overview of Our Industries

Oil and Natural Gas Industry

The oil and natural gas industry has traditionally been volatile and is influenced by a combination of long-term, short-term and cyclical trends, including the domestic and international supply and demand for oil and natural gas, current and expected future prices for oil and natural gas and the perceived stability and sustainability of those prices, production depletion rates and the resultant levels of cash flows generated and allocated by exploration and production companies to their drilling, completion and related services and products budgets. The oil and natural gas industry is also impacted by general domestic and international economic conditions, political instability in oil producing countries, government regulations (both in the United States and elsewhere), levels of customer demand, the availability of pipeline capacity, storage capacity, shortages of equipment and materials and other conditions and factors that are beyond our control.

Demand for most of our oil and natural gas products and services depends substantially on the level of expenditures by companies in the oil and natural gas industry. The levels of capital expenditures of our customers are predominantly driven by the prices of oil and natural gas. In March and April 2020, concurrent with the COVID-19 pandemic and quarantine orders in the U.S. and worldwide, oil prices dropped sharply to below zero dollars per barrel for the first time in history due to factors including significantly reduced demand and a shortage of storage facilities. In 2021, U.S. oil production stabilized as commodity prices increased and demand for crude oil rebounded. We saw improvements in the oilfield services industry and in both pricing and utilization of our well completion and drilling services during 2022. During the first half of 2023, pricing for crude oil and natural gas declined from levels seen in 2022, which slowed down completion activities for our customers, in particular, in the Utica and Marcellus Shale natural gas plays, and, as a result, reduced demand for our well completion services. We expect these factors to continue through at least the third quarter of 2023. Despite this short-term softness, however, we are seeing indications that activity levels will begin to ramp back up in the fourth quarter of 2023 and into 2024, creating the opportunity to reactivate additional fleets, if appropriate. The ongoing war and related humanitarian crisis in Ukraine, however, could continue to have an adverse impact on the global energy markets and volatility of commodity prices, which could further adversely impact demand for our well completion services.

In response to market conditions, we have temporarily shut down our cementing and acidizing operations and flowback operations beginning in July 2019, our contract drilling operations beginning in December 2019, our rig hauling operations beginning in April 2020, our coil tubing, pressure control and full service transportation operations beginning in July 2020 and our crude oil hauling operations beginning in July 2021. We continue to monitor the market to determine if and when we can recommence these services.

We are currently operating one of our six pressure pumping fleets. Subject to market conditions, supply chain constraints and liquidity requirements, we have plans to upgrade one spread to Tier 4 dual fuel as well as upgrade two fleets to Tier 2 dual fuel, giving us a total of four dual fuel fleets by year-end 2023. Continuing supply chain disruptions have resulted in backlogs of equipment and replacement parts for our and our competitors' pressure pumping fleets. Any of these factors may result in the delay of our plans to activate, convert or upgrade our existing pressure pumping fleets in the second half of 2023, which may adversely impact our business, financial condition and cash flow.

Natural Sand Proppant Industry

In our natural sand proppant services business, we experienced a significant decline in demand for our sand proppant in the second half of 2019 and throughout 2020 as a result of completion activity falling due to lower oil demand and pricing, increased capital discipline by our customers, budget exhaustion and the COVID-19 pandemic. Activity rebounded modestly in 2021 and continued to increase throughout 2022 as we saw an increase in the volume of sand sold. Supply constraints from labor shortages have negatively affected West Texas in-basin mine operations and increased demand for Northern White frac sand for the region in 2022. Demand from oil and gas companies in Western Canada and the Marcellus Shale was also strong in 2022. The increase in activity in 2022 resulted in an increase in demand and pricing for our sand, which continued throughout the first quarter of 2023. Demand for our natural sand proppant was adversely impacted in the second quarter of 2023 by the wildfires in Canada, which hindered our ability to transport sand. Notwithstanding the foregoing, our sand business remained resilient during the second quarter of 2023, and we expect both pricing and demand for our sand to remain strong through the remainder of 2023. As discussed above, pricing for crude oil and natural gas declined from levels seen in 2022, which slowed down completion activities, in particular, in the Utica and Marcellus natural gas plays, which may adversely impact demand for our sand proppant services in those regions.

As a result of adverse market conditions, production at our Muskie sand facility in Pierce County, Wisconsin has been temporarily idled since September 2018. Our contracted capacity has provided a baseline of business, which has kept our Taylor and Piranha plants operating and our costs competitive.

Energy Infrastructure Industry

Our infrastructure services business provides engineering, design, construction, upgrade, maintenance and repair services to the electrical infrastructure industry. We offer a broad range of services on electric transmission and distribution, or T&D, networks and substation facilities, which include engineering, design, construction, upgrade, maintenance and repair of high voltage transmission lines, substations and lower voltage overhead and underground distribution systems. Our commercial services include the installation, maintenance and repair of commercial wiring. We also provide storm repair and restoration services in response to storms and other disasters. We provide infrastructure services primarily in the northeast, southwest, midwest and western portions of the United States. We currently have agreements in place with private utilities, public IOUs and Co-Ops.

During 2022, operational improvements combined with increased crew count drove enhanced results in our infrastructure services division. Although our average crew count declined slightly from approximately 93 crews throughout the fourth quarter of 2022 to approximately 87 crews throughout the first half of 2023, operational efficiencies drove improved results. Funding for projects in the infrastructure space remains strong with added opportunities expected from the Infrastructure Investment and Jobs Act, which was signed into law on November 15, 2021. We anticipate the federal spending to begin fueling additional projects in this sector and expect bidding activity to ramp up in late 2023 and into 2024. We continue to focus on operational execution and pursue opportunities within this sector as we strategically structure our service offerings for growth, intending to increase our infrastructure services activity and expand both our geographic footprint and depth of projects, especially in fiber maintenance and installation projects.

We work for multiple utilities primarily across the northeastern, southwestern, midwestern and western portions of the United States. We believe that we are well-positioned to compete for new projects due to the experience of our infrastructure management team, combined with our vertically integrated service offerings. We are seeking to leverage this experience and our service offerings to grow our customer base and increase our revenues in the continental United States over the coming years.

Our infrastructure services business has been adversely impacted by the outstanding amounts owed to us by the Puerto Rico Electric Power Authority, or PREPA, for services performed by our subsidiary, Cobra Acquisitions LLC, or Cobra, in Puerto Rico to restore PREPA's electrical grid damaged by Hurricane Maria. As of June 30, 2023, PREPA owed us approximately $216.2 million for services performed excluding approximately $174.5 million of interest charged on these delinquent balances. See Note 2. Basis of Presentation and Significant Accounting Policies—Accounts Receivable of our unaudited condensed consolidated financial statements. PREPA is currently subject to bankruptcy proceedings, which were filed in July 2017 and are currently pending in the U.S. District Court for the District of Puerto Rico. As a result, PREPA's ability to meet its payment obligations under the contracts is largely dependent upon funding from the Federal Emergency Management Agency, or FEMA, or other sources. On September 30, 2019, we filed a motion with the U.S. District Court for the District of Puerto Rico seeking recovery of the amounts owed to us by PREPA, which motion was stayed by the Court. On March 25, 2020, we filed an urgent motion to modify the stay order and allow our recovery of approximately $62 million in claims related to a tax gross-up provision contained in the first contract. This emergency motion was denied on June 3, 2020 and the Court extended the stay of our motion. On December 9, 2020, the Court again extended the stay of our motion and directed PREPA to file a status report by June 7, 2021. On April 6, 2021, we filed a motion to lift the stay order. Following this filing, PREPA initiated discussion with Cobra, which resulted in PREPA and Cobra filing a joint motion to adjourn all deadlines relative to the April 6, 2021 motion until the June 16, 2021 omnibus hearing as a result of PREPA's understanding that FEMA would be releasing a report in the near future relating to the first contract. The joint motion was granted by the Court on April 14, 2021. On May 26, 2021, FEMA issued a Determination Memorandum related to the first contract between Cobra and PREPA in which, among other things, FEMA raised two contract compliance issues and, as a result, concluded that approximately $47 million in costs were not authorized costs under the contract. On June 14, 2021, the Court issued an order adjourning Cobra's motion to lift the stay order to a hearing on August 4, 2021 and directing Cobra and PREPA to meet and confer in good faith concerning, among other things, (i) the May 26, 2021 Determination Memorandum issued by FEMA and (ii) whether and when a second determination memorandum is expected. The parties were further directed to file an additional status report, which was filed on July 20, 2021. On July 23, 2021, with our aid, PREPA filed an appeal of the entire $47 million that FEMA de-obligated in the May 26, 2021 Determination Memorandum. FEMA approved the appeal in part and denied the appeal in part. FEMA found that staffing costs of $24.4 million are eligible for funding. On August 4, 2021, the Court denied Cobra's April 6, 2021 motion to lift the stay order, extended the stay of our motion seeking recovery of amounts owed to Cobra and directed the parties to file an additional joint status report, which was filed on January 22, 2022. On January 26, 2022, the Court extended the stay and directed the parties to file a further status report by July 25, 2022. On June 7, 2022, Cobra filed a motion to lift the stay order. On June 29, 2022 the Court denied Cobra's motion and extended the stay to January 2023. On November 21, 2022, FEMA issued a Determination Memorandum related to the 100% federal funded portion of the second contract between Cobra and PREPA in which FEMA concluded that approximately $5.6 million in costs were not authorized costs under the contract. On December 21, 2022, FEMA issued a Determination Memorandum related to the 90% federal cost share portion of the second contract between Cobra and PREPA in which FEMA concluded that approximately $68.1 million in costs were not authorized costs under the contract. PREPA has filed first-level administrative appeals of the November 21, 2022 and December 21, 2022 Determination Memorandums. On January 7, 2023, Cobra and PREPA filed a joint status report with the Court, in which PREPA requested that the Court continue the stay through July 31, 2023 and Cobra requested that the stay be lifted. On January 18, 2023, the Court entered an order extending the stay and directing the parties to file a further status report addressing (i) the status of any administrative appeals in connection with the November and December determination memorandums regarding the second contract, (ii) the status of the criminal proceedings against the former Cobra president and the FEMA official that concluded in December 2022, and (iii) a summary of the outstanding and unpaid amounts arising from the first and second contracts and whether PREPA disputes Cobra's entitlement to these amounts with the Court by July 31, 2023. On March 27, 2023, Cobra was notified that FEMA had approved $233 million in Cobra invoices related to the December 21, 2022 Determination Memorandum. The 90% federal cost share of this approved amount was $210 million, which was obligated and made available for draw down on March 27, 2023. Of this $210 million, approximately $99 million has been represented by both PREPA and FEMA as intended to pay Cobra for outstanding invoices and the remaining $111 million is a reimbursement to PREPA for payments already made on Cobra invoices. On May 16, 2023, Cobra filed a motion to lift the stay order. In a June 8, 2023 hearing, the Court ordered PREPA to provide Cobra a detailed report on the status of their review of the invoices that make up the aforementioned $99 million. On June 14, 2023, PREPA paid Cobra approximately $10.8 million, all of which was used to reduce outstanding borrowings under our existing revolving credit facility, as required under the terms thereof. Additionally, on June 14, 2023, PREPA filed a report noting a portion of the approved, but unpaid invoices would be submitted to COR3 within two weeks of the filing and the remainder of the invoices would be submitted to COR3 within four weeks of the filing. Following the passage of the two-week and four-week periods contained in the June 14, 2023 report, Cobra filed an informative motion with the Court regarding the passage of the respective periods and PREPA's failure to meet the deadlines. The Court ordered PREPA to respond to Cobra's informative motion, which PREPA did on July 21, 2023.In this Court ordered response, PREPA informed the Court that an additional $8.4 million of invoices had been submitted for payment and that $72 million in FEMA approved costs were awaiting engineer certification. On August 2, 2023, following submission of a joint status report by Cobra and FEMA on July 31, 2023, in which, among other things, PREPA requested the stay be continued and Cobra requested the stay be lifted, the Court entered an order continuing the stay until October 31, 2023 and requiring another joint status report be filed on October 10, 2023.

On January 20, 2023, Cobra submitted a certified claim for approximately $379 million to FEMA pursuant to the federal Contract Disputes Act. On February 1, 2023, FEMA notified Cobra that it had reviewed the claim and determined that no contract, expressed or implied, exists between FEMA and Cobra. On March 29, 2023, Cobra filed a notice of appeal with the Civilian Board of Contract Appeals related to the certified claim submitted in January 2023. On April 25, 2023, FEMA filed a motion to dismiss Cobra's appeal alleging lack of jurisdiction.

We believe all amounts charged to PREPA were in accordance with the terms of the contracts. Further, we believe these receivables are collectible. However, in the event PREPA (i) does not have or does not obtain the funds necessary to satisfy its obligations to Cobra under the contracts, (ii) obtains the necessary funds but refuses to pay the amounts owed to us or (iii) otherwise does not pay amounts owed to us, the receivable may not be collected and our financial condition, results of operations and cash flows would be materially and adversely affected. In addition, government contracts are subject to various uncertainties, restrictions and regulations, including oversight audits and compliance reviews by government agencies and representatives. In this regard, on September 10, 2019, the U.S. District Court for the District of Puerto Rico unsealed an indictment that charged the former president of Cobra with conspiracy, wire fraud, false statements and disaster fraud. Two other individuals were also charged in the indictment. The indictment focused on the interactions between a former FEMA official and the former President of Cobra. Neither we nor any of our subsidiaries were charged in the indictment. On May 18, 2022, the former FEMA official and the former president of Cobra each pled guilty to one-count information charging gratuities related to a project that Cobra never bid upon and was never awarded or received any monies for. On December 13, 2022, the Court sentenced the former Cobra president to custody of the Bureau of Prisons for six months and one day, a term of supervised release of six months and a fine of $25,000. The Court sentenced the FEMA official to custody of the Bureau of Prisons for six months and one day, a term of supervised release of six months and a fine of $15,000. The Court also dismissed the indictment against the two defendants. We do not expect any additional activity in the criminal proceeding. Given the uncertainty inherent in the criminal litigation, however, it is not possible at this time to determine the potential impacts that the sentencings could have on us. PREPA has stated in Court filings that it may contend the alleged criminal activity affects Cobra's entitlement to payment under its contracts with PREPA. It is unclear what PREPA's position will be going forward. See Note 18. Commitments and Contingencies to our unaudited condensed consolidated financial statements included elsewhere in this report for additional information regarding these investigations and proceedings. Further, as noted above, our contracts with PREPA have concluded and we have not obtained, and there can be no assurance that we will be able to obtain, one or more contracts with other customers to replace the level of services that we provided to PREPA.

Second Quarter 2023 Financial Overview and Other Recent Developments

- Revenue for the second quarter of 2023 decreased by $14.3 million, or 16%, to $75.4 million from $89.7 million for the second quarter of 2022. The decrease in total revenue is primarily due to a decline in utilization for our well completion services.

- Net loss for the second quarter of 2023 was $4.5 million, or $0.09 loss per diluted share, as compared to net income of $1.7 million, or $0.04 income per diluted share, for the second quarter of 2022.

- Net cash flow provided by operating activities for the second quarter of 2023 was $29.4 million, as compared to net cash flow provided by operating activities of $1.7 million for the second quarter of 2022.

- Adjusted EBITDA (as defined and reconciled below) for the second quarter of 2023 decreased by $6.6 million, or 29%, to $16.4 million from $23.0 million for the second quarter of 2022. See “Non-GAAP Financial Measures” below for a reconciliation of net income to Adjusted EBITDA.

- On June 14, 2023, PREPA paid Cobra approximately $10.8 million, all of which was used to reduce outstanding borrowing under the Company's existing revolving credit facility. Additionally, on July 21, 2023, PREPA informed the Court that an additional $8.4 million of invoices had been submitted for payment to Cobra and that $72 million in FEMA approved costs were awaiting engineer certification.

- On July 13, 2023, we sold all of our equity interests in our subsidiary Air Rescue Systems Corporation for $3.3 million in cash, plus $0.3 million in consideration to be paid by the seller in 90 days, subject to certain conditions.

- On August 10, 2023, we executed two non-binding agreements with lenders to repay and refinance our existing revolving credit facility, and intend to close these refinancing transactions prior to the October 19, 2023 maturity of our existing revolving credit facility, subject to customary closing conditions and closing deliverables.

- On August 10, 2023, our board of directors approved a stock repurchase program pursuant to which we are authorized to repurchase up to the lesser of $55 million or 10 million shares of our common stock, subject to the expected repayment and refinancing of our existing revolving credit facility and other factors.

Results of Operations

Three Months Ended June 30, 2023 Compared to Three Months Ended June 30, 2022

	Three Months Ended	
	June 30, 2023	June 30, 2022
	(in thousands)	
Revenue:		
Well completion services	$ 27,584	$ 43,817
Infrastructure services	28,315	25,587
Natural sand proppant services	11,567	15,459
Drilling services	3,335	1,971
Other services	5,119	5,030
Eliminations	(489)	(2,186)
Total revenue	75,431	89,678
Cost of revenue:		
Well completion services (exclusive of depreciation and amortization of $4,497 and $6,739, respectively, for the three months ended June 30, 2023 and 2022)	23,821	33,471
Infrastructure services (exclusive of depreciation and amortization of $2,433 and $4,206, respectively, for the three months ended June 30, 2023 and 2022)	23,301	21,823
Natural sand proppant services (exclusive of depreciation, depletion and accretion of $2,373 and $2,055, respectively, for the three months ended June 30, 2023 and 2022)	7,067	9,707
Drilling services (exclusive of depreciation and amortization of $1,284 and $1,650, respectively, for the three months ended June 30, 2023 and 2022)	2,833	2,194
Other services (exclusive of depreciation and amortization of $2,056 and $2,807, respectively, for the three months ended June 30, 2023 and 2022)	3,719	3,854
Eliminations	(489)	(2,263)
Total cost of revenue	60,252	68,786
Selling, general and administrative expenses	10,357	8,206
Depreciation, depletion, amortization and accretion	12,650	17,476
Gains on disposal of assets, net	(473)	(2,943)
Operating loss	(7,355)	(1,847)
Interest expense, net	(3,220)	(2,659)
Other income, net	8,339	10,144
(Loss) income before income taxes	(2,236)	5,638
Provision for income taxes	2,234	3,935
Net (loss) income	$ (4,470)	$ 1,703

Revenue. Revenue for the three months ended June 30, 2023 decreased $14.3 million, or 16%, to $75.4 million from $89.7 million for the three months ended June 30, 2022. The decrease in total revenue is primarily attributable to a decrease in well completions revenue during the three months ended June 30, 2023 primarily due to a decline in utilization. Revenue by operating division was as follows:

Well Completion Services. Well completion services division revenuedecreased $16.2 million, or 37%, to $27.6 million for the three months ended June 30, 2023 from $43.8 million for the three months ended June 30, 2022. The decrease in our well completion services revenue was primarily driven by a 44% decrease in the number of stages completed from 1,716 for the three months ended June 30, 2022 to 956 for the three months ended June 30, 2023 as well as a decrease in sand and chemical materials revenue. An average of 1.6 of our fleets were active for the three months ended June 30, 2023 as compared to an average of 3.5 fleets for the three months ended June 30, 2022.

Infrastructure Services. Infrastructure services division revenue increased $2.7 million, or 11%, to $28.3 million for the three months ended June 30, 2023 from $25.6 million for the three months ended June 30, 2022. The increase in revenue was primarily due to an increase in storm restoration activity and improved pricing for our services. Average crew count was 86 crews for the three months ended June 30, 2023, as compared to 88 crews for the three months ended June 30, 2022.

Natural Sand Proppant Services. Natural sand proppant services division revenue decreased $3.9 million, or 25%, to $11.6 million for the three months ended June 30, 2023, from $15.5 million for the three months ended June 30, 2022 primarily due to declines in freight and shortfall revenue. This decrease was partially offset by a 12% increase in the average price per ton of sand sold from $26.86 per ton during the three months ended June 30, 2022 to $30.08 per ton during the three months ended June 30, 2023, and a 10% increase in tons of sand sold from 349,877 tons for the three months ended June 30, 2022 to 383,841 tons for the three months ended June 30, 2023.

Drilling Services. Drilling services division revenue increased $1.3 million, or 65%, to $3.3 million for the three months ended June 30, 2023 as compared to $2.0 million for the three months ended June 30, 2022. The increase is primarily due to increased utilization for our directional drilling business from 35% for the three months ended June 30, 2022 to 58% for the three months ended June 30, 2023.

Other Services. Other services revenue, consisting of revenue derived from our aviation, equipment rental, remote accommodation and equipment manufacturing businesses, increased approximately $0.1 million, or 2%, to $5.1 million for the three months ended June 30, 2023, from $5.0 million for the three months ended June 30, 2022. Inter-segment revenue, consisting primarily of revenue derived from our well completion segment, was $0.4 million and $0.3 million for the three months ended June 30, 2023 and 2022, respectively.

An average of 253 pieces of equipment were rented to customers during the three months ended June 30, 2023, an increase from an average of 244 pieces of equipment rented to customers during the three months ended June 30, 2022.

Cost of Revenue (exclusive of depreciation, depletion, amortization and accretion expense). Cost of revenue, exclusive of depreciation, depletion, amortization and accretion expense, decreased $8.5 million from $68.8 million, or 77% of total revenue, for the three months ended June 30, 2022 to $60.3 million, or 80% of total revenue, for the three months ended June 30, 2023. The decrease is primarily due to an decrease in activity in our well completions divisions. Cost of revenue by operating division was as follows:

Well Completion Services. Well completion services division cost of revenue, exclusive of depreciation and amortization expense, decreased $9.7 million, or 29%, to $23.8 million for the three months ended June 30, 2023 from $33.5 million for the three months ended June 30, 2022, primarily due to a decrease in utilization of our services. As a percentage of revenue, our well completion services division cost of revenue, exclusive of depreciation and amortization expense of $4.5 million and $6.7 million for the three months ended June 30, 2023 and 2022, respectively, was 86% and 76% for the three months ended June 30, 2023 and 2022, respectively. The increase as a percentage of revenue is primarily due to a decrease in utilization of our pressure pumping services, resulting in a higher ratio of fixed costs to variable costs.

Infrastructure Services. Infrastructure services division cost of revenue, exclusive of depreciation and amortization expense, increased $1.5 million, or 7%, to $23.3 million for the three months ended June 30, 2023 from $21.8 million for the three months ended June 30, 2022, primarily due to an increase in activity. As a percentage of revenue, cost of revenue, exclusive of depreciation and amortization expense of $2.4 million and $4.2 million for the three months ended June 30, 2023 and 2022, respectively, was 82% and 85% for the three months ended June 30, 2023 and 2022, respectively. The decline as a percentage of revenue is primarily due to the increase in storm restoration work, which produces higher margins, as well as improved pricing for our services.

Natural Sand Proppant Services. Natural sand proppant services division cost of revenue, exclusive of depreciation, depletion and accretion expense, decreased $2.6 million, to $7.1 million for the three months ended June 30, 2023 from $9.7 million for the three months ended June 30, 2022. As a percentage of revenue, cost of revenue, exclusive of depreciation, depletion and accretion expense of $2.4 million and $2.1 million for the three months ended June 30, 2023 and 2022, respectively, was 61% and 63% for the three months ended June 30, 2023 and 2022, respectively. The decrease as a percentage of revenue is primarily due to a 12% increase in price per ton of sand sold.

Drilling Services. Drilling services division cost of revenue, exclusive of depreciation and amortization expense, increased $0.6 million, or 27%, to $2.8 million for the three months ended June 30, 2023 from $2.2 million for the three months ended June 30, 2022. As a percentage of revenue, our drilling services division cost of revenue, exclusive of depreciation and amortization expense of $1.3 million and $1.7 million for the three months ended June 30, 2023 and 2022, respectively, was 85% and 111% for the three months ended June 30, 2023 and 2022, respectively. The decrease is primarily due to an increase in utilization of our directional drilling services, resulting in a lower ratio of fixed costs to variable costs.

Other Services. Other services division cost of revenue, exclusive of depreciation and amortization expense, decreased $0.2 million, or 5%, to $3.7 million for the three months ended June 30, 2023 from $3.9 million for the three months ended June 30, 2022 primarily due to increased activity. As a percentage of revenue, cost of revenue, exclusive of depreciation and amortization expense of $2.1 million and $2.8 million for the three months ended June 30, 2023 and 2022, respectively, was 73% and 77% for the three months ended June 30, 2023 and 2022, respectively. The decrease is primarily due to an increase in utilization.

Selling, General and Administrative Expenses. Selling, general and administrative, or SG&A, expenses represent the costs associated with managing and supporting our operations. SG&A expense increased $2.2 million, or 27%, to $10.4 million for the three months ended June 30, 2023 from $8.2 million for the three months ended June 30, 2022 primarily due to an increase in professional fees. The table below presents a breakdown of SG&A expenses for the periods indicated (in thousands):

	Three Months Ended	
	June 30, 2023	**June 30, 2022**
Cash expenses:		
Compensation and benefits	$ 3,996	$ 3,137
Professional services	4,276	2,724
Other[(a)]	1,868	2,162
Total cash SG&A expense	10,140	8,023
Non-cash expenses:		
Bad debt recoveries	(44)	(16)
Stock based compensation	261	199
Total non-cash SG&A expense	217	183
Total SG&A expense	$ 10,357	$ 8,206

a. Includes travel-related costs, IT expenses, rent, utilities and other general and administrative-related costs.

Depreciation, Depletion, Amortization and Accretion. Depreciation, depletion, amortization and accretion decreased $4.9 million, or 28%, to $12.6 million for the three months ended June 30, 2023 from $17.5 million for the three months ended June 30, 2022. The decrease is primarily attributable to a decline in property and equipment depreciation expense as a result of existing assets being fully depreciated.

Gains on Disposal of Assets, Net. Gains on the disposal of assets were $0.5 million and $2.9 million for the three months ended June 30, 2023 and 2022, respectively.

Operating Loss. We reported operating loss of $7.4 million for the three months ended June 30, 2023 compared to $1.8 million for the three months ended June 30, 2022. The increase in operating loss is primarily due to a decline in activity for our well completions division.

Interest Expense, Net. Interest expense, net increased $0.5 million, or 19%, to $3.2 million for the three months ended June 30, 2023 from $2.7 million for the three months ended June 30, 2022. The increase is primarily due to an increase in the interest rate under our revolving credit facility.

Other Income, Net. Other income decreased $1.8 million to $8.3 million for the three months ended June 30, 2023 compared to $10.1 million for the three months ended June 30, 2022.

Income Taxes. We recorded income tax expense of $2.2 million on pre-tax losses of $2.2 million for the three months ended June 30, 2023 compared to $3.9 million on pre-tax income of $5.6 million for the three months ended June 30, 2022. Our effective tax rates were (100)% and 70% for the three months ended June 30, 2023 and 2022, respectively. The effective tax rates for the three months ended June 30, 2023 and 2022 differed from the statutory rate of 21% primarily due to the mix of earnings between the United States and Puerto Rico as well as changes in the valuation allowance.

Six Months Ended June 30, 2023 Compared to Six Months Ended June 30, 2022

	Six Months Ended	
	June 30, 2023	**June 30, 2022**
	(in thousands)	
Revenue:		
Well completion services	$ 94,884	$ 67,691
Infrastructure services	56,596	48,596
Natural sand proppant services	24,034	24,639
Drilling services	5,160	4,826
Other services	12,150	9,761
Eliminations	(1,073)	(3,537)
Total revenue	191,751	151,976
Cost of revenue:		
Well completion services (exclusive of depreciation and amortization of $9,310 and $13,176, respectively, for the six months ended June 30, 2023 and 2022)	76,334	56,341
Infrastructure services (exclusive of depreciation and amortization of $5,804 and $8,512, respectively, for the six months ended June 30, 2023 and 2022)	45,788	40,726
Natural sand proppant services (exclusive of depreciation, depletion and accretion of $3,559 and $3,847, respectively, for the six months ended June 30, 2023 and 2022)	14,927	17,495
Drilling services (exclusive of depreciation of $2,651 and $3,330, respectively, for the six months ended June 30, 2023 and 2022)	4,865	4,727
Other services (exclusive of depreciation and amortization of $4,266 and $5,740, respectively, for the six months ended June 30, 2023 and 2022)	8,403	7,517
Eliminations	(1,073)	(3,540)
Total cost of revenue	149,244	123,266
Selling, general and administrative expenses	18,740	16,874
Depreciation, depletion, amortization and accretion	25,606	34,643
Gains on disposal of assets, net	(834)	(3,139)
Operating loss	(1,005)	(19,668)
Interest expense, net	(6,509)	(5,008)
Other income, net	16,963	19,185
Income (loss) before income taxes	9,449	(5,491)
Provision for income taxes	5,568	7,623
Net income (loss)	$ 3,881	$ (13,114)

Revenue. Revenue for the six months ended June 30, 2023 increased $39.8 million, or 26%, to $191.8 million from $152.0 million for the six months ended June 30, 2022. The increase in total revenue is primarily attributable to increases in well completion services and infrastructure services revenue. Revenue by operating division was as follows:

Well Completion Services. Well completion services division revenue increased $27.2 million, or 40%, to $94.9 million for the six months ended June 30, 2023 from $67.7 million for the six months ended June 30, 2022.

Inter-segment revenues, consisting primarily of revenue derived from our sand segment, was $0.2 million and $0.5 million for the six months ended June 30, 2023 and 2022, respectively.

The increase in our well completion services revenue was primarily driven by an increase in pressure pumping services utilization and pricing. The number of stages completed increased 23% to 2,974 for the six months ended June 30, 2023 from 2,415 for the six months ended June 30, 2022. Additionally, sand and chemical materials revenue increased during the six months ended June 30, 2023. An average of 2.6 of our six fleets were active for the six months ended June 30, 2023 as compared to an average of 2.5 fleets for the six months ended June 30, 2022.

Infrastructure Services. Infrastructure services division revenue increased $8.0 million, or 16%, to $56.6 million for the six months ended June 30, 2023 from $48.6 million for the six months ended June 30, 2022. The increase in revenue was primarily due to an increase in storm restoration activity, improved pricing for our services and an increase in engineering revenue as a result of increased activity. Average crew count remained flat at 87 crews for each of the six months ended June 30, 2023 and June 30, 2022.

Natural Sand Proppant Services. Natural sand proppant services division revenue decreased $0.6 million, or 2%, to $24.0 million for the six months ended June 30, 2023, from $24.6 million for the six months ended June 30, 2022. Inter-segment revenue, consisting primarily of revenue derived from our pressure pumping segment, was a nominal amount for the six months ended June 30, 2023 and $2.4 million, or 10% of total sand revenue, for the six months ended June 30, 2022.

The decrease in our natural sand proppant services revenue was primarily due to declines in freight and shortfall revenue, which was partially offset by a 26% increase in the average sales price per ton of sand sold from $24.24 per ton during the six months ended June 30, 2022 to $30.55 per ton during the six months ended June 30, 2023 and a 14% increase in tons of sand sold from approximately 678,468 tons for the six months ended June 30, 2022 to approximately 775,280 tons for the six months ended June 30, 2023.

Drilling Services. Drilling services division revenue increased $0.4 million, or 8%, to $5.2 million for the six months ended June 30, 2023 from $4.8 million for the six months ended June 30, 2022. The increase in our drilling services revenue was primarily attributable to increased utilization for our directional drilling business from 42% during the six months ended June 30, 2022 to 44% during the six months ended June 30, 2023.

Other Services. Other services revenue, consisting of revenue derived from our aviation, equipment rental, crude oil hauling, remote accommodation and equipment manufacturing businesses, increased $2.3 million, or 23%, to $12.1 million for the six months ended June 30, 2023 from $9.8 million for the six months ended June 30, 2022. Inter-segment revenue, consisting primarily of revenue derived from our infrastructure and well completion segments, totaled $0.8 million and $0.6 million for the six months ended June 30, 2023 and 2022, respectively.

The increase in our other services revenue was primarily due to an increase in utilization for our equipment rental business. An average of 270 pieces of equipment was rented to customers during the six months ended June 30, 2023, an increase of 16% from an average of 233 pieces of equipment rented to customers during the six months ended June 30, 2022. Additionally, utilization for remote accommodations business increased.

Cost of Revenue (exclusive of depreciation, depletion, amortization and accretion expense). Cost of revenue, exclusive of depreciation, depletion, amortization and accretion expense, increased $25.9 million from $123.3 million, or 81% of total revenue, for the six months ended June 30, 2022 to $149.2 million, or 78% of total revenue, for the six months ended June 30, 2023. The increase is primarily due to an increase in cost of revenue for the well completion services division. Cost of revenue by operating division was as follows:

Well Completion Services. Well completion services division cost of revenue, exclusive of depreciation and amortization expense, increased $20.0 million, or 36%, to $76.3 million for the six months ended June 30, 2023 from $56.3 million for the six months ended June 30, 2022, primarily due to an increase in utilization. As a percentage of revenue, our well completion services division cost of revenue, exclusive of depreciation and amortization expense of $9.3 million and $13.2 million for the six months ended June 30, 2023 and 2022, respectively, was 80% and 83% for the six months ended June 30, 2023 and 2022, respectively.

Infrastructure Services. Infrastructure services division cost of revenue, exclusive of depreciation and amortization expense, increased $5.1 million, or 13%, to $45.8 million for the six months ended June 30, 2023 from $40.7 million for the six months ended June 30, 2022. As a percentage of revenue, cost of revenue, exclusive of depreciation and amortization expense of $5.8 million and $8.5 million, respectively, for the six months ended June 30, 2023 and 2022 was 81% and 84% for the six months ended June 30, 2023 and 2022, respectively. The decrease as a percentage of revenue is primarily due to an increase in storm activity, which produces higher margins as well as improved pricing for our services.

Natural Sand Proppant Services. Natural sand proppant services division cost of revenue, exclusive of depreciation, depletion and accretion expense, decreased $2.6 million, or 15%, from $17.5 million for the six months ended June 30, 2022 to $14.9 million for the six months ended June 30, 2023. As a percentage of revenue, cost of revenue, exclusive of depreciation, depletion and accretion expense of $3.6 million and $3.9 million for the six months ended June 30, 2023 and 2022, respectively, was 62% and 71% for the six months ended June 30, 2023 and 2022, respectively. The decrease in cost as a percentage of revenue is primarily due to a 26% increase in average sales price.

Drilling Services. Drilling services division cost of revenue, exclusive of depreciation and amortization expense, increased $0.2 million, or 4%, from $4.7 million for the six months ended June 30, 2022 to $4.9 million for the six months ended June 30, 2023, as a result of increased activity. As a percentage of revenue, our drilling services division cost of revenue, exclusive of depreciation and amortization expense of $2.7 million and $3.3 million, for the six months ended June 30, 2023 and 2022, respectively, was 94% and 98% for the six months ended June 30, 2023 and 2022, respectively. The decrease is primarily due to an increase in utilization of our directional drilling services, resulting in a lower ratio of fixed costs to variable costs.

Other Services. Other services division cost of revenue, exclusive of depreciation and amortization expense, increased $0.9 million, or 12%, from $7.5 million for the six months ended June 30, 2022 to $8.4 million for the six months ended June 30, 2023. As a percentage of revenue, cost of revenue, exclusive of depreciation and amortization expense of $4.3 million and $5.7 million for the six months ended June 30, 2023 and 2022, respectively, was 69% and 77% for the six months ended June 30, 2023 and 2022, respectively. The decrease as a percentage of revenue is primarily due to an increase in utilization for our equipment rental and accommodations businesses, resulting in a lower ratio of fixed costs to variable costs.

Selling, General and Administrative Expenses. Selling, general and administrative expenses represent the costs associated with managing and supporting our operations. SG&A expense increased $1.8 million, or 11%, to $18.7 million for the six months ended June 30, 2023 from $16.9 million for the six months ended June 30, 2022 primarily due to an increase in compensation expenses. The table below presents a breakdown of SG&A expenses for the periods indicated (in thousands):

	Six Months Ended	
	June 30, 2023	**June 30, 2022**
Cash expenses:		
Compensation and benefits	$ 8,273	$ 6,120
Professional services	6,205	6,361
Other[(a)]	3,779	4,068
Total cash SG&A expenses	18,257	16,549
Non-cash expenses:		
Bad debt recoveries	(425)	(115)
Stock based compensation	908	440
Total non-cash SG&A expenses	483	325
Total SG&A expenses	$ 18,740	$ 16,874

a. Includes travel-related costs, IT expenses, rent, utilities and other general and administrative-related costs.

Depreciation, Depletion, Amortization and Accretion. Depreciation, depletion, amortization and accretion decreased $9.0 million to $25.6 million for the six months ended June 30, 2023 from $34.6 million for the six months ended June 30, 2022. The decrease is primarily attributable to a decline in property and equipment depreciation expense as a result of lower capital expenditures and existing assets being fully depreciated.

Gains on Disposal of Assets, Net. Gains on the disposal of assets were $0.8 million and $3.1 million for the six months ended June 30, 2023 and 2022, respectively.

Operating Loss. We reported an operating loss of $1.0 million for the six months ended June 30, 2023 compared to $19.7 million for the six months ended June 30, 2022. The reduced operating loss was primarily due to increased activity across all operating divisions as well as a decline in depreciation, depletion, amortization and accretion expense.

Interest Expense, Net. Interest expense, net increased $1.5 million, or 30%, to $6.5 million for the six months ended June 30, 2023 from $5.0 million for the six months ended June 30, 2022 primarily due to an increase in the interest rate under our revolving credit facility.

Other Income, Net. We recognized other income, net of $17.0 million during the six months ended June 30, 2023 compared to other income, net of $19.2 million for the six months ended June 30, 2022. We recognized interest on trade accounts receivable of $22.5 million for the six months ended June 30, 2023 compared to $20.0 million for six months ended June 30, 2022.

Income Taxes. We recorded income tax expense of $5.6 million on pre-tax income of $9.4 million for the six months ended June 30, 2023 compared to an income tax expense of $7.6 million on pre-tax losses of $5.5 million for the six months ended June 30, 2022. Our effective tax rate was 59% for the six months ended June 30, 2023 compared to (139%) for the six months ended June 30, 2022. The effective tax rates for the six months ended June 30, 2023 and 2022 differed from the statutory rate of 21% primarily due to the mix of earnings between the United States and Puerto Rico as well as changes in the valuation allowance.

Non-GAAP Financial Measures

Adjusted EBITDA

Adjusted EBITDA is a supplemental non-GAAP financial measure that is used by management and external users of our financial statements, such as industry analysts, investors, lenders and rating agencies. We define Adjusted EBITDA as net (loss) income before depreciation, depletion, amortization and accretion, gains on disposal of assets, stock based compensation, interest expense, net, other income (expense), net (which is comprised of interest on trade accounts receivable and certain legal expenses) and provision for income taxes, further adjusted to add back interest on trade accounts receivable. We exclude the items listed above from net (loss) income in arriving at Adjusted EBITDA because these amounts can vary substantially from company to company within our industries depending upon accounting methods and book values of assets, capital structures and the method by which the assets were acquired. Adjusted EBITDA should not be considered as an alternative to, or more meaningful than, net loss or cash flows from operating activities as determined in accordance with GAAP or as an indicator of our operating performance or liquidity. Certain items excluded from Adjusted EBITDA are significant components in understanding and assessing a company’s financial performance, such as a company’s cost of capital and tax structure, as well as the historic costs of depreciable assets, none of which are components of Adjusted EBITDA. Our computations of Adjusted EBITDA may not be comparable to other similarly titled measures of other companies. We believe that Adjusted EBITDA is a widely followed measure of operating performance and may also be used by investors to measure our ability to meet debt service requirements.

The following tables provide a reconciliation of Adjusted EBITDA to the GAAP financial measure of net income or (loss) for each of our operating segments for the specified periods (in thousands).

Consolidated

	Three Months Ended June 30,		Six Months Ended June 30,	
Reconciliation of net (loss) income to Adjusted EBITDA:	**2023**	**2022**	**2023**	**2022**
Net (loss) income	$ (4,470)	$ 1,703	$ 3,881	$ (13,114)
Depreciation, depletion, amortization and accretion expense	12,650	17,476	25,606	34,643
Gains on disposal of assets, net	(473)	(2,943)	(834)	(3,139)
Stock based compensation	261	200	908	441
Interest expense, net	3,220	2,659	6,509	5,008
Other income, net	(8,339)	(10,144)	(16,963)	(19,185)
Provision for income taxes	2,234	3,935	5,568	7,623
Interest on trade accounts receivable	11,341	10,160	22,454	20,022
Adjusted EBITDA	$ 16,424	$ 23,046	$ 47,129	$ 32,299

Well Completion Services

	Three Months Ended June 30,		Six Months Ended June 30,	
Reconciliation of net (loss) income to Adjusted EBITDA:	**2023**	**2022**	**2023**	**2022**
Net (loss) income	$ (3,338)	$ 1,450	$ 3,211	$ (6,351)
Depreciation and amortization expense	4,500	6,747	9,317	13,191
Gains on disposal of assets, net	—	(157)	—	(206)
Stock based compensation	97	84	387	171
Interest expense	824	422	1,753	793
Other expense, net	1	—	1	—
Adjusted EBITDA	$ 2,084	$ 8,546	$ 14,669	$ 7,598

Infrastructure Services

	Three Months Ended June 30,		Six Months Ended June 30,	
Reconciliation of net income to Adjusted EBITDA:	**2023**	**2022**	**2023**	**2022**
Net income	$ 697	$ 572	$ 3,151	$ 695
Depreciation and amortization expense	2,436	4,211	5,810	8,525
Gains on disposal of assets	—	(863)	(127)	(868)
Stock based compensation	107	74	337	172
Interest expense	1,869	1,755	3,714	3,298
Other income, net	(8,557)	(10,062)	(17,365)	(19,644)
Provision for income taxes	2,184	3,708	5,030	6,776
Interest on trade accounts receivable	11,341	10,160	22,454	20,022
Adjusted EBITDA	$ 10,077	$ 9,555	$ 23,004	$ 18,976

Natural Sand Proppant Services

Reconciliation of net income to Adjusted EBITDA:	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Net income	$ 1,027	$ 2,665	$ 3,805	$ 1,352
Depreciation, depletion, amortization and accretion expense	2,374	2,058	3,561	3,852
Gains on disposal of assets	—	(16)	(16)	(91)
Stock based compensation	36	26	113	60
Interest expense	149	178	305	340
Other income, net	(4)	(3)	(6)	(7)
Adjusted EBITDA	$ 3,582	$ 4,908	$ 7,762	$ 5,506

Drilling Services

Reconciliation of net loss to Adjusted EBITDA:	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Net loss	$ (1,289)	$ (2,272)	$ (3,336)	$ (4,026)
Depreciation expense	1,284	1,651	2,651	3,331
Stock based compensation	6	4	18	9
Interest expense	170	121	330	225
Adjusted EBITDA	$ 171	$ (496)	$ (337)	$ (461)

Other Services[(a)]

Reconciliation of net loss to Adjusted EBITDA:	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Net loss	$ (1,567)	$ (788)	$ (2,950)	$ (4,786)
Depreciation, amortization and accretion expense	2,056	2,809	4,267	5,744
Gains on disposal of assets, net	(473)	(1,907)	(691)	(1,974)
Stock based compensation	15	12	53	29
Interest expense, net	208	183	407	352
Other expense (income), net	221	(79)	407	466
Provision for income taxes	50	226	538	846
Adjusted EBITDA	$ 510	$ 456	$ 2,031	$ 677

a. Includes results for our aviation, equipment rentals, remote accommodations and equipment manufacturing and corporate related activities. Our corporate related activities do not generate revenue.

Liquidity and Capital Resources

We require capital to fund ongoing operations including maintenance expenditures on our existing fleet of equipment, organic growth initiatives, investments and acquisitions, and the litigation settlement obligations described in Note 18 “Commitments and Contingencies” of the Notes to the Unaudited Condensed Consolidated Financial Statements and under “Capital Requirements and Sources of Liquidity” below. Our primary sources of liquidity have been cash on hand, borrowings under our revolving credit facility and cash flows from operations. Our primary uses of capital have been for investing in property and equipment used to provide our services and to acquire complementary businesses.

Liquidity

The following table summarizes our liquidity as of the dates indicated (in thousands):

	June 30, 2023	December 31, 2022
Cash and cash equivalents	$ 8,850	$ 17,282
Revolving credit facility borrowing base	89,416	119,756
Less current and long-term debt	(59,356)	(83,520)
Less available borrowing capacity reserve	(10,000)	(10,000)
Less letter of credit facilities (insurance programs)	(2,800)	(2,800)
Less letter of credit facilities (environmental remediation)	(3,569)	(3,694)
Net working capital (less cash and current portion of long-term debt)[a]	322,399	325,719
Total	$ 344,940	$ 362,743

a. Net working capital (less cash and current portion of long-term debt) is a non-GAAP measure and, as of June 30, 2023, is calculated by subtracting total current liabilities of $205.1 million and cash and cash equivalents of $8.8 million from total current assets of $477.0 million, further adjusted to add current portion of long-term debt of $59.4 million. As of December 31, 2022, net working capital (less cash and current portion of long-term debt) is calculated by subtracting total current liabilities of $237.2 million and cash and cash equivalents of $17.3 million from total current assets of $496.7 million, further adjusted to add current portion of long-term debt of $83.5 million. Amounts include receivables due from PREPA of $390.7 million at June 30, 2023 and $379.0 million at December 31, 2022 and corresponding liabilities of $52.7 million at June 30, 2023 and $47.6 million at December 31, 2022. See "Capital Requirements and Sources of Liquidity" section below.

As of August 9, 2023, we had cash on hand of $10.6 million and outstanding borrowings under our revolving credit facility of $72.3 million, a borrowing base of $95.6 million, leaving an aggregate of $16.9 million of available borrowing capacity under this facility, after giving effect to $6.4 million of outstanding letters of credit and the requirement to maintain a $10.0 million reserve out of the available borrowing capacity.

Continued prolonged volatility in the capital, financial and/or credit markets due to the COVID-19 pandemic, inflationary pressures or otherwise and volatility in commodity prices and/or adverse macroeconomic conditions may further limit our access to, or increase our cost of, capital or make capital unavailable on terms acceptable to us or at all. In addition, if we are unable to comply with the financial covenants under our existing revolving credit facility, or obtain a waiver of forecasted or actual non-compliance with any such financial covenants from our lenders, or under any replacement credit facilities, and an event of default occurs and remains uncured, our lenders would not be required to lend any additional amounts to us, could elect to increase our interest rate by 200 basis points, or as specified in any such replacement credit facilities, could elect to declare all outstanding borrowings, together with accrued and unpaid interest and fees, to be due and payable, may have the ability to require us to apply all of our available cash to repay our outstanding borrowings and may foreclose on substantially all of our assets.

On August 10, 2023, we entered into two non-binding agreements with lenders to repay and refinance our existing revolving credit facility. We expect to close these refinancing transactions prior to the maturity of our existing revolving credit facility on October 19, 2023, subject to customary closing conditions and closing deliverables; however, no assurance can be provided that these transactions will close on the currently anticipated timeline or at all. If we fail to repay or refinance our existing revolving credit facility prior to maturity, our liquidity, financial position and operations will be materially and adversely affected.

Cash Flows

The following table sets forth our cash flows at the dates indicated (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net cash provided by (used in) operating activities	$ 29,369	$ 1,744	$ 32,609	$ (638)
Net cash (used in) provided by investing activities	(4,027)	3,623	(9,733)	3,479
Net cash (used in) provided by financing activities	(28,240)	(680)	(31,323)	57
Effect of foreign exchange rate on cash	21	(76)	15	(68)
Net change in cash	$ (2,877)	$ 4,611	$ (8,432)	$ 2,830

Operating Activities

Net cash provided by operating activities was $29.4 million for the three months ended June 30, 2023, compared to $1.7 million for the three months ended June 30, 2022. Net cash provided by operating activities was $32.6 million for the six months ended June 30, 2023, compared to net cash used in operating activities of $0.6 million for the six months ended June 30, 2022. The increase in operating cash flows was primarily attributable to increased receipts on accounts receivable, including the receipt of $10.8 million from PREPA, as well as an increase in utilization for our well completions division.

Investing Activities

Net cash used by investing activities was $4.0 million for the three months ended June 30, 2023, compared to net cash provided by investing activities of $3.6 million for the three months ended June 30, 2022. Net cash used in investing activities was $9.7 million for the six months ended June 30, 2023, compared to net cash provided by investing activities of $3.5 million for the six months ended June 30, 2022. Cash used in investing activities is primarily comprised of purchases of property and equipment and proceeds from the disposal of property and equipment.

The following table summarizes our capital expenditures by operating division for the periods indicated (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Well completion services[(a)]	$ 4,348	$ 2,500	10,120	3,301
Infrastructure services[(b)]	72	200	$ 275	$ 598
Natural sand proppant services	—	—	—	—
Drilling services[(c)]	—	12	—	14
Other[(d)]	—	161	—	221
Eliminations	83	(87)	144	(166)
Total capital expenditures	$ 4,503	$ 2,786	$ 10,539	$ 3,968

a. Capital expenditures primarily for upgrades to our pressure pumping fleet to reduce greenhouse gas emissions and maintenance for the three and six months ended June 30, 2023 and 2022.
b. Capital expenditures primarily for tooling and other equipment for the three and six months ended June 30, 2023 and 2022.
c. Capital expenditures primarily for maintenance for the three and six months ended June 30, 2022.
d. Capital expenditures primarily for equipment for our rental business for the three and six months ended June 30, 2022.

Financing Activities

Net cash used in financing activities was $28.2 million for the three months ended June 30, 2023, compared to $0.7 million for the three months ended June 30, 2022. Net cash used in financing activities for the three months ended June 30, 2023 was primarily attributable to net payments on our revolving credit facility of $25.3 million. Net cash used in financing activities for the three months ended June 30, 2022 was primarily attributable to net payments on our revolving credit facility of $3.5 million, partially offset by net proceeds received from sale leaseback transactions of $3.3 million.

Net cash used in financing activities was $31.3 million for the six months ended June 30, 2023, compared to net cash provided by financing activities of $0.1 million for the six months ended June 30, 2022. Net cash used in financing activities for the six months ended June 30, 2023 was primarily attributable to net payments on our revolving credit facility of $24.2 million, principal payment on financing leases and equipment financing notes of $3.8 million, principal payments on sale leaseback arrangements of $2.5 million and share repurchases used to satisfy tax withholding obligations of $0.9 million in connection with the vesting and settlement of certain executive restricted stock unit awards. Net cash provided by financing activities for the six months ended June 30, 2022 was primarily attributable to net proceeds received from sale leaseback transactions of $2.5 million, partially offset by net payments on our revolving credit facility of $1.2 million and principal payments on financing leases and equipment financing notes totaling $1.2 million.

Effect of Foreign Exchange Rate on Cash

The effect of foreign exchange rate on cash was a nominal amount and ($0.1) million for the six months ended June 30, 2023 and 2022. The change was driven primarily by a favorable (unfavorable) shift in the weakness (strength) of the Canadian dollar relative to the U.S. dollar for the cash held in Canadian accounts.

Working Capital

Our working capital totaled $271.9 million and $259.5 million at June 30, 2023 and December 31, 2022, respectively, including receivables due from PREPA of $390.7 million at June 30, 2023 and $379.0 million at December 31, 2022 and corresponding liabilities of $52.7 million at June 30, 2023 and $47.6 million at December 31, 2022. Our cash balances were $8.8 million and $17.3 million at June 30, 2023 and December 31, 2022, respectively.

Our Revolving Credit Facility

On October 19, 2018, we and certain of our direct and indirect subsidiaries, as borrowers, entered into an amended and restated revolving credit facility, as subsequently amended, with the lenders party thereto and PNC Bank, National Association, or PNC, as a lender and as administrative agent for the lenders, as subsequently further amended (our "existing revolving credit facility"). Under our existing revolving credit facility, we are required among other things, to mandatorily remit to PNC all amounts that constitute PREPA Claim Proceeds, as such term is defined in our existing revolving credit facility, including the $10.8 million received from PREPA on June 14, 2023, all of which was used to reduce outstanding borrowings under our existing revolving credit facility, as required under the terms thereof. Further, our existing revolving credit facility provides for a reduction in the maximum revolving advance amount in an amount equal to 50% of the PREPA Claims Proceeds remitted to PNC, subject to a floor equal to the sum of eligible billed and unbilled accounts receivables.

At June 30, 2023, we had outstanding borrowings under our revolving credit facility of $59.4 million, a borrowing base of $89.4 million and $13.6 million of available borrowing capacity under this facility, after giving effect to $6.4 million of outstanding letters of credit and the requirement to maintain a $10.0 million reserve out of the available borrowing capacity.

As of June 30, 2023, the applicable financial covenants under our revolving credit facility were as follows:

- the fixed charge coverage ratio was 1.1 to 1.0; and
- the minimum excess availability covenant was $10.0 million.

We were in compliance with the applicable financial covenants under our existing revolving credit facility in effect as of June 30, 2023. For additional information regarding our revolving credit facility, see Note 9. Debt to our unaudited condensed consolidated financial statements included elsewhere in this report.

As of August 9, 2023, our borrowing base was $95.6 million and our outstanding borrowings under our existing revolving credit facility were $72.3 million, leaving an aggregate of $16.9 million of available borrowing capacity, after giving effect to $6.4 million of outstanding letters of credit and the requirement to maintain a $10.0 million reserve out of the available borrowing capacity. If we fail to comply with the financial covenants contemplated by our existing revolving credit facility, or obtain a waiver of forecasted or actual non-compliance with any such financial covenants from our lenders, and an event of default occurs and remains uncured, it will have a material adverse effect on our business, financial condition, liquidity and results of operations.

On August 10, 2023 we entered into two non-binding agreements with lender to repay and refinance our existing revolving credit facility. We expect to close these refinancing transactions prior to the maturity of our existing revolving credit facility on October 19, 2023, subject to customary closing conditions and closing deliverables; however, no assurance can be provided that these transactions will close on the currently anticipated timeline or at all. If we fail to repay or refinance our existing revolving credit facility prior to maturity, our liquidity, financial position and operations will be materially and adversely affected.

Repurchase Program Authorization

On August 10, 2023, our board of directors approved a stock repurchase program pursuant to which we would be authorized to repurchase up to the lesser of $55 million or 10 million shares of its common stock, subject to the expected repayment and refinancing of its existing revolving credit facility and other factors discussed below. Following the completion of the refinancing transactions discussed in this report, any stock repurchases under this program may be made opportunistically from time to time in open market or privately negotiated transactions in compliance with Rule 10b-18 under the Securities Act of 1934, as amended, including any 10b5-1 plan, and will be subject to market conditions, applicable legal and contractual restrictions, liquidity requirements and other factors. The repurchase program has no time limit, does not require us to repurchase any specific number of shares and may be suspended from time to time, modified or discontinued by our board of directors at any time. Any common stock repurchased as part of such stock repurchase program will be cancelled and retired.

Sale Leaseback Transactions

On December 30, 2020, we entered into an agreement with First National Capital, LLC, or FNC, whereby we agreed to sell certain assets from our infrastructure segment to FNC for aggregate proceeds of $5.0 million. Concurrent with the sale of assets, we entered into a 36 month lease agreement whereby we lease back the assets at a monthly rental rate of $0.1 million. On June 1, 2021, we entered into another agreement with FNC whereby we sold additional assets from our infrastructure segment to FNC for aggregate proceeds of $9.5 million and entered into a 42-month lease agreement whereby we lease back the assets at a monthly rental rate of $0.2 million. On June 1, 2022, we entered into another agreement with FNC whereby we sold additional assets from our infrastructure segment to FNC for aggregate proceeds of $4.6 million and entered into a 42-month lease agreement whereby we lease back the assets at a monthly rental rate of $0.1 million. Under the agreements, we have the option to purchase the assets at the end of the lease term. We recorded a liability for the proceeds received and will continue to depreciate the assets. We imputed an interest rate so that the carrying amount of the financial liabilities will be the expected repurchase price at the end of the initial lease terms.

Equipment Financing Note

In December 2022, we entered into a 42 month financing arrangement with FNC for the purchase of seven new pressure pumping units for an aggregate value of $9.7 million. Under this arrangement, we have agreed to make monthly principal and interest payments totaling $0.3 million over the term of the agreement. This note is secured by the seven pressure pumping units and bears interest at an imputed rate of approximately 15.0%.

Capital Requirements and Sources of Liquidity

As we pursue our business and financial strategy, we regularly consider which capital resources are available to meet our future financial obligations and liquidity requirement. We believe that our cash on hand, operating cash flow and available borrowings under our existing revolving credit facility and, following the completion of the pending refinancing transactions, under the replacement credit facilities, will be sufficient to meet our short-term and long-term funding requirements, including funding our current operations, planned capital expenditures, debt service obligations and known contingencies. However, if we fail to close our pending refinancing transactions at or prior to maturity of our existing revolving credit facility, our liquidity, financial condition and operations will be materially and adversely affected.

Our liquidity and future cash flows are subject to a number of variables, including receipt of payments from our customers, including PREPA, and our ability to extend, refinance or repay our revolving credit facility at or prior to its scheduled maturity date of October 19, 2023. On June 14, 2023, PREPA paid our subsidiary Cobra approximately $10.8 million, all of which was used to reduce outstanding borrowings under our existing revolving credit facility, as required under the terms thereof. As of June 30, 2023, PREPA owed Cobra approximately $390.7 million for services performed, including $174.5 million of interest charges. Throughout 2021, we released significant data that we obtained through Freedom of Information Act requests that affirm the work performed by Cobra in Puerto Rico. We believe these documents in conjunction with the current Administration's focus on the recovery of Puerto Rico and our enhanced lobbying efforts will aid in collecting the outstanding amounts owed to us by PREPA. However, in the event PREPA (i) does not have or does not obtain the funds necessary to satisfy its obligations to Cobra under the contracts, (ii) obtains the necessary funds but refuses to pay the amounts owed to Cobra or (iii) otherwise does not pay amounts owed to Cobra, the receivable may not be collectible, which may adversely impact our liquidity.

We have revised our 2023 capital expenditure estimate down to approximately $18.0 million from the previously planned 2023 capital budget of $24.0 million primarily due to lower commodity prices, softer demand for oilfield services and volatility in market conditions. During the first half of 2023, pricing for crude oil and natural gas declined from levels seen in 2022, which slowed down completion activities for our customers, in particular, in the Utica and Marcellus Shale natural gas plays, and, as a result, reduced demand for our well completion services. Capital expenditures will ultimately be dependent upon industry conditions and our financial results. These capital expenditures include $17 million for our well completions segment and $1 million for our other businesses. During the six months ended June 30, 2023, our capital expenditures totaled $10.5 million.

Also, as noted above in this report, in response to market conditions we have (i) temporarily shut down certain of our oilfield service offerings, including coil tubing, pressure control, flowback, crude oil hauling, cementing, acidizing and land drilling services, (ii) idled certain facilities, including our sand processing plant in Pierce County, Wisconsin and (iii) reduced our workforce across all of our operations. We continue to monitor market conditions to determine if and when we will recommence these services and operations and increase our workforce. Any such recommencement and expansion will further increase our liquidity requirements in advance of revenue generation.

In addition, while we regularly evaluate acquisition opportunities, we do not have a specific acquisition budget for 2023. We intend to continue to evaluate acquisition opportunities, including those in the renewable energy sector as well as transactions involving entities controlled by Wexford. Our acquisitions may be undertaken with cash, our common stock or a combination of cash, common stock and/or other consideration. In the event we make one or more acquisitions and the amount of capital required is greater than the amount we have available for acquisitions at that time, we could be required to reduce the expected level of capital expenditures and/or seek additional capital.

If we seek additional capital for any of the above or other reasons, we may do so through borrowings under a revolving credit facility, joint venture partnerships, sale-leaseback transactions, asset sales, offerings of debt or equity securities or other means. Although we expect that our sources of capital will be adequate to fund our short-term and long-term liquidity requirements, we cannot assure you that this additional capital will be available on acceptable terms or at all. If we are unable to obtain funds we need, our ability to conduct operations, make capital expenditures, satisfy debt services obligations, pay litigation settlement obligations, fund contingencies and/or complete acquisitions that may be favorable to us will be impaired, which would have a material adverse effect on our business, financial condition, results of operations and cash flows.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The demand, pricing and terms for our products and services are largely dependent upon the level of activity for the U.S. oil and natural gas industry, energy infrastructure industry and natural sand proppant industry. Industry conditions are influenced by numerous factors over which we have no control, including, but not limited to: the supply of and demand for oil and natural gas services, energy infrastructure services and natural sand proppant; demand for repair and construction of transmission lines, substations and distribution networks in the energy infrastructure industry and the level of expenditures of utility companies; the level of prices of, and expectations about future prices for, oil and natural gas and natural sand proppant, as well as energy infrastructure services; the cost of exploring for, developing, producing and delivering oil and natural gas; the expected rates of declining current production; the discovery rates of new oil and natural gas reserves and frac sand reserves meeting industry specifications and consisting of the mesh size in demand; access to pipeline, transloading and other transportation facilities and their capacity; weather conditions; domestic and worldwide economic conditions; political instability in oil-producing countries; environmental regulations; technical advances affecting energy consumption; the price and availability of alternative fuels; the ability of oil and natural gas producers and other users of our services to raise equity capital and debt financing; and merger and divestiture activity in industries in which we operate.

In March and April 2020, concurrent with the COVID-19 pandemic and quarantine orders in the U.S. and worldwide, oil prices dropped sharply to below zero dollars per barrel for the first time in history due to factors including significantly reduced demand and a shortage of storage facilities. In 2021, U.S. oil production stabilized as commodity prices increased and demand for crude oil rebounded, many exploration and production companies set their operating budgets based on the prevailing prices for oil and natural gas at the time. Despite improvement in the U.S. and global economic activity, easing of the COVID-19 pandemic and related restrictions, rising energy use and improved commodity prices, the budgets for the publicly traded exploration and production companies remained relatively flat throughout 2021, with any excess cash flows used for debt repayment and shareholder returns, rather than to increase production. We saw improvements in the oilfield services industry and in both pricing and utilization of our well completion and drilling services throughout 2022. During the first half of 2023, pricing for crude oil and natural gas declined from levels seen in 2022, which slowed down completion activities for our customers, in particular, in the Utica and Marcellus Shale natural gas plays, and, as a result, reduced demand for our well completion services. Further, the ongoing war and related humanitarian crisis in Ukraine could continue to have an adverse effect on the global supply chain and volatility of commodity prices.

Although the levels of activity in the U.S. oil and natural gas exploration and production, energy infrastructure and natural sand proppant industries improved throughout 2022 and the first quarter of 2023, they have historically been and continue to be volatile. We are unable to predict the ultimate impact of the COVID-19 pandemic, the volatility in commodity prices, any changes in the near-term or long-term outlook for our industries or overall macroeconomic conditions on our business, financial condition, results of operations, cash flows and stock price.

Interest Rate Risk

We had a cash and cash equivalents balance of $8.8 million at June 30, 2023. We do not enter into investments for trading or speculative purposes.

Interest under our existing revolving credit facility is payable at a base rate, which can fluctuate based on multiple facts, including rates set by the U.S. Federal Reserve (which increased its benchmark interest rate by an aggregate of 4.75 percentage points throughout 2022 and 2023, and may continue to increase interest rates in an effort to counter the persistent inflation), the supply and demand for credit and general economic conditions, plus an applicable margin. The applicable margin is currently set at 4.0%, which can be reduced to 3.5% under certain circumstances specified in our existing credit facility. At June 30, 2023, we had outstanding borrowings under our existing revolving credit facility of $59.4 million with a weighted average interest rate of 11.75%. A 1% increase or decrease in the interest rate at that time would increase or decrease our interest expense by approximately $0.6 million per year. We do not currently hedge our interest rate exposure.

Foreign Currency Risk

Our remote accommodation business, which is included in our other services division, generates revenue and incurs expenses that are denominated in the Canadian dollar. These transactions could be materially affected by currency fluctuations. Changes in currency exchange rates could adversely affect our consolidated results of operations or financial position. We also maintain cash balances denominated in the Canadian dollar. At June 30, 2023, we had $2.2 million of cash, in Canadian dollars, in Canadian accounts. A 10% increase in the strength of the Canadian dollar versus the U.S. dollar would have resulted in an increase in pre-tax income of approximately $0.1 million as of June 30, 2023. Conversely, a corresponding decrease in the strength of the Canadian dollar would have resulted in a comparable decrease in pre-tax income. We have not hedged our exposure to changes in foreign currency exchange rates and, as a result, could incur unanticipated translation gains and losses.

Customer Credit Risk

We are also subject to credit risk due to concentration of our receivables from several significant customers. We generally do not require our customers to post collateral. The inability, delay or failure of our customers to meet their obligations to us due to customer liquidity issues or their insolvency or liquidation may adversely affect our business, financial condition, results of operations and cash flows. This risk may be further enhanced by the COVID-19 pandemic, the volatility in commodity prices, the reduction in demand for our services and challenging macroeconomic conditions.

Specifically, we had receivables due from PREPA totaling $390.7 million, including $174.5 million of interest charges, as of June 30, 2023. PREPA is currently subject to bankruptcy proceedings pending in the U.S. District Court for the District of Puerto Rico. As a result, PREPA's ability to meet its payment obligations under the contracts is largely dependent upon funding from the FEMA or other sources. See Note 2. Basis of Presentation and Significant Accounting Policies—Accounts Receivable and —Concentrations of Credit Risk and Significant Customers and Note 18. Commitments and Contingencies—Litigation of our unaudited condensed consolidated financial statements.

Seasonality

We provide infrastructure services in the northeastern, southwestern, midwestern and western portions of the United States. We provide well completion and drilling services primarily in the Utica, Permian Basin, Eagle Ford, Marcellus, Granite Wash, Cana Woodford and Cleveland sand resource plays located in the continental U.S. We provide remote accommodation services in the oil sands in Alberta, Canada. We serve these markets through our facilities and service centers that are strategically located to serve our customers in Ohio, Texas, Oklahoma, Wisconsin, Kentucky, Colorado, California, Indiana and Alberta, Canada. A portion of our revenues are generated in Ohio, Wisconsin, Minnesota, Pennsylvania, West Virginia and Canada where weather conditions may be severe. As a result, our operations may be limited or disrupted, particularly during winter and spring months, in these geographic regions, which would have a material adverse effect on our financial condition and results of operations. Our operations in Oklahoma and Texas are generally not affected by seasonal weather conditions.

Inflation

Although the impact of inflation has been insignificant on our operations in prior years, inflation in the U.S. has been at some of the highest levels in over 40 years, creating inflationary pressure on the cost of services, equipment and other goods in our industries and other sectors and contributing to labor and materials shortages across the supply-chain. Throughout 2022 and early 2023, the Federal Reserve increased its benchmark interest rates by an aggregate of 4.75 percentage points, and may continue increasing benchmark interest rates in the future. If the efforts to control inflation are not successful and inflationary pressures persist, our business, results of operations and financial condition may be adversely affected.

Item 4. Controls and Procedures

Evaluation of Disclosure Control and Procedures

Under the direction of our Chief Executive Officer and Chief Financial Officer, we have established disclosure controls and procedures, as defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. The disclosure controls and procedures are also intended to ensure that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

As of June 30, 2023, an evaluation was performed under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(b) under the Exchange Act. Based upon our evaluation, our Chief

Executive Officer and Chief Financial Officer have concluded that as of June 30, 2023, our disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(d) and 15d-15(d) under the Exchange Act) that occurred during the quarter ended June 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Due to the nature of our business, we are, from time to time, involved in litigation or subject to disputes or claims related to our business activities, including breaches of contractual obligations, workers' compensation claims, employment related disputes, arbitrations, class actions and other litigation. We are also involved, from time to time, in reviews, investigations, subpoenas and other proceedings (both formal and informal) by governmental agencies regarding our business (collectively, "regulatory matters"), which regulatory matters, if determined adversely to us, could subject us to significant fines, penalties, obligations to change our business practices or other requirements resulting in increased expenses, diminished income and damage to our reputation. In the opinion of our management, none of the pending litigation, disputes or claims against us is expected to have a material adverse effect on our financial condition, cash flows or results of operations, except as disclosed in Note 18 "Commitments and Contingencies," of the Notes to Unaudited Condensed Consolidated Financial Statements.

Item 1A. Risk Factors

As of the date of this filing, our Company and operations continue to be subject to the risk factors previously disclosed in Item 1A. Risk Factors in our Annual Report on Form 10-K filed with the SEC on February 24, 2023. For a discussion of the recent trends and uncertainties impacting our business, see also "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Developments—Overview of Our Services and Industry Conditions"

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 4. Mine Safety Disclosures

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

Item 5. Other Information

None of our directors or officers adopted or terminated a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement during the second quarter ended June 30, 2023.

Item 6. Exhibits

The following exhibits are filed as a part of this report:

Exhibit Number	Exhibit Description	Incorporated By Reference Form	Commission File No.	Filing Date	Exhibit No.	Filed Herewith	Furnished Herewith
3.1	Amended and Restated Certificate of Incorporation of the Company	8-K	001-37917	11/15/2016	3.1		
3.2	Amended and Restated Bylaws of the Company	8-K	001-37917	11/15/2016	3.2		
3.3	First Amendment to Amended and Restated Bylaws of the Company	8-K	001-37917	6/9/2020	3.1		
4.1	Specimen Certificate for shares of common stock, par value $0.01 per share, of the Company	S-1/A	333-213504	10/3/2016	4.1		
4.2	Registration Rights Agreement, dated October 12, 2016, by and between the Company and Mammoth Energy Holdings, LLC	8-K	001-37917	11/15/2016	4.1		
31.1	Certification of Chief Executive Officer pursuant to Rule 13(a)-14 and 15(d)-14 under the Securities Exchange Act of 1934.					X	
31.2	Certification of Chief Financial Officer pursuant to Rule 13(a)-14 and 15(d)-14 under the Securities Exchange Act of 1934.					X	
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X	
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X	
95.1	Mine Safety Disclosure Exhibit					X	
101.INS	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.					X	
101.SCH	XBRL Taxonomy Extension Schema Document.					X	
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X	
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document.					X	
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X	
104	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X	

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

			MAMMOTH ENERGY SERVICES, INC.
Date:	August 11, 2023	By:	/s/ Arty Straehla
			Arty Straehla
			Chief Executive Officer
Date:	August 11, 2023	By:	/s/ Mark Layton
			Mark Layton
			Chief Financial Officer

EXHIBIT 31.1

CERTIFICATIONS

I, Arty Straehla, Chief Executive Officer, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Mammoth Energy Services, Inc. (the "registrant");
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 Rule 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.

MAMMOTH ENERGY SERVICES, INC.

By: /s/ Arty Straehla

Arty Straehla
Chief Executive Officer
August 11, 2023

EXHIBIT 31.2

CERTIFICATIONS

I, Mark Layton, Chief Financial Officer, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Mammoth Energy Services, Inc. (the "registrant");
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 Rule 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.

	MAMMOTH ENERGY SERVICES, INC.
By:	/s/ Mark Layton
	Mark Layton
	Chief Financial Officer
	August 11, 2023

EXHIBIT 32.1

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

In connection with the Quarterly Report on Form 10-Q of Mammoth Energy Services, Inc. (the “Company”) for the quarter ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Arty Straehla, as Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

MAMMOTH ENERGY SERVICES, INC.

By: /s/ Arty Straehla

Arty Straehla
Chief Executive Officer
August 11, 2023

This certification accompanies the Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liability under that section. This certification shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

EXHIBIT 32.2

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

In connection with the Quarterly Report on Form 10-Q of Mammoth Energy Services, Inc. (the “Company”) for the quarter ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Mark Layton, as Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

MAMMOTH ENERGY SERVICES, INC.

By: /s/ Mark Layton

Mark Layton
Chief Financial Officer
August 11, 2023

This certification accompanies the Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liability under that section. This certification shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

EXHIBIT 95.1

Mine Safety Disclosure

The following disclosures are provided pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act") and Item 104 of Regulation S-K, which requires certain disclosures by companies required to file periodic reports under the Securities Exchange Act of 1934, as amended, that operate mines regulated under the Federal Mine Safety and Health Act of 1977 (the "Mine Act").

Mine Safety Information. Whenever the Federal Mine Safety and Health Administration ("MSHA") believes a violation of the Mine Act, any health or safety standard or any regulation has occurred, it may issue a citation which describes the alleged violation and fixes a time within which the U.S. mining operator must abate the alleged violation. In some situations, such as when MSHA believes that conditions pose a hazard to miners, MSHA may issue an order removing miners from the area of the mine affected by the condition until the alleged hazards are corrected. When MSHA issues a citation or order, it generally proposes a civil penalty, or fine, as a result of the alleged violation, that the operator is ordered to pay. Citations and orders can be contested and appealed, and as part of that process, are often reduced in severity and amount, and are sometimes dismissed. The number of citations, orders and proposed assessments vary depending on the size and type (underground or surface) of the mine as well as by the MSHA inspector(s) assigned.

Mine Safety Data. The following provides additional information about references used in the table below to describe the categories of violations, orders or citations issued by MSHA under the Mine Act:

- Section 104 S&S Citations: Citations received from MSHA under section 104 of the Mine Act for violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a mine safety or health hazard.
- Section 104(b) Orders: Orders issued by MSHA under section 104(b) of the Mine Act, which represents a failure to abate a citation under section 104(a) within the period of time prescribed by MSHA. This results in an order of immediate withdrawal from the area of the mine affected by the condition until MSHA determines that the violation has been abated.
- Section 104(d) Citations and Orders: Citations and orders issued by MSHA under section 104(d) of the Mine Act for unwarrantable failure to comply with mandatory health or safety standards.
- Section 110(b)(2) Violations: Flagrant violations issued by MSHA under section 110(b)(2) of the Mine Act.
- Section 107(a) Orders: Orders issued by MSHA under section 107(a) of the Mine Act for situations in which MSHA determined an "imminent danger" (as defined by MSHA) existed.

The following table details the violations, citations and orders issued to us by MSHA during the quarter ended June 30, 2023:

Mine[(a)]	Section 104 S&S Citations(#)	Section104(b)Orders (#)	Section104(d)Citations and Orders(#)	Section 110(b)(2) Violations(#)	Section107(a)Orders (#)	Proposed Assessments[(b)]($, amounts in dollars)	Mining Related Fatalities (#)
Taylor, WI	—	—	—	—	—	$ —	—
Menomonie, WI	—	—	—	—	—	$ —	—
New Auburn, WI	—	—	—	—	—	$ —	—

a. The definition of mine under section 3 of the Mine Act includes the mine, as well as other items used in, or to be used in, or resulting from, the work of extracting minerals, such as land, structures, facilities, equipment, machines, tools and minerals preparation facilities. Unless otherwise indicated, any of these other items associated with a single mine have been aggregated in the totals for that mine. MSHA assigns an identification number to each mine and may or may not assign separate identification numbers to related facilities such as preparation facilities. We are providing the information in the table by mine rather than MSHA identification number because that is how we manage and operate our mining business and we believe this presentation will be more useful to investors than providing information based on MSHA identification numbers.

b. Represents the total dollar value of proposed assessments from MSHA under the Mine Act relating to any type of citation or order issued during the quarter ended June 30, 2023.

Pattern or Potential Pattern of Violations. During the quarter ended June 30, 2023, none of the mines operated by us received written notice from MSHA of (a) a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of mine health or safety hazards under section 104(e) of the Mine Act or (b) the potential to have such a pattern.

Pending Legal Actions. There were no legal actions pending before the Federal Mine Safety and Health Review Commission (the Commission) as of June 30, 2023. The Commission is an independent adjudicative agency established by the Mine Act that provides administrative trial and appellate review of legal disputes arising under the Mine Act.