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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2023

or

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

For the transition period from _____ to _____

Commission File Number: 001-39277



MP MATERIALS CORP.

(Exact name of registrant as specified in its charter)

Delaware	**84-4465489**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1700 S. Pavilion Center Drive, Suite 800
Las Vegas, Nevada 89135
(702) 844-6111

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, par value of $0.0001 per share	MP	New York Stock Exchange

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

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

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

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

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

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

As of October 31, 2023, the number of shares of the registrant's common stock outstanding was 177,815,058.

MP MATERIALS CORP. AND SUBSIDIARIES
TABLE OF CONTENTS

	Page
PART I—FINANCIAL INFORMATION	
Item 1. Financial Statements	1
Condensed Consolidated Balance Sheets (unaudited)	1
Condensed Consolidated Statements of Operations (unaudited)	2
Condensed Consolidated Statements of Comprehensive Income (Loss) (unaudited)	3
Condensed Consolidated Statements of Changes in Stockholders' Equity (unaudited)	4
Condensed Consolidated Statements of Cash Flows (unaudited)	5
Notes to Condensed Consolidated Financial Statements (unaudited)	6
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 3. Quantitative and Qualitative Disclosures About Market Risk	33
Item 4. Controls and Procedures	33
PART II—OTHER INFORMATION	
Item 1. Legal Proceedings	34
Item 1A. Risk Factors	34
Item 4. Mine Safety Disclosures	34
Item 5. Other Information	34
Item 6. Exhibits	34
Signatures	35

References herein to the "Company," "MP Materials," "we," "our," and "us," refer to MP Materials Corp. and its subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements included in this Quarterly Report on Form 10-Q for the three months ended September 30, 2023 (this "Form 10-Q"), that are not historical facts are forward-looking statements under Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements may be identified by the use of the words such as "estimate," "plan," "shall," "may," "project," "forecast," "intend," "expect," "anticipate," "believe," "seek," "target," or similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding estimates and forecasts of other financial and performance metrics and projections of market opportunity. These statements are based on various assumptions, whether or not identified in this Form 10-Q or our Annual Report on Form 10-K for the year ended December 31, 2022 (the "Form 10-K"), and on the current expectations of our management and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on by any investor as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. Many actual events and circumstances are beyond our control.

These forward-looking statements are subject to a number of risks and uncertainties, including:

- fluctuations and uncertainties related to demand for and pricing of rare earth products;
- uncertainties regarding the growth of existing and emerging uses for rare earth products and ability to compete with substitutions for rare earth minerals;
- the intense competition within the rare earth mining and processing industry;
- uncertainties relating to our commercial arrangements with Shenghe Resources (Singapore) International Trading Pte. Ltd., an affiliate of Shenghe Resources Holding Co., Ltd., a global rare earth company listed on the Shanghai Stock Exchange;
- potential changes in China's political environment and policies;
- unanticipated costs or delays associated with our Stage II optimization project;
- unanticipated costs or delays associated with our Stage III project;
- risks associated with our intellectual property rights, including uncertainties related to the Company's ability to obtain the intellectual property rights or licenses of intellectual property rights to produce NdFeB alloy and magnets;
- uncertainties related to the Company's ability to produce and supply NdFeB alloy and magnets;
- the ability to convert current commercial discussions with customers for the sale of rare earth oxide and metal products, NdFeB alloy and magnets into contracts;
- uncertainties relating to the COVID-19 pandemic;
- potential power shortages and interruptions at the Mountain Pass Rare Earth Mine and Processing Facility;
- increasing costs or limited access to raw materials that may adversely affect our profitability;
- fluctuations in transportation costs or disruptions in transportation services;
- inability to meet individual customer specifications;
- diminished access to water;
- uncertainty in our estimates of rare earth oxide reserves;
- risks associated with work stoppages;
- a shortage of skilled technicians and engineers;
- loss of key personnel;
- risks associated with the inherent dangers involved in mining activity and metal and alloy manufacturing;
- risks associated with events outside of our control, such as natural disasters, climate change, wars or health epidemics or pandemics;
- risks related to technology systems and security breaches;
- ability to maintain satisfactory labor relations;

- ability to comply with various government regulations that are applicable to our business;
- ability to maintain our governmental licenses, registrations, permits, and approvals with numerous governmental agencies necessary for us to operate our business;
- risks relating to extensive and costly environmental regulatory requirements;
- risks associated with the terms of our convertible notes; and
- the other factors described elsewhere in this Form 10-Q, included under the headings "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Part II, Item 1A, "Risk Factors" or as described in our Form 10-K, or as described in the other documents and reports we file with the Securities and Exchange Commission ("SEC").

If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements.

These and other factors that could cause actual results to differ from those implied by the forward-looking statements in this Form 10-Q are more fully described within Part II, Item 1A, "Risk Factors" in this Form 10-Q and "Part I, Item 1A. Risk Factors" in our Form 10-K. Such risks are not exhaustive. New risk factors emerge from time to time, and it is not possible to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

In addition, statements of belief and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us, as applicable, as of the date of this Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

MP MATERIALS CORP. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(in thousands, except share and per share data)	September 30, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	$ 547,668	$ 136,627
Short-term investments	536,994	1,045,718
Total cash, cash equivalents and short-term investments	1,084,662	1,182,345
Accounts receivable (including related party), net of allowance for credit losses of $0 and $0, respectively	13,180	32,856
Inventories	77,179	57,554
Income taxes receivable	4,128	2,201
Prepaid expenses and other current assets	9,162	18,872
Total current assets	1,188,311	1,293,828
Non-current assets		
Property, plant and equipment, net	1,097,727	935,743
Operating lease right-of-use assets	10,346	99
Inventories	12,589	5,744
Intangible assets, net	9,179	89
Other non-current assets	4,070	2,284
Total non-current assets	1,133,911	943,959
Total assets	$ 2,322,222	$ 2,237,787
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable, construction payables and accrued liabilities	$ 92,096	$ 72,265
Income taxes payable	—	21,163
Operating lease liabilities	728	84
Other current liabilities	4,188	3,969
Total current liabilities	97,012	97,481
Non-current liabilities		
Asset retirement obligations	5,462	5,295
Environmental obligations	16,554	16,580
Long-term debt, net	681,094	678,444
Operating lease liabilities	7,014	15
Deferred income taxes	135,435	122,353
Other non-current liabilities	3,578	4,985
Total non-current liabilities	849,137	827,672
Total liabilities	946,149	925,153
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock ($0.0001 par value, 50,000,000 shares authorized, none issued and outstanding in either period)	—	—
Common stock ($0.0001 par value, 450,000,000 shares authorized, 177,802,600 and 177,706,608 shares issued and outstanding, as of September 30, 2023, and December 31, 2022, respectively)	17	18
Additional paid-in capital	974,103	951,008
Retained earnings	401,985	361,419
Accumulated other comprehensive income (loss)	(32)	189
Total stockholders' equity	1,376,073	1,312,634
Total liabilities and stockholders' equity	$ 2,322,222	$ 2,237,787

See accompanying notes to the Condensed Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

(in thousands, except share and per share data)	For the three months ended September 30, 2023	For the three months ended September 30, 2022	For the nine months ended September 30, 2023	For the nine months ended September 30, 2022
Revenue:				
Rare earth concentrate (including related party)	$ 52,472	$ 124,231	$ 212,139	$ 425,169
Other rare earth products (including related party)	44	214	101	9,096
Total revenue	52,516	124,445	212,240	434,265
Operating costs and expenses:				
Cost of sales (including related party)(excluding depreciation, depletion and amortization)	22,217	22,417	69,137	67,682
Selling, general and administrative	19,561	17,722	57,829	56,150
Advanced projects, start-up, development and other	10,209	2,625	25,711	6,212
Depreciation, depletion and amortization	16,751	2,096	37,076	12,763
Accretion of asset retirement and environmental obligations	227	418	681	1,255
Loss on disposals of long-lived assets, net	1,087	—	5,897	258
Total operating costs and expenses	70,052	45,278	196,331	144,320
Operating income (loss)	(17,536)	79,167	15,909	289,945
Interest expense, net	(1,396)	(1,224)	(4,147)	(4,455)
Other income, net	14,456	6,168	41,970	8,574
Income (loss) before income taxes	(4,476)	84,111	53,732	294,064
Income tax benefit (expense)	200	(20,934)	(13,166)	(72,067)
Net income (loss)	$ (4,276)	$ 63,177	$ 40,566	$ 221,997
Earnings (loss) per share:				
Basic	$ (0.02)	$ 0.36	$ 0.23	$ 1.26
Diluted	$ (0.02)	$ 0.33	$ 0.22	$ 1.16
Weighted-average shares outstanding:				
Basic	177,231,717	176,543,624	177,034,068	176,476,276
Diluted	177,231,717	193,409,857	193,632,662	193,438,939

See accompanying notes to the Condensed Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(UNAUDITED)

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	**2023**	**2022**	**2023**	**2022**
Net income (loss)	$ (4,276)	$ 63,177	$ 40,566	$ 221,997
Other comprehensive income (loss), net of tax:				
Change in net unrealized gains (losses) on available-for-sale securities	134	319	(221)	(97)
Total comprehensive income (loss)	$ (4,142)	$ 63,496	$ 40,345	$ 221,900

See accompanying notes to the Condensed Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(UNAUDITED)

Three months ended September 30, 2023 and 2022

(in thousands, except share data)	Preferred Stock Shares	Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
Balance as of July 1, 2023	—	$ —	177,626,668	$ 17	$ 958,819	$ 406,261	$ (166)	$ 1,364,931
Stock-based compensation	—	—	37,236	—	6,665	—	—	6,665
Shares used to settle payroll tax withholding	—	—	(13,808)	—	(344)	—	—	(344)
Common stock issued to acquire intangible asset	—	—	152,504	—	8,963	—	—	8,963
Net loss	—	—	—	—	—	(4,276)	—	(4,276)
Unrealized gains on available-for-sale securities	—	—	—	—	—	—	134	134
Balance as of September 30, 2023	—	$ —	177,802,600	$ 17	$ 974,103	$ 401,985	$ (32)	$ 1,376,073
Balance as of July 1, 2022	—	$ —	177,534,132	$ 18	$ 939,900	$ 231,235	$ (416)	$ 1,170,737
Stock-based compensation	—	—	506	—	8,073	—	—	8,073
Net income	—	—	—	—	—	63,177	—	63,177
Unrealized gains on available-for-sale securities	—	—	—	—	—	—	319	319
Balance as of September 30, 2022	—	$ —	177,534,638	$ 18	$ 947,973	$ 294,412	$ (97)	$ 1,242,306

Nine months ended September 30, 2023 and 2022

(in thousands, except share data)	Preferred Stock Shares	Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
Balance as of January 1, 2023	—	$ —	177,706,608	$ 18	$ 951,008	$ 361,419	$ 189	$ 1,312,634
Stock-based compensation	—	—	149,922	—	20,607	—	—	20,607
Shares used to settle payroll tax withholding	—	—	(206,434)	(1)	(6,475)	—	—	(6,476)
Common stock issued to acquire intangible asset	—	—	152,504	—	8,963	—	—	8,963
Net income	—	—	—	—	—	40,566	—	40,566
Unrealized losses on available-for-sale securities	—	—	—	—	—	—	(221)	(221)
Balance as of September 30, 2023	—	$ —	177,802,600	$ 17	$ 974,103	$ 401,985	$ (32)	$ 1,376,073
Balance as of January 1, 2022	—	$ —	177,816,554	$ 18	$ 936,299	$ 72,415	$ —	$ 1,008,732
Stock-based compensation	—	—	60,691	—	25,970	—	—	25,970
Shares used to settle payroll tax withholding	—	—	(342,607)	—	(14,296)	—	—	(14,296)
Net income	—	—	—	—	—	221,997	—	221,997
Unrealized losses on available-for-sale securities	—	—	—	—	—	—	(97)	(97)
Balance as of September 30, 2022	—	$ —	177,534,638	$ 18	$ 947,973	$ 294,412	$ (97)	$ 1,242,306

See accompanying notes to the Condensed Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

(in thousands)	For the nine months ended September 30, 2023	2022
Operating activities:		
Net income	$ 40,566	$ 221,997
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion and amortization	37,076	12,763
Accretion of asset retirement and environmental obligations	681	1,255
Accretion of discount on short-term investments	(17,334)	(3,921)
Loss on disposals of long-lived assets, net	410	258
Stock-based compensation expense	19,041	25,019
Accretion of debt discount and amortization of debt issuance costs	2,650	3,153
Revenue recognized in exchange for debt principal reduction	—	(13,566)
Deferred income taxes	13,156	62,561
Decrease (increase) in operating assets:		
Accounts receivable (including related party)	19,676	34,991
Inventories	(25,498)	(22,386)
Income taxes receivable	(1,927)	(3,857)
Prepaid expenses, other current and non-current assets	490	1,339
Increase (decrease) in operating liabilities:		
Accounts payable and accrued liabilities	8,601	(1,271)
Income taxes payable	(21,163)	(3,463)
Other current and non-current liabilities	55	(453)
Net cash provided by operating activities	76,480	314,419
Investing activities:		
Additions to property, plant and equipment	(188,927)	(214,332)
Purchases of short-term investments	(705,241)	(1,358,390)
Proceeds from sales of short-term investments	461,042	313,865
Proceeds from maturities of short-term investments	769,907	212,000
Proceeds from government awards used for construction	1,050	5,130
Net cash provided by (used in) investing activities	337,831	(1,041,727)
Financing activities:		
Principal payments on debt obligations and finance leases	(2,101)	(5,139)
Tax withholding on stock-based awards	(6,476)	(14,296)
Net cash used in financing activities	(8,577)	(19,435)
Net change in cash, cash equivalents and restricted cash	405,734	(746,743)
Cash, cash equivalents and restricted cash beginning balance	143,509	1,181,157
Cash, cash equivalents and restricted cash ending balance	$ 549,243	$ 434,414
Reconciliation of cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 547,668	$ 427,969
Restricted cash, current	1,228	5,915
Restricted cash, non-current	347	530
Total cash, cash equivalents and restricted cash	$ 549,243	$ 434,414

See accompanying notes to the Condensed Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

NOTE 1—DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business: MP Materials Corp., including its subsidiaries (the "Company" or "MP Materials"), is the largest producer of rare earth materials in the Western Hemisphere. The Company, which is headquartered in Las Vegas, Nevada, owns and operates the Mountain Pass Rare Earth Mine and Processing Facility ("Mountain Pass"), the only rare earth mining and processing site of scale in North America, and is constructing a rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas (the "Fort Worth Facility"), where the Company anticipates manufacturing, among other products, neodymium-iron-boron ("NdFeB") permanent magnets.

Currently, the Company primarily produces a rare earth concentrate that is principally sold pursuant to the Offtake Agreement to Shenghe (as such terms are defined in Note 15, "Related-Party Transactions,"), a related party of the Company, that, in turn, typically sells that product to refiners in China. These refiners separate the constituent rare earth elements contained within the concentrate and sell the separated products to their customers. Upon completing initial commissioning of the remaining circuits of the Company's Stage II optimization project ("Stage II") in the third quarter of 2023, the Company began producing separated rare earth products, including neodymium-praseodymium ("NdPr") oxide. The Company anticipates selling these new products to customers in the U.S. and around the globe beginning in the fourth quarter of 2023, including to Japanese customers pursuant to a distributorship agreement with Sumitomo Corporation of Americas ("Sumitomo").

Additionally, in April 2022, the Company entered into a long-term supply agreement with General Motors Company (NYSE: GM) ("GM") to supply U.S.-sourced and manufactured rare earth materials, alloy and finished magnets for the electric motors in more than a dozen models using GM's Ultium Platform, with a gradual production ramp that is expected to begin in late 2023. These developments are part of the Company's Stage III downstream expansion strategy ("Stage III").

Operating segments are defined as components of an enterprise about which separate financial information is available and evaluated regularly by the chief operating decision maker ("CODM"), or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's CODM views the Company's operations and manages the business as one reportable segment.

The cash flows and profitability of the Company's operations are significantly affected by the market price of rare earth products. The prices of rare earth products are affected by numerous factors beyond the Company's control. The products of the Company are sold globally, with a primary focus in the Asian market due to the refining capabilities of the region. Rare earth products are critical inputs in hundreds of existing and emerging clean-tech applications including electric vehicles and wind turbines as well as robotics, drones, and defense applications.

Basis of Presentation: The unaudited Condensed Consolidated Financial Statements of the Company have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") for interim financial information and with the rules and regulations of the U.S. Securities and Exchange Commission. Accordingly, since they are interim statements, they do not include all of the information and notes required by GAAP for complete consolidated financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included.

Results of operations and cash flows for the interim periods presented herein are not necessarily indicative of the results that would be achieved during a full year of operations or in future periods. These unaudited Condensed Consolidated Financial Statements and notes thereto should be read in conjunction with the Consolidated Financial Statements and notes thereto included in the Company's Form 10-K.

NOTE 2—SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation: The unaudited Condensed Consolidated Financial Statements include the accounts of MP Materials Corp. and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates: The preparation of the unaudited Condensed Consolidated Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect (i) the reported amounts of assets and liabilities, (ii) the disclosure of contingent assets and liabilities at the date of the unaudited Condensed Consolidated Financial Statements, and (iii) the reported amounts of revenues and expenses during the reporting period. Accordingly, actual results may differ from those estimates.

Concentration of Risk: Financial instruments that potentially subject the Company to credit risk consist principally of cash, cash equivalents and short-term investments, and trade accounts receivable. The Company believes that its credit risk is limited because the Company's current contracts are with companies that have a reliable payment history. The Company does not believe that it is exposed to any significant risks related to its cash accounts, money market funds, or short-term investments.

As of September 30, 2023, Shenghe was the Company's principal customer and accounted for more than 90% of revenue. Rare earth concentrate is not quoted on any major commodities market or exchange and demand for rare earth concentrate is currently constrained to a relatively limited number of refiners, a significant majority of which are based in China. Uncertainty exists as to the market price of rare earth oxide ("REO"), as evidenced by the volatility experienced in 2022 and continued into 2023 due to concerns over the global economic conditions and actual or perceived concerns over increases in the supply of rare earth products. Furthermore, while revenue is generated in the U.S., Shenghe conducts its primary operations in China and may transport and sell products in the Chinese market. Therefore, the Company's revenue is affected by Shenghe's ultimate realized prices in China, including the impact of changes in the exchange rate between the Chinese Yuan and the U.S. dollar. In addition, there is an ongoing economic conflict between China and the U.S. that has previously resulted in tariffs and trade barriers that may negatively affect the Company's business and results of operations. See Note 15, "Related-Party Transactions," for additional information.

At the onset of the COVID-19 pandemic and through 2022, the Company experienced, at times, significant shipping delays due to congestion and slowdowns at U.S. and international ports caused by shortages in vessels, containers, and truckers, also disrupting the global supply chain. Despite these factors, the Company did not experience a reduction in production or sales due to the COVID-19 pandemic. However, the COVID-19 pandemic contributed to certain cost and schedule pressures for capital projects. The Company continues to monitor the global situation, including the impacts of new and potential future variants of COVID-19, or other factors that may affect international shipping, logistics, and supply chain, or involve responses to government actions such as strikes or other disruptions.

Intangible Assets: Indefinite-lived intangible assets are tested annually for impairment, or more frequently if events or changes in circumstances indicate that it is more likely than not that the assets are impaired. If the carrying amounts of the indefinite-lived intangible assets exceed their fair value, the excess amount is recognized as an impairment. Intangible assets that have a definite life are amortized on a straight-line basis over their estimated useful lives to reflect the expected pattern of economic benefits consumed. The Company reviews the carrying amount of its amortizing intangible assets for possible impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. If the carrying amounts of the amortizing intangible assets exceed their fair value, the excess amount is recognized as an impairment. Once an impairment of an intangible asset has been recorded, it cannot be reversed. No impairment charges were recorded during the three and nine months ended September 30, 2023 and 2022. See also Note 6, "Intangible Assets."

Leases: The Company determines if an arrangement is, or contains, a lease at contract inception. In some cases, the Company has determined that its lease arrangements include both lease and non-lease components. The Company has elected to use a practical expedient to account for each separate lease component and its associated non-lease components as a single lease component for the majority of its asset classes. The Company recognizes right-of-use ("ROU") assets and lease liabilities upon commencement for all leases with a lease term greater than 12 months. The Company has elected to use a practical expedient to not recognize leases with a lease term of 12 months or less in the unaudited Condensed Consolidated Balance Sheets for the majority of its asset classes. These short-term leases are expensed on a straight-line basis over the lease term.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at commencement date of the lease based on the present value of lease payments over the lease term. When the rate implicit in the lease cannot be readily determined, the Company utilizes its incremental borrowing rate in determining the present value of the future lease payments. Lease liabilities are accreted each period and reduced for payments. The ROU asset also includes other adjustments, such as for the effects of lease prepayments, initial lease costs, or lease incentives received. The lease term may include periods covered by options to extend or terminate the lease when it is either reasonably certain that the Company will exercise a renewal option, or reasonably certain it will not exercise an early termination option. For operating leases, lease expense is recognized on a straight-line basis over the lease term. For finance leases, the ROU asset amortizes on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset (or the useful life of the underlying asset if title transfers at the end of the lease term or there is a purchase option the Company is reasonably certain to exercise) and the lease liability accretes interest based on the interest method using the discount rate determined at lease commencement. For operating and finance leases, variable lease payments not included in the lease liability are expensed as incurred unless such costs are capitalized as part of another asset (e.g., inventory). Additionally, ROU assets are subject to impairment testing whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. If the carrying amounts of ROU

assets exceed their fair value, the excess amount is recognized as an impairment. No impairment charges were recorded during the three and nine months ended September 30, 2023 and 2022. See also Note 9, "Leases."

Stock-Based Compensation: The cost of employee services received in exchange for an award of equity instruments is based on the grant-date fair value of the award. The fair value of Stock Awards (as defined in Note 12, "Stock-based Compensation,") is equal to the fair value of the Company's stock on the grant date. The fair value of performance awards that include performance and/or market conditions is determined using a Monte Carlo simulation technique. The Monte Carlo simulation requires the use of inputs and assumptions such as the grant-date closing stock price, expected volatility, correlation coefficient to relevant peer groups or indices, risk-free interest rate and dividend yield.

Compensation cost for Stock Awards with graded vesting schedules is recognized on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards, which results in accelerated recognition of compensation cost. Compensation cost for performance awards with cliff vesting schedules is recognized on a straight-line basis over the requisite service period. Compensation cost is not adjusted based on the actual achievement of the market-based performance goals. The Company accounts for forfeitures in the period in which they occur based on actual forfeitures. See also Note 12, "Stock-based Compensation."

Recently Issued Accounting Pronouncements: During the three and nine months ended September 30, 2023, there were no accounting pronouncements adopted by the Company that had a material impact on the Company's unaudited Condensed Consolidated Financial Statements. Additionally, as of September 30, 2023, there were no accounting pronouncements pending adoption that are expected to have a material impact on the Company's unaudited Condensed Consolidated Financial Statements.

Reclassifications: Certain amounts in prior periods have been reclassified to conform to the current year presentation.

NOTE 3—CASH, CASH EQUIVALENTS AND INVESTMENTS

The following table presents the Company's cash, cash equivalents and short-term investments:

	September 30, 2023				December 31, 2022			
(in thousands)	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Cash:								
Demand deposits	$ 1,580	$ —	$ —	$ 1,580	$ 7,373	$ —	$ —	$ 7,373
Cash equivalents:								
Money market funds	134,038	—	—	134,038	64,855	—	—	64,855
U.S. agency securities	—	—	—	—	63,605	1	(2)	63,604
U.S. Treasury securities	327,224	48	(4)	327,268	795	—	—	795
Commercial paper	49,662	7	—	49,669	—	—	—	—
Certificates of deposit	35,110	3	—	35,113	—	—	—	—
Total cash equivalents	546,034	58	(4)	546,088	129,255	1	(2)	129,254
Total cash and equivalents	547,614	58	(4)	547,668	136,628	1	(2)	136,627
Short-term investments:								
U.S. agency securities	141,873	1	(155)	141,719	979,878	361	(17)	980,222
U.S. Treasury securities	395,217	61	(3)	395,275	65,586	1	(91)	65,496
Total short-term investments	537,090	62	(158)	536,994	1,045,464	362	(108)	1,045,718
Total cash, cash equivalents and short-term investments	$1,084,704	$ 120	$ (162)	$1,084,662	$1,182,092	$ 363	$ (110)	$1,182,345

The Company does not intend to sell, nor is it more likely than not that the Company will be required to sell, any investments in unrealized loss positions before recovery of their amortized cost basis. The Company did not recognize any credit losses related to its available-for-sale investments during the three and nine months ended September 30, 2023 and 2022. The unrealized losses on the Company's available-for-sale investments were primarily due to unfavorable changes in interest rates subsequent to initial purchase. None of the available-for-sale investments held as of September 30, 2023, were in a continuous unrealized loss position for greater than 12 months and the unrealized losses and the related risk of expected credit losses were not material.

The Company recognized the following income and expense amounts, all of which are included in "Other income, net" within the Company's unaudited Condensed Consolidated Statements of Operations:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	2023	2022	2023	2022
Gross realized gains	$ 1	$ 71	$ 506	$ 71
Gross realized losses	$ —	$ 199	$ 139	$ 199
Interest and investment income[1]	$ 14,455	$ 6,274	$ 41,607	$ 8,529

(1) Includes interest and investment income on the Company's available-for-sale securities and other money market funds.

As of September 30, 2023, the fair values of available-for-sale investments, by remaining contractual maturity, were as follows:

(in thousands)	
Due within one year	$ 926,223
Due after one year through two years	22,821
Total	$ 949,044

NOTE 4—INVENTORIES

The Company's inventories consisted of the following:

(in thousands)	September 30, 2023	December 31, 2022
Raw materials and supplies, including spare parts[1]	$ 34,680	$ 28,590
Work in process[2]	41,367	27,212
Finished goods	1,132	1,752
Total current inventories	77,179	57,554
Add: Non-current portion[3]	12,589	5,744
Total inventories	$ 89,768	$ 63,298

(1) Includes raw materials to support activities pertaining to the Company's rare earth metal, alloy and magnet manufacturing capabilities.

(2) Includes packaged and finished NdPr oxide shipped to the Company's toller for processing into NdPr metal.

(3) Represents stockpiled ore that is not expected to be processed within the next 12 months as well as certain raw materials that are not expected to be consumed within the next 12 months.

NOTE 5—PROPERTY, PLANT AND EQUIPMENT

The Company's property, plant and equipment consisted of the following:

(in thousands)	September 30, 2023	December 31, 2022
Land and land improvements	$ 16,425	$ 16,102
Buildings and building improvements	25,427	15,111
Machinery and equipment	473,578	186,388
Assets under construction	240,219	338,482
Mineral rights	438,395	438,395
Property, plant and equipment, gross	1,194,044	994,478
Less: Accumulated depreciation and depletion	(96,317)	(58,735)
Property, plant and equipment, net	$ 1,097,727	$ 935,743

Additions to Property, Plant and Equipment: The Company capitalized expenditures related to property, plant and equipment of $199.9 million and $250.1 million for the nine months ended September 30, 2023 and 2022, respectively,

including amounts not yet paid (see Note 16, "Supplemental Cash Flow Information"). The capitalized expenditures related to machinery, equipment, and assets under construction to support the Company's Stage II optimization project, its Fort Worth Facility, and its HREE Facility (as defined below). Additionally, the capitalized expenditures for the nine months ended September 30, 2022, included the purchase of approximately 18 acres of land in Fort Worth, Texas.

Placement of Certain Stage II Assets into Service: During the nine months ended September 30, 2023, the Company transferred certain of its assets totaling $248.4 million and pertaining to its Stage II optimization project from assets under construction to buildings, machinery and equipment, with $239.8 million relating to machinery and equipment.

Government Awards: In November 2020, the Company was awarded a Defense Production Act Title III technology investment agreement ("TIA") from the Department of Defense ("DOD") to establish domestic processing for separated light rare earth elements in the amount of $9.6 million. During the nine months ended September 30, 2023 and 2022, pursuant to the TIA, the Company had received zero and $5.1 million, respectively, in reimbursements from the DOD. As of September 30, 2023, the Company is entitled to receive an additional $0.1 million from the DOD under the TIA.

In February 2022, the Company was awarded a $35.0 million contract by the DOD's Office of Industrial Base Analysis and Sustainment program to design and build a facility to process heavy rare earth elements ("HREE") at Mountain Pass (the "HREE Facility") (the "HREE Production Project Agreement"). As of September 30, 2023, the Company had received $1.1 million from the DOD under the HREE Production Project Agreement.

Change in Estimates of Asset Retirement Costs: As a result of a decrement to the Company's asset retirement obligations during the third quarter of 2022, the carrying amount of the Company's total property, plant and equipment was reduced by $10.4 million, the majority of which pertained to buildings, machinery and equipment, and assets under construction, in the amounts of $0.6 million, $2.7 million and $6.7 million, respectively. Additionally, the Company's depreciation expense for the three and nine months ended September 30, 2022, was reduced by $2.7 million, reflecting the excess of the decrement over the carrying amount of the related property, plant and equipment. See Note 7, "Asset Retirement and Environmental Obligations," for further information on the decrement.

The Company's depreciation and depletion expense were as follows:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	2023	2022	2023	2022
Depreciation expense[(1)]	$ 13,951	$ (656)	$ 28,385	$ 3,702
Depletion expense	$ 2,664	$ 2,664	$ 8,407	$ 8,808

(1) As noted above, during the three months ended September 30, 2022, the Company recorded a reduction to depreciation expense, reflecting the excess of the asset retirement obligation decrement over the carrying amount of the related property, plant and equipment, as a result of changes in the Company's estimates of cash flows underlying its asset retirement obligations.

The Company recognized $0.8 million and $5.5 million of demolition costs for the three and nine months ended September 30, 2023, which are included in "Loss on disposals of long-lived assets, net" within the Company's unaudited Condensed Consolidated Statements of Operations, incurred in connection with demolishing and removing certain old facilities from the Mountain Pass site that have not been used in the Company's operations. There were no impairments recognized for the three and nine months ended September 30, 2023 and 2022.

NOTE 6—INTANGIBLE ASSETS

In August 2023, the Company acquired a license to use patented technology, technical know-how, and other intellectual property pertaining to the development and manufacturing of magnetics products in exchange for 435,729 shares of the Company's common stock. Pursuant to the terms of the agreement to acquire the license, 152,504 shares were issued immediately and the remaining shares will be issued as follows: 43,573 on each of the first, second, and third anniversaries of the acquisition date and an additional 152,506 shares on the fourth anniversary of the acquisition date.

Upon obtaining the license, the Company recorded a definite-lived intangible asset in the amount of $9.0 million, based on the closing price of the Company's common stock on the acquisition date. The intangible asset will be amortized on a straight-line basis, with no estimated residual value, over the estimated useful life of 7.5 years, which the Company based on the life of the patents associated with the licensed technology.

Contemporaneous with the acquisition of the license, the Company entered into a consulting agreement in support of integrating the licensed technology and know-how into its existing processes aimed at the development of magnetics products. Unless earlier terminated, under the consulting agreement, the Company will pay a total of approximately $15 million over the next four years, of which, the first payment will be in cash on the first anniversary of the consulting agreement and the payments pertaining to the second, third, and fourth anniversaries of the consulting agreement may be settled in cash or shares of the Company's common stock at the Company's election. The Company will ratably record an expense over the four-year period unless the costs qualify for capitalization.

The Company's intangible assets were as follows:

(in thousands)	September 30, 2023	December 31, 2022
Intangible assets with indefinite lives:		
Emissions allowances	$ 316	$ 89
Intangible assets with definite lives:		
Patent and intellectual property license	8,963	—
Less: Accumulated amortization	(100)	—
Patent and intellectual property license, net	8,863	—
Intangible assets, net	$ 9,179	$ 89

Amortization expense related to amortizing intangible assets was $0.1 million for the three and nine months ended September 30, 2023. There was no amortization expense related to amortizing intangible assets recognized for the three and nine months ended September 30, 2022. The following table presents the estimated amortization expense based on amortizing intangible assets as of September 30, 2023:

(in thousands)	
Period:	
Remainder of 2023	$ 299
2024	1,195
2025	1,195
2026	1,195
2027	1,195
Thereafter	3,784
Total	$ 8,863

NOTE 7—ASSET RETIREMENT AND ENVIRONMENTAL OBLIGATIONS

Asset Retirement Obligations

The Company estimates asset retirement obligations based on the requirements to reclaim certain land areas associated with mineral extraction activities and certain related facilities at Mountain Pass. Minor reclamation activities related to discrete portions of the Company's operations are ongoing. As of September 30, 2023, the Company estimated a significant portion of the cash outflows for major reclamation activities including the retirement of Mountain Pass will be incurred beginning in 2056 and 2057.

In June 2021, San Bernardino County approved a re-zoning request for certain of the Company's properties such that certain of the Company's processing and separations facilities would be zoned for industrial end uses as opposed to the prior "resource conservation" designation. In September 2022, and as a result of the re-zoning of this land, the Company received final approval from San Bernardino County and the Division of Mine Reclamation (California) on a revised reclamation plan. The revision removed from the regulatory oversight under The Surface Mining and Reclamation Act of 1975 the majority of the buildings and equipment used in the processing and separations facilities, including the land underlying such buildings and equipment.

As a result of the final approval of the reclamation plan, in the third quarter of 2022, the Company revised its estimated cash flows pertaining to the settlement of the reclamation and removal activities associated with Mountain Pass, including removing the previous estimates of the cash flows associated with the processing and separations facilities that no longer

require reclamation. The changes in estimates resulted in an asset retirement obligation decrement of $13.1 million, of which $10.4 million reduced the carrying amounts of the associated property, plant and equipment, and $2.7 million, reflecting the excess of the decrement over the carrying amount of the related property, plant and equipment, was recorded as a reduction to depreciation expense for the three and nine months ended September 30, 2022.

As of September 30, 2023, the credit-adjusted risk-free rate ranged between 6.5% and 12.0% depending on the timing of expected settlement and when the increment was recognized. There were no significant increments or decrements for the three and nine months ended September 30, 2023, and there were no significant increments for the three and nine months ended September 30, 2022.

The balance as of both September 30, 2023, and December 31, 2022, included current portions of $0.2 million, which are included in "Other current liabilities" within the Company's unaudited Condensed Consolidated Balance Sheets. The total estimated future undiscounted cash flows required to satisfy the Company's asset retirement obligations were $50.3 million and $50.4 million as of September 30, 2023, and December 31, 2022, respectively.

Environmental Obligations

The Company has certain environmental remediation liabilities related to the monitoring of groundwater contamination. The Company engaged an environmental consultant to develop a remediation plan and remediation cost projections based upon that plan. Utilizing the remediation plan developed by the environmental consultant, the Company developed an estimate of future cash payments for the remediation plan.

As of September 30, 2023, the Company estimated the cash outflows related to these environmental activities will be incurred annually over the next 24 years. The Company's environmental remediation liabilities are measured at the expected value of future cash outflows discounted to their present value using a discount rate of 2.93%. There were no significant changes in the estimated remaining remediation costs for the three and nine months ended September 30, 2023 and 2022.

The total estimated aggregate undiscounted cost of $26.8 million and $27.2 million as of September 30, 2023, and December 31, 2022, respectively, principally related to water monitoring activities required by state and local agencies. Based on the Company's estimate of the cost and timing and the assumption that payments are considered to be fixed and reliably determinable, the Company has discounted the liability. The balance as of both September 30, 2023, and December 31, 2022, included current portions of $0.5 million, which are included in "Other current liabilities" within the Company's unaudited Condensed Consolidated Balance Sheets.

Financial Assurances

The Company is required to provide the applicable government agencies with financial assurances relating to the closure and reclamation obligations. As of September 30, 2023, and December 31, 2022, the Company had financial assurance requirements of $45.4 million and $43.5 million, respectively, which were satisfied with surety bonds placed with California state and regional agencies.

NOTE 8—DEBT OBLIGATIONS

The Company's long-term debt was as follows:

(in thousands)	September 30, 2023	December 31, 2022
Convertible Notes due 2026	$ 690,000	$ 690,000
Less: Unamortized debt issuance costs	(8,906)	(11,556)
Long-term debt, net	$ 681,094	$ 678,444

Convertible Notes

In March 2021, the Company issued $690.0 million aggregate principal amount of 0.25% unsecured green convertible senior notes that mature, unless earlier converted, redeemed or repurchased, on April 1, 2026 (the "Convertible Notes"), at a price of par. Interest on the Convertible Notes is payable on April 1st and October 1st of each year, beginning on October 1, 2021. The Convertible Notes may, at the Company's election, be settled in cash, shares of common stock of the Company, or a combination thereof. The Company has the option to redeem the Convertible Notes, in whole or in part, beginning on April 5, 2024.

The Convertible Notes are convertible into shares of the Company's common stock at an initial conversion price of $44.28 per share, or 22.5861 shares, per $1,000 principal amount of notes, subject to adjustment upon the occurrence of certain corporate events. However, in no event will the conversion price exceed 28.5714 shares of common stock per $1,000 principal amount of the Convertible Notes. As of September 30, 2023, based on the conversion price, the maximum number of shares that could be issued to satisfy the conversion feature of the Convertible Notes was 19,714,266. The Convertible Notes' if-converted value did not exceed its principal amount as of September 30, 2023.

Interest expense related to the Convertible Notes was as follows:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	**2023**	**2022**	**2023**	**2022**
Coupon interest	$ 431	$ 431	$ 1,293	$ 1,293
Amortization of debt issuance costs	884	881	2,650	2,637
Convertible Notes interest expense	$ 1,315	$ 1,312	$ 3,943	$ 3,930

The debt issuance costs are being amortized to interest expense over the term of the Convertible Notes at an effective interest rate of 0.51%. The remaining term of the Convertible Notes was 2.5 years as of September 30, 2023.

Equipment Notes

The Company has entered into several financing agreements for the purchase of equipment, including trucks, tractors, loaders, graders, and various other machinery. The Company's equipment notes, which are secured by the purchased equipment, have terms of between 4 to 5 years and interest rates of between 0.0% and 6.5% per annum.

The current and non-current portions of the equipment notes, which are included within the unaudited Condensed Consolidated Balance Sheets in "Other current liabilities" and "Other non-current liabilities," respectively, were as follows:

(in thousands)	September 30, 2023	December 31, 2022
Equipment notes		
Current	$ 2,193	$ 2,392
Non-current	3,147	4,743
	$ 5,340	$ 7,135

As of September 30, 2023, none of the agreements or indentures governing the Company's indebtedness contain financial covenants.

NOTE 9—LEASES

The Company has operating and finance leases for certain office space, warehouses, vehicles and equipment used in its operations. In November 2021, the Company entered into a lease agreement for corporate office space. The lease commenced during the second quarter of 2023, and at lease commencement, the Company recorded an operating lease liability of $7.3 million and an ROU asset of $10.3 million, primarily comprised of the lease liability as well as $2.9 million of payments for lessor-owned tenant improvements. The lease has an initial term of 91 months expiring in October 2030, with an option to renew for one five-year period at the election of the Company. Excluding rent abatement in the first year of the lease, the initial annual base rent payment is $1.2 million, subject to an annual escalator.

The Company's lease agreements do not contain material residual value guarantees or restrictive covenants. As of September 30, 2023, the Company was not reasonably certain of exercising any material purchase, renewal, or termination options contained within its lease agreements.

As of September 30, 2023, the maturities of the Company's operating and finance lease liabilities were as follows:

(in thousands)	Operating Leases	Finance Leases
Period:		
Remainder of 2023	$ 162	$ 56
2024	1,422	228
2025	1,441	179
2026	1,337	59
2027	1,370	54
Thereafter	4,066	160
Total lease payments	9,798	736
Less: Imputed interest	(2,056)	(108)
Total	$ 7,742	$ 628

Supplemental disclosure for the unaudited Condensed Consolidated Balance Sheets related to the Company's operating and finance leases is as follows:

(in thousands)	Location on Unaudited Condensed Consolidated Balance Sheets	September 30, 2023	December 31, 2022
Operating Leases:			
Right-of-use assets	Operating lease right-of-use assets	$ 10,346	$ 99
Operating lease liability, current	Operating lease liabilities (included in current liabilities)	$ 728	$ 84
Operating lease liability, non-current	Operating lease liabilities (included in non-current liabilities)	7,014	15
Total operating lease liabilities		$ 7,742	$ 99
Finance Leases:			
Right-of-use assets	Other non-current assets	$ 650	$ 451
Finance lease liability, current	Other current liabilities	$ 197	$ 354
Finance lease liability, non-current	Other non-current liabilities	431	242
Total finance lease liabilities		$ 628	$ 596

NOTE 10—INCOME TAXES

The Company calculates the provision for income taxes during interim reporting periods by applying an estimate of the annual effective tax rate to its year-to-date pretax book income or loss. The tax effects of discrete items, including but not limited to, excess tax benefits or deficiencies associated with stock-based compensation, valuation allowance adjustments based on new evidence, and enactment of tax laws, are reported in the interim period in which they occur. The effective tax rate (income tax expense or benefit as a percentage of income or loss before income taxes) including discrete items was 4.5% and 24.5% for the three and nine months ended September 30, 2023, respectively, as compared to 24.9% and 24.5% for the three and nine months ended September 30, 2022, respectively. The Company's effective income tax rate can vary from period to period depending on, among other factors, percentage depletion, executive compensation deduction limitations, the Section 45X Advanced Manufacturing Production Credit, and changes to its valuation allowance against deferred tax assets. Certain of these and other factors, including the Company's history and projections of pretax earnings, are considered in assessing its ability to realize its net deferred tax assets.

On August 16, 2022, the U.S. government enacted the Inflation Reduction Act of 2022 which, among other things, implements a 15% minimum tax on book income of certain large corporations, a 1% excise tax on net stock repurchases, and provides several tax incentives to promote clean energy for tax years beginning after December 31, 2022. The Company does not expect the minimum tax or excise tax to have a material impact on the unaudited Condensed Consolidated Financial

Statements. The Company expects to benefit from the Section 45X Advanced Manufacturing Production Credit, which provides a credit equal to 10% of the costs incurred with respect to the production and sale of certain critical minerals, including NdPr oxide.

NOTE 11—COMMITMENTS AND CONTINGENCIES

Litigation: The Company may become party to lawsuits, administrative proceedings, and government investigations, including environmental, regulatory, construction, and other matters, in the ordinary course of business. Large, and sometimes unspecified, damages or penalties may be sought in some matters, and certain matters may require years to resolve. The Company is not aware of any pending or threatened litigation that it believes would have a material adverse effect on its unaudited Condensed Consolidated Financial Statements.

NOTE 12—STOCK-BASED COMPENSATION

2020 Incentive Plan: In November 2020, the Company's stockholders approved the MP Materials Corp. 2020 Stock Incentive Plan (the "2020 Incentive Plan"), which permits the Company to issue stock options (incentive and/or non-qualified); stock appreciation rights ("SARs"); restricted stock, restricted stock units ("RSUs") and other stock awards (collectively, the "Stock Awards"); and performance awards, which vest contingent upon the attainment of either or a combination of market- or performance-based goals. As of September 30, 2023, the Company has not issued any stock options or SARs and there were 6,101,859 shares available for future grants under the 2020 Incentive Plan.

Market-Based PSUs: In February 2023, pursuant to the 2020 Incentive Plan, the Company's Compensation Committee of the Board of Directors adopted a performance share plan (the "2023 Performance Share Plan"). Pursuant to the 2023 Performance Share Plan, for the nine months ended September 30, 2023, the Company granted 62,709 of market-based performance stock units ("PSUs") at target, all of which cliff vest after a requisite performance and service period of three years. The PSUs have the potential to be earned at between 0% and 200% of the number of awards granted depending on the level of growth of the Company's total shareholder return ("TSR") as compared to the TSR of the S&P 400 Index and the S&P 400 Materials Group over the performance period. The fair value of the market-based PSUs was determined using a Monte Carlo simulation technique.

Stock-Based Compensation: The Company's stock-based compensation was recorded as follows:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	**2023**	**2022**	**2023**	**2022**
Cost of sales	$ 842	$ 889	$ 2,759	$ 2,110
Selling, general and administrative	5,193	6,912	15,603	22,717
Advanced projects, start-up, development and other	263	5	679	192
Total stock-based compensation expense	$ 6,298	$ 7,806	$ 19,041	$ 25,019
Stock-based compensation capitalized to property, plant and equipment, net	$ 367	$ 267	$ 1,566	$ 951

NOTE 13—FAIR VALUE MEASUREMENTS

Accounting Standards Codification ("ASC") Topic 820, "Fair Value Measurement" ("ASC 820"), establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority

to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2: Quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, quoted prices or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability and model-based valuation techniques (e.g., the Black-Scholes model) for which all significant inputs are observable in active markets.

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of assets and liabilities and their placement within the fair value hierarchy. The following methods and assumptions are used to estimate the fair value of each class of financial instruments for which it is practicable to estimate. The fair value of the Company's accounts receivable, accounts payable, short-term debt and accrued liabilities approximates the carrying amounts because of the immediate or short-term maturity of these financial instruments.

Cash, Cash Equivalents and Restricted Cash

The Company's cash, cash equivalents and restricted cash are classified within Level 1 of the fair value hierarchy. The carrying amounts reported in the unaudited Condensed Consolidated Balance Sheets approximate the fair value of cash, cash equivalents and restricted cash due to the short-term nature of these assets.

Short-term Investments

The fair value of the Company's short-term investments, which are classified as available-for-sale securities, is estimated based on quoted prices in active markets and is classified as a Level 1 measurement.

Convertible Notes

The fair value of the Company's Convertible Notes is estimated based on quoted prices in active markets and is classified as a Level 1 measurement.

Equipment Notes

The Company's equipment notes are classified within Level 2 of the fair value hierarchy because there are inputs that are directly observable for substantially the full term of the liability. Model-based valuation techniques for which all significant inputs are observable in active markets were used to calculate the fair values of liabilities classified within Level 2 of the fair value hierarchy.

Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The carrying amounts and estimated fair values by input level of the Company's financial instruments were as follows:

	September 30, 2023				
(in thousands)	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
Financial assets:					
Cash and cash equivalents	$ 547,668	$ 547,668	$ 547,668	$ —	$ —
Short-term investments	$ 536,994	$ 536,994	$ 536,994	$ —	$ —
Restricted cash	$ 1,575	$ 1,575	$ 1,575	$ —	$ —
Financial liabilities:					
Convertible Notes	$ 681,094	$ 591,923	$ 591,923	$ —	$ —
Equipment notes	$ 5,340	$ 5,142	$ —	$ 5,142	$ —

(in thousands)	December 31, 2022				
	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
Financial assets:					
Cash and cash equivalents	$ 136,627	$ 136,627	$ 136,627	$ —	$ —
Short-term investments	$ 1,045,718	$ 1,045,718	$ 1,045,718	$ —	$ —
Restricted cash	$ 6,882	$ 6,882	$ 6,882	$ —	$ —
Financial liabilities:					
Convertible Notes	$ 678,444	$ 610,650	$ 610,650	$ —	$ —
Equipment notes	$ 7,135	$ 6,807	$ —	$ 6,807	$ —

NOTE 14—EARNINGS (LOSS) PER SHARE

Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding during the period. Diluted earnings (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method or the if-converted method, as applicable.

The following table reconciles the weighted-average common shares outstanding used in the calculation of basic earnings (loss) per share to the weighted-average common shares outstanding used in the calculation of diluted earnings (loss) per share:

	For the three months ended September 30,		For the nine months ended September 30,	
	2023	2022	2023	2022
Weighted-average shares outstanding, basic	177,231,717	176,543,624	177,034,068	176,476,276
Assumed conversion of Convertible Notes	—	15,584,409	15,584,409	15,584,409
Assumed conversion of restricted stock	—	840,786	620,190	944,925
Assumed conversion of RSUs	—	441,038	393,995	433,329
Weighted-average shares outstanding, diluted	177,231,717	193,409,857	193,632,662	193,438,939

The following table presents unweighted potentially dilutive shares that were not included in the computation of diluted earnings (loss) per share because to do so would have been antidilutive:

	For the three months ended September 30,		For the nine months ended September 30,	
	2023	2022	2023	2022
Convertible Notes	15,584,409	—	—	—
Restricted Stock	685,202	—	—	—
RSUs	1,629,938	6,013	3,184	6,013

The following table presents the calculation of basic and diluted earnings (loss) per share for the Company's common stock:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands, except share and per share data)	2023	2022	2023	2022
Calculation of basic earnings (loss) per share:				
Net income (loss)	$ (4,276)	$ 63,177	$ 40,566	$ 221,997
Weighted-average shares outstanding, basic	177,231,717	176,543,624	177,034,068	176,476,276
Basic earnings (loss) per share	$ (0.02)	$ 0.36	$ 0.23	$ 1.26
Calculation of diluted earnings (loss) per share:				
Net income (loss)	$ (4,276)	$ 63,177	$ 40,566	$ 221,997
Interest expense, net of tax[(1)]:				
Convertible Notes	—	985	2,977	2,967
Diluted income (loss)	$ (4,276)	$ 64,162	$ 43,543	$ 224,964
Weighted-average shares outstanding, diluted	177,231,717	193,409,857	193,632,662	193,438,939
Diluted earnings (loss) per share	$ (0.02)	$ 0.33	$ 0.22	$ 1.16

(1) The nine months ended September 30, 2023, was tax-effected at a rate of 24.5%, and the three and nine months ended September 30, 2022, were tax-effected at a rate of 24.9% and 24.5%, respectively.

Basic and diluted earnings (loss) per share were the same for the three months ended September 30, 2023, as all potential common shares outstanding would have been anti-dilutive due to the presentation of net loss during the period.

NOTE 15—RELATED-PARTY TRANSACTIONS

Offtake Agreement: In March 2022, the Company entered into an offtake agreement (the "Offtake Agreement") with Shenghe Resources (Singapore) International Trading Pte. Ltd. ("Shenghe"), a majority-owned subsidiary of Leshan Shenghe Rare Earth Co., Ltd. ("Leshan Shenghe") whose ultimate parent is Shenghe Resources Holding Co., Ltd., a leading global rare earth company listed on the Shanghai Stock Exchange. The Offtake Agreement became effective upon the termination of the amended and restated offtake agreement with Shenghe. The initial term of the Offtake Agreement is two years, with the option to extend the term at the Company's discretion for an additional one-year period.

Pursuant to the Offtake Agreement, and subject to certain exclusions, Shenghe is obligated to purchase on a "take or pay" basis the rare earth concentrate produced by the Company as the exclusive distributor in China, with certain exceptions for the Company's direct sales globally. In addition, at the discretion of the Company, Shenghe may be required to purchase on a "take or pay" basis certain non-concentrate rare earth products, although the Company may sell all non-concentrate rare earth products in its sole discretion to customers or end users in any jurisdiction.

The sales price of rare earth concentrate sold to Shenghe is based on an agreed-upon price per metric ton, subject to certain quality adjustments depending on the measured characteristics of the product, with an adjustment for the ultimate market price of the product realized by Shenghe upon sales to their customers. The sales price and other terms applicable to a quantity of offtake products are set forth in monthly purchase agreements between the Company and Shenghe. Under the Offtake Agreement, Shenghe is paid a variable commission on net proceeds to the Company.

Tolling Agreement with VREX Holdco: In October 2023, the Company entered into a tolling agreement with VREX Holdco Ltd. Pte. ("VREX Holdco") (the "Tolling Agreement"), a wholly-owned subsidiary of Shenghe. VREX Holdco owns Vietnam Rare Earth Company Limited ("VREX"), which owns and operates a metal processing plant and related facilities in Vietnam. This Tolling Agreement replaced the previous tolling agreement signed in March 2023 directly with VREX. Pursuant to the Tolling Agreement, the Company will deliver NdPr oxide to VREX Holdco, which VREX Holdco will then provide to VREX to process into NdPr metal for delivery to the Company's customers globally. As several of the Company's potential customers that manufacture magnets outside of China prefer to purchase NdPr metal in addition to NdPr oxide, this Tolling Agreement will enable the Company to distribute NdPr products more widely to customers in Japan and other global markets. During the term of the Tolling Agreement, the Company will pay VREX Holdco a processing fee per unit of rare earth metal produced. The Company will maintain title to the products and directly enter into sales agreements for the produced NdPr metal. The initial term of the Tolling Agreement is three years and may be renewed for additional three-year terms. As of

September 30, 2023, there have not been any transactions as contemplated under the previous tolling agreement signed in March 2023.

Revenue and Cost of Sales: The Company's related-party revenue and cost of sales were as follows:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	**2023**	**2022**	**2023**	**2022**
Revenue:				
Rare earth concentrate	$ 51,502	$ 114,894	$ 203,186	$ 401,496
Other rare earth products[(1)]	$ —	$ 172	$ —	$ 8,646
Cost of sales[(2)]	$ 21,829	$ 21,842	$ 66,817	$ 65,368

(1) Represents sales agreements with Shenghe for non-concentrate products, including certain stockpiles of rare earth fluoride.
(2) Excludes depreciation, depletion and amortization and includes shipping and freight.

Purchases of Materials and Supplies: The Company purchases certain reagent products (generally produced by an unrelated third-party manufacturer) used in the flotation process as well as other materials from Shenghe in the ordinary course of business. Total purchases were $5.8 million and $7.6 million for the three and nine months ended September 30, 2023, respectively, as compared to $15.3 million and $18.5 million for the three and nine months ended September 30, 2022, respectively.

Accounts Receivable: As of September 30, 2023, and December 31, 2022, $11.9 million and $29.8 million, respectively, of the accounts receivable as stated in the unaudited Condensed Consolidated Balance Sheets, were receivable from and pertained to sales made to Shenghe in the ordinary course of business.

NOTE 16—SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental cash flow information and non-cash investing and financing activities were as follows:

	For the nine months ended September 30,	
(in thousands)	**2023**	**2022**
Supplemental cash flow information:		
Cash paid for interest	$ 1,116	$ 1,140
Cash payments related to income taxes	$ 23,101	$ 16,827
Change in construction payables	$ 10,952	$ 35,779
Supplemental non-cash investing and financing activities:		
Common stock issued to acquire intangible asset	$ 8,963	$ —
Operating ROU assets obtained in exchange for lease liabilities	$ 7,608	$ 168
Revenue recognized in exchange for debt principal reduction	$ —	$ 13,566
Decrease in estimates of asset retirement costs	$ —	$ 10,395

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of financial condition, results of operations, liquidity and capital resources should be read in conjunction with, and is qualified in its entirety by, the unaudited Condensed Consolidated Financial Statements and the notes thereto included in this Quarterly Report on Form 10-Q ("Form 10-Q"), and the Consolidated Financial Statements and notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in the Annual Report on Form 10-K for the year ended December 31, 2022 ("Form 10-K"). This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. The actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including, but not limited to, those set forth under "Part II. Item 1A. Risk Factors" and elsewhere in this Form 10-Q and "Part I. Item 1A. Risk Factors" and elsewhere in our Form 10-K. See also "Cautionary Note Regarding Forward-Looking Statements."

Business Overview

MP Materials Corp., including its subsidiaries ("we," "our," and "us"), is the largest producer of rare earth materials in the Western Hemisphere. We own and operate the Mountain Pass Rare Earth Mine and Processing Facility ("Mountain Pass"), the only rare earth mining and processing site of scale in North America, and are also constructing a rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas (the "Fort Worth Facility"), where we anticipate manufacturing, among other products, neodymium-iron-boron ("NdFeB") permanent magnets.

Currently, we primarily produce a rare earth concentrate that is principally sold pursuant to the Offtake Agreement to Shenghe (as such terms are defined in Note 15, "Related-Party Transactions," in the notes to the unaudited Condensed Consolidated Financial Statements), that, in turn, typically sells that product to refiners in China. These refiners separate the constituent rare earth elements ("REE") contained in our concentrate and sell the separated products to their customers. Upon completing initial commissioning of the remaining circuits of our Stage II optimization project ("Stage II") in the third quarter of 2023, we began producing separated rare earth products, including neodymium-praseodymium ("NdPr") oxide. We anticipate selling these new products to customers in the U.S. and around the globe beginning in the fourth quarter of 2023, including to Japanese customers pursuant to a distributorship agreement with Sumitomo Corporation of Americas ("Sumitomo").

Additionally, in April 2022, we entered into a long-term supply agreement with General Motors Company (NYSE: GM) ("GM") to supply U.S.-sourced and manufactured rare earth materials, alloy and finished magnets for the electric motors in more than a dozen models using GM's Ultium Platform, with a gradual production ramp that is expected to begin in late 2023. These developments are a part of our Stage III downstream expansion strategy ("Stage III").

Certain REE serve as critical inputs for the rare earth magnets inside the electric motors and generators powering carbon-reducing technologies such as electric vehicles ("EVs") and wind turbines, as well as drones, defense systems, robotics and many other high-growth, advanced technologies. Our integrated operations at Mountain Pass combine low production costs with high environmental standards, thereby restoring American leadership to a critical industry with a strong commitment to sustainability.

Recent Developments and Other Information

Distribution Agreement with Sumitomo

In February 2023, we entered into a distributorship agreement ("Distribution Agreement") with Sumitomo, under which Sumitomo would serve as the exclusive distributor of NdPr oxide, produced by us, to Japanese customers. Further, in connection with the Distribution Agreement, we intend to collaborate with Sumitomo on the supply of rare earth metals and other products. Under the terms of the Distribution Agreement, Sumitomo will be paid a variable commission. The initial term of the Distribution Agreement is through the end of 2025 with options to renew annually.

Patent and Intellectual Property License

In August 2023, we acquired a license to use patented technology, technical know-how, and other intellectual property pertaining to the development and manufacturing of magnetics products in exchange for 435,729 shares of our common stock. Contemporaneous with the acquisition of the license, we entered into a consulting agreement in support of integrating the licensed technology and know-how into its existing processes aimed at the development of magnetics products.

Tolling Agreement with VREX Holdco

In October 2023, we entered into a tolling agreement with VREX Holdco Pte. Ltd. ("VREX Holdco") (the "Tolling Agreement"), a wholly-owned subsidiary of Shenghe. VREX Holdco owns Vietnam Rare Earth Company Limited ("VREX"), which owns and operates a metal processing plant and related facilities in Vietnam. This Tolling Agreement replaced the previous tolling agreement signed in March 2023 directly with VREX. Pursuant to the Tolling Agreement, we will deliver NdPr oxide to VREX Holdco, which VREX Holdco will then provide to VREX to process into NdPr metal for delivery to our customers globally. As several of our potential customers that manufacture magnets outside of China prefer to purchase NdPr metal in addition to NdPr oxide, this Tolling Agreement will enable us to distribute NdPr products more widely to customers in Japan and other global markets. During the term of the Tolling Agreement, we will pay VREX Holdco a processing fee per unit of rare earth metal produced. We will maintain title to the products and directly enter into sales agreements for the produced NdPr metal. The initial term of the Tolling Agreement is three years and may be renewed for additional three-year terms.

COVID-19 Pandemic

At the onset of the COVID-19 pandemic and through 2022, we experienced, at times, significant shipping delays due to congestion and slowdowns at U.S. and international ports caused by shortages in vessels, containers, and truckers, also disrupting the global supply chain. Despite these factors, we did not experience a reduction in production or sales due to the COVID-19 pandemic. However, the COVID-19 pandemic contributed to certain cost and schedule pressures for capital projects. We continue to monitor the global situation, including the impacts of new and potential future variants of COVID-19, or other factors that may affect international shipping, logistics, and supply chain, or involve responses to government actions such as strikes or other disruptions.

Key Performance Indicators

We have historically used and/or currently use the following key performance indicators ("KPIs") to evaluate the performance of our business. However, as our business continues to evolve and transitions from a producer of rare earth concentrate to a producer of separated rare earth products, the metrics that management uses to evaluate the business may continue to change or be revised. For example, in completing the transition to separated rare earth products, we may determine that production cost per rare earth oxide ("REO") equivalent metric ton ("MT"), which is a metric focused solely on Stage I concentrate operations, is no longer meaningful in evaluating and understanding our business or operating results. In addition, during the third quarter of 2023, upon the production of separated products, we identified two new KPIs of our business: NdPr Production Volume and NdPr Sales Volume. Our calculations of these KPIs may differ from similar measures published by other companies in our industry or in other industries. The following table presents our KPIs:

(in whole units or dollars, except percentages)	For the three months ended September 30,		Change		For the nine months ended September 30,		Change	
	2023	2022	Amount	%	2023	2022	Amount	%
Rare earth concentrate								
REO Production Volume (MTs)	10,766	10,886	(120)	(1)%	32,300	32,014	286	1 %
REO Sales Volume (MTs)	9,177	10,676	(1,499)	(14)%	29,663	32,382	(2,719)	(8)%
Realized Price per REO MT	$ 5,718	$ 11,636	$ (5,918)	(51)%	$ 7,152	$ 13,130	$ (5,978)	(46)%
Production Cost per REO MT	$ 2,020	$ 1,653	$ 367	22 %	$ 1,977	$ 1,661	$ 316	19 %
Separated NdPr products								
NdPr Production Volume (MTs)	50	N/A	N/A	N/A	50	N/A	N/A	N/A
NdPr Sales Volume (MTs)	—	N/A	N/A	N/A	—	N/A	N/A	N/A

N/A = Not applicable as there was neither NdPr production nor sales volume in these periods.

REO Production Volume

We measure our REO-equivalent production volume for a given period in MTs, our principal unit of sale for our concentrate product. This measure refers to the REO content contained in the rare earth concentrate we produce and, beginning in the second quarter of 2023, includes volumes fed into downstream circuits for commissioning and starting up our separations facilities and for producing separated NdPr product, the latter of which is also included in our KPI, NdPr Production Volume. Our REO Production Volume is a key indicator of our mining and concentrate processing capacity and efficiency.

The rare earth concentrate is a processed, concentrated form of our mined rare earth-bearing ores. While our unit of production and sale is a MT of embedded REO, the actual weight of our rare earth concentrate is significantly greater, as the concentrate also contains non-REO minerals, loss-on-ignition, and residual moisture from the production process. We target REO content of greater than 60% per dry MT of concentrate (referred to as "REO grade"). The elemental distribution of REO in our concentrate is relatively consistent over time and production lot. We consider this the natural distribution, as it reflects the distribution of elements contained, on average, in our ore.

REO Sales Volume

Our REO Sales Volume for a given period is calculated in MTs. A unit, or MT, is considered sold once we recognize revenue on its sale as determined in accordance with generally accepted accounting principles in the United States ("GAAP"). Our REO Sales Volume is a key measure of our ability to convert our concentrate production into revenue. Our REO Sales Volume for the three and nine months ended September 30, 2023, included both traditional concentrate as well as roasted concentrate.

Realized Price per REO MT

We calculate the Realized Price per REO MT for a given period as the quotient of: (i) our rare earth concentrate sales, which are determined in accordance with GAAP, for a given period and (ii) our REO Sales Volume for the same period. Realized Price per REO MT is an important measure of the market price of our concentrate product. Historically, we used Total Value Realized, which was a non-GAAP financial measure defined as our rare earth concentrate sales (previously captioned as product sales) adjusted for the revenue impact of tariff rebates related to prior period sales, as the numerator in the calculation of Realized Price per REO MT. As we no longer expect to receive any additional tariff rebates, we no longer utilize Total Value Realized in the calculation of Realized Price per REO MT.

Production Cost per REO MT

We calculate the Production Cost per REO MT for a given period as the quotient of: (i) our Production Costs (see below) for a given period and (ii) our REO Sales Volume for the same period. We define Production Costs, which is a non-GAAP financial measure, as our cost of sales (excluding depletion, depreciation and amortization) less stock-based compensation expense included in cost of sales, shipping and freight costs, and costs not attributable to concentrate sales.

Production Cost per REO MT is a key indicator of our concentrate production efficiency. As a significant portion of our cash costs of Stage I production are fixed, our Production Cost per REO MT is influenced by mineral recovery, REO grade, plant feed rate and production uptime. See the "Non-GAAP Financial Measures" section below for a reconciliation of our Production Costs, which is a non-GAAP financial measure, to our cost of sales (excluding depletion, depreciation and amortization), which is determined in accordance with GAAP, as well as the calculation of Production Cost per REO MT.

NdPr Production Volume

We measure our NdPr Production Volume for a given period in MTs, our principal unit of sale for our NdPr separated products. NdPr Production Volume refers to the volume of finished and packaged NdPr oxide produced at Mountain Pass for a given period. NdPr Production Volume is a key indicator of our separating and finishing capacity and efficiency.

NdPr Sales Volume

Our NdPr Sales Volume for a given period is calculated in MTs and on an NdPr oxide-equivalent basis (see example below). A unit, or MT, is considered sold once we recognize revenue on its sale, whether sold as NdPr oxide or NdPr metal, as determined in accordance with GAAP. For NdPr metal sales, the MTs sold and included in NdPr Sales Volume are calculated on the basis of the volume of NdPr oxide used to produce such NdPr metal. For example, assuming a material conversion ratio of 1.25, a sale of 100 MTs of NdPr metal would be included in this KPI as 125 MTs of NdPr oxide-equivalent. NdPr Sales Volume is a key measure of our ability to convert our production of separated NdPr products into revenue.

We expect to have a mix of contracts with customers where we will sell NdPr as (i) oxide, (ii) metal, where the amount of oxide required to produce such metal is variable, and (iii) metal, where we have a guarantee of the amount produced and sold based on the amount of oxide consumed. Among other factors, differences between quarterly NdPr Production Volume and NdPr Sales Volume may be caused by the time required for the conversion of NdPr oxide to NdPr metal, including time in-transit.

Factors Affecting Our Performance

We believe we are uniquely positioned to capitalize on the key trends of electrification and supply chain security, particularly as domestic EV production grows. Our continued success depends to a significant extent on our ability to take advantage of the following opportunities and meet the challenges associated with them.

Demand for REE

The key demand drivers for REE are a diverse array of growing end markets, including clean-energy and transportation technologies, consumer and medical applications, critical defense systems, and essential industrial infrastructure. Despite the current macroeconomic conditions, we continue to believe we benefit from the growth of the rare earth market, particularly the market for NdPr and permanent magnets, and from several demand tailwinds for REE. These include the trend toward electrification; geographic supply chain diversification, particularly in relation to China; the U.S. government initiatives to restore domestic supply of key minerals; and the increasing acceptance of environmental, social and governance mandates.

However, changes in technology could also drive down the use of REE, including NdPr, in the components in which they are now used, or lead to a decline in reliance on such components altogether. Such actual, or perceived, decreases in demand for REE, could result in a decline in the market price of REE, including NdPr, and/or result in pricing volatility. We also operate in a competitive industry, and many of our key competitors are based in China, where competitors may not be subject to the same rigorous environmental standards and production costs are typically lower than in the U.S.

Maximizing Production Efficiency

Since the implementation of our Stage I optimization plan and the achievement of commercial production on July 1, 2019, our quarterly REO Production Volume has exceeded 8,500 MTs, and we have achieved at least 10,000 MTs of REO Production Volume every quarter since the second quarter of 2021. These results were achieved by optimizing the reagent scheme, reducing process temperatures, improving tailings facility management, and committing to operational excellence, which has allowed us to sustain approximately 95% uptime. Our Stage I optimization plan enabled us to achieve what we believe to be world-class production cost levels for rare earth concentrate.

The success of our business reflects our ability to continue to manage our costs. Our production achievements in Stage I have provided economies of scale to lower production costs per MT of REO produced in concentrate. Furthermore, we designed our Stage II process flow to capitalize on the inherent advantages of the bastnaesite ore at Mountain Pass, that is well-suited to low-cost refining by selectively eliminating the need to carry cerium, a lower-value mineral, through the separations process. Additionally, our location offers transportation advantages that create meaningful cost efficiencies in securing incoming supplies and shipping of our final products.

We currently operate a single site in a single location, and any stoppage in activity, including for reasons outside of our control, could adversely impact our production, results of operations and cash flows. In addition, several of our current and potential competitors are government supported and may have access to substantially more capital, which may allow them to make similar or greater efficiency improvements or undercut market prices for our product.

Development of Our REE Refining, Metal Alloy, and Magnet-Making Capabilities

Stage II advances our operations from the production of rare earth concentrate to the separation of individual REE. The project incorporated upgrades and enhancements to the prior facility process flow to reliably produce separated REE at a low cost and with the intent of minimizing our impact on the environment. More specifically, we have reintroduced an oxidizing roasting circuit, reoriented portions of the plant process flow, increased product finishing capacity, improved wastewater management, and made other improvements to materials handling and storage. During the third quarter of 2023, we began producing separated rare earth products. We expect that it may take up to several quarters to achieve our designed throughput of separated products. As we increase production of separated products over time, we expect to improve our per-unit costs of NdPr oxide, which represents a majority of the value contained in our concentrate.

Partially supported by a $35.0 million award from the Department of Defense's Office of Industrial Base Policy, Industrial Base Analysis and Sustainment program, we are currently advancing the facilitating works, engineering and procurement on a processing and separations facility for heavy rare earth elements ("HREE") (the "HREE Facility"), which will be built at Mountain Pass and will be integrated into the rest of our Stage I and Stage II facilities. The HREE Facility is expected to support the separating of HREE contained in the Mountain Pass ore as well as from third-party feedstocks.

In addition, we are constructing the Fort Worth Facility, and developing engineering and manufacturing technology to process NdPr oxide into metal alloys and magnets, while incorporating magnet recycling capabilities. These initiatives support our long-term plans to become a leading global source for rare earth magnets. We believe integration into magnet production will provide some protection from commodity pricing volatility, while also enhancing our business profile as the producer of a critical industrial output in addition to a producer of resources. We expect our Stage III efforts to continue to benefit from geopolitical developments, including initiatives to repatriate critical materials supply chains.

Our Mineral Reserves

Our ore body has proven over more than 60 years of operations to be one of the world's largest and highest-grade rare earth resources. As of December 31, 2022, SRK Consulting (U.S.), Inc., an independent consulting firm that we retained to assess our reserves, estimated total proven and probable reserves of 1.96 million short tons of REO contained in 29.30 million short tons of ore at Mountain Pass, with an average ore grade of 6.32%. These estimates use an estimated economical cut-off of 2.49% total rare earth oxide. Based on these estimated reserves and our expected annual production, our expected mine life was approximately 34 years as of December 31, 2022. Over time, we expect to be able to continue to grow our expected mine life through additional exploratory drilling and improved processing capabilities, which may result in changes to various assumptions underlying our mineral reserve estimate.

Mining activities in the U.S. are heavily regulated, particularly in California. Regulatory changes may make it more challenging for us to access our reserves. In addition, new mineral deposits may be discovered elsewhere, which could make our operations less competitive.

Results of Operations

Comparison of the Three and Nine Months Ended September 30, 2023 and 2022

The following table summarizes our results of operations:

	For the three months ended September 30,		Change		For the nine months ended September 30,		Change	
(in thousands, except percentages)	**2023**	**2022**	**$**	**%**	**2023**	**2022**	**$**	**%**
Revenue:								
Rare earth concentrate	$ 52,472	$ 124,231	$ (71,759)	(58)%	$ 212,139	$ 425,169	$ (213,030)	(50)%
Other rare earth products	44	214	(170)	(79)%	101	9,096	(8,995)	(99)%
Total revenue	52,516	124,445	(71,929)	(58)%	212,240	434,265	(222,025)	(51)%
Operating costs and expenses:								
Cost of sales[1]	22,217	22,417	(200)	(1)%	69,137	67,682	1,455	2 %
Selling, general and administrative	19,561	17,722	1,839	10 %	57,829	56,150	1,679	3 %
Advanced projects, start-up, development and other	10,209	2,625	7,584	289 %	25,711	6,212	19,499	314 %
Depreciation, depletion and amortization	16,751	2,096	14,655	699 %	37,076	12,763	24,313	190 %
Accretion of asset retirement and environmental obligations	227	418	(191)	(46)%	681	1,255	(574)	(46)%
Loss on disposals of long-lived assets, net	1,087	—	1,087	N/M	5,897	258	5,639	N/M
Total operating costs and expenses	70,052	45,278	24,774	55 %	196,331	144,320	52,011	36 %
Operating income (loss)	(17,536)	79,167	(96,703)	N/M	15,909	289,945	(274,036)	(95)%
Interest expense, net	(1,396)	(1,224)	(172)	(14)%	(4,147)	(4,455)	308	7 %
Other income, net	14,456	6,168	8,288	134 %	41,970	8,574	33,396	390 %
Income (loss) before income taxes	(4,476)	84,111	(88,587)	(105)%	53,732	294,064	(240,332)	(82)%
Income tax benefit (expense)	200	(20,934)	21,134	N/M	(13,166)	(72,067)	58,901	82 %
Net income (loss)	$ (4,276)	$ 63,177	$ (67,453)	N/M	$ 40,566	$ 221,997	$ (181,431)	(82)%
Adjusted EBITDA[2]	$ 15,551	$ 91,372	$ (75,821)	(83)%	$ 101,202	$ 333,581	$ (232,379)	(70)%
Adjusted Net Income[2]	$ 7,026	$ 68,119	$ (61,093)	(90)%	$ 75,376	$ 241,771	$ (166,395)	(69)%

N/M = Not meaningful.

(1) Excludes depreciation, depletion and amortization.

(2) Non-GAAP financial measures are defined and reconciled to the most directly comparable GAAP financial measures in the "Non-GAAP Financial Measures" section below.

Revenue consists primarily of sales of rare earth concentrate, including roasted concentrate, principally to Shenghe under the amended and restated offtake agreement ("A&R Offtake Agreement") for sales between January 2022 and February 2022, or the Offtake Agreement for sales beginning in March 2022. The sales price of rare earth concentrate sold to Shenghe under both agreements is based on an agreed-upon price per MT, subject to certain quality adjustments depending on the measured characteristics of the product, with an adjustment for the ultimate market price of the product realized by Shenghe upon sales to their customers, including the impact of changes in the exchange rate between the Chinese Yuan and the U.S. dollar.

The decreases in rare earth concentrate sales for the three and nine months ended September 30, 2023, as compared to the respective prior year periods, were driven by lower Realized Price per REO MT, which decreased by 51% and 46%, respectively, when compared to the respective prior year periods, as well as lower REO Sales Volume, which decreased by 14% and 8%, respectively, when compared to the respective prior year periods.

Realized Price per REO MT for the three and nine months ended September 30, 2023, reflects a significantly softer pricing environment for rare earth products, as compared to the prior year periods when pricing peaked in the first and second quarter of 2022. As noted above in the "Factors Affecting our Performance" section, market prices for rare earth products may be volatile due to actual or perceived changes in supply or demand. The decreases in REO Sales Volume for the three and nine months ended September 30, 2023, were due to the start-up of Stage II operations. A significant portion of the REO produced, which could otherwise have been sold as rare earth concentrate, was used to charge the Stage II circuits, establish separations work-in-process inventory, or produce packaged and finished separated rare earth products.

Historically, given our take-or-pay offtake arrangement with Shenghe, our REO Sales Volume has generally tracked our REO Production Volume over time despite period-to-period differences caused by the timing of shipments. However, as we ramp up production of separated rare earth materials, we expect that significant volumes of REO produced from Stage I operations will be retained for separation and not sold as concentrate. In addition, a significant portion of the contained cerium in the REO produced will be intentionally rejected and may not result in finished product. Accordingly, as evidenced in the third quarter of 2023, we expect that REO Sales Volume will be significantly lower than REO Production Volume. See also the "Quarterly Performance Trend" section below.

The decrease in other rare earth product sales for the nine months ended September 30, 2023, as compared to the prior year period, was driven by $8.5 million of revenue related to a sales agreement with Shenghe entered into in March 2022 for certain stockpiles of rare earth fluoride.

Cost of sales (excluding depreciation, depletion and amortization) consists of production- and processing-related labor costs (including wages and salaries, benefits, and bonuses), mining and processing supplies (such as reagents), parts and labor for the maintenance of our mining fleet and processing facilities, other facilities-related costs (such as property taxes and utilities), packaging materials, and shipping and freight costs.

Cost of sales for the three months ended September 30, 2023, remained relatively flat year over year, primarily due to an increase in Production Cost per REO MT of $367 or 22%, offset by a decrease in REO Sales Volume and $1.9 million in lower shipping and freight costs, which are included in cost of sales but excluded from Production Cost per REO MT. The increase in Production Cost per REO MT was driven by higher payroll costs, including the increase in employee headcount to support the expansion of operations, and to a lesser extent, higher materials and supplies costs. Shipping and freight costs decreased primarily due to year-over-year declines in trucking rates and diesel fuel prices.

Cost of sales for the nine months ended September 30, 2023, increased year over year, primarily due to an increase in Production Cost per REO MT of $316 or 19%, which was driven by higher payroll costs, including the increase in employee headcount to support the expansion of operations, and to a lesser extent, higher materials and supplies costs. The increase in cost of sales was partially offset by $4.4 million in lower shipping and freight costs for the nine months ended September 30, 2023, as compared to the prior year period, primarily due to year-over-year declines in trucking rates and diesel fuel prices. Production Cost per REO MT varies period to period based on the timing of scheduled outages of our production facilities for maintenance. See also the "Quarterly Performance Trend" section below.

Selling, general and administrative expenses consist primarily of accounting, finance and administrative personnel costs, including stock-based compensation expense related to these personnel; professional services (including legal, regulatory, audit and others); certain engineering expenses; insurance, license and permit costs; facilities rent and other costs; office supplies; general facilities expenses; and certain environmental, health, and safety expenses.

Selling, general and administrative expenses increased by $1.8 million, or 10% for the three months ended September 30, 2023 and by $1.7 million, or 3% for the nine months ended September 30, 2023, as compared to the respective prior year periods. The increases in selling, general and administrative expenses were primarily due to higher personnel costs (other than stock-based compensation expense), which increased by $2.1 million and $4.9 million, respectively, along with other general and administrative costs required to further build out our corporate infrastructure in support of our downstream expansion. The increases in selling, general and administrative expenses were partially offset by $1.7 million and $7.1 million decreases in stock-based compensation expense for the three and nine months ended September 30, 2023, respectively, when compared to the respective prior year periods, due primarily to the timing of grants and the recognition of stock-based compensation on an accelerated basis for virtually all of our stock awards.

Advanced projects, start-up, development and other consists principally of start-up costs associated with restarting an existing facility or commissioning a new facility, circuit or process of our production, manufacturing, or separations facilities prior to achievement of commercial production; costs incurred in connection with research and development of new processes or to significantly enhance our existing processes; as well as costs incurred to support growth initiatives or pursue other opportunities.

Advanced projects, start-up, development and other for the three and nine months ended September 30, 2023, increased year over year by $7.6 million and $19.5 million, respectively, which was primarily driven by $5.9 million and $12.3 million, respectively, in higher start-up costs, that predominantly relate to certain costs that do not qualify for capitalization, such as salaries and wages, outside services, parts, and training, used or consumed directly in the commissioning and starting up of our Stage II circuits and facilities that were not yet in commercial production. The remaining increases primarily relate to costs incurred to support growth initiatives or pursue other opportunities.

Depreciation, depletion and amortization primarily consists of depreciation of property, plant and equipment and depletion of mineral rights. The year-over-year increase in depreciation, depletion and amortization for the three and nine months ended September 30, 2023, primarily reflects an increase in depreciation of $14.6 million and $24.7 million, respectively, resulting from the continued placement of new circuits and facilities associated with our Stage II optimization project into service, which began at the end of the fourth quarter of 2022.

Accretion of asset retirement and environmental obligations is based on the estimated future cash flows required to reclaim certain land areas associated with mineral extraction activities and certain related facilities at Mountain Pass and to monitor groundwater contamination, respectively. Accretion of asset retirement and environmental obligations for the three and nine months ended September 30, 2023, decreased year over year primarily as a result of a decrement to our asset retirement obligation during the third quarter of 2022, which reduced the accretion of our asset retirement obligation in subsequent periods.

Loss on disposals of long-lived assets, net consists of gains or losses on the disposals of property, plant and equipment, as well as demolition costs. The year-over-year increase in loss on disposals of long-lived assets, net, for the three and nine months ended September 30, 2023, principally relates to demolition costs incurred in connection with demolishing and removing certain out-of-use older facilities and infrastructure from the Mountain Pass site to accommodate future expansion in rare earth processing.

Interest expense, net principally consists of expense associated with the 0.25% per annum interest rate and amortization of the debt issuance costs on our Convertible Notes (as defined in the "Liquidity and Capital Resources" section below) and amortization of the discount on a previous debt obligation to Shenghe, offset by capitalized interest. Interest expense, net for the nine months ended September 30, 2023, decreased year over year due to the full repayment of the debt obligation to Shenghe in the first quarter of 2022.

Other income, net consists of interest and investment income and non-operating gains or losses. Other income, net for the three and nine months ended September 30, 2023, increased year over year as a result of interest and investment income earned on our short-term investments, which were purchased starting in the second quarter of 2022. Interest and investment income is principally generated from accretion of the discount on such investments.

Income tax expense consists of an estimate of U.S. federal and state income taxes in the jurisdictions in which we conduct business, adjusted for federal, state and local allowable income tax benefits, the effect of permanent differences and any valuation allowance against deferred tax assets. The effective tax rate (income tax expense as a percentage of income before income taxes) was 4.5% and 24.5% for the three and nine months ended September 30, 2023, respectively, as compared to 24.9% and 24.5% for the three and nine months ended September 30, 2022, respectively. The effective tax rate for the three and nine months ended September 30, 2023, differed from the statutory tax rate of 21% primarily due to state income tax expense and a deduction limitation on officers' compensation, offset by the Section 45X Advanced Manufacturing Production Credit

and the California Competes Tax Credit ("CCTC"). The effective tax rate for the three and nine months ended September 30, 2022, differed from the statutory tax rate of 21% primarily due to state income tax expense and a deduction limitation on officers' compensation, partially offset by the CCTC.

On August 16, 2022, the U.S. government enacted the Inflation Reduction Act of 2022 which, among other things, implements a 15% minimum tax on book income of certain large corporations, a 1% excise tax on net stock repurchases, and provides several tax incentives to promote clean energy for tax years beginning after December 31, 2022. We do not expect the minimum tax or excise tax to have a material impact on our unaudited Condensed Consolidated Financial Statements. We expect to benefit from the Section 45X Advanced Manufacturing Production Credit, which provides a credit equal to 10% of the costs incurred with respect to the production and sale of certain critical minerals, including NdPr oxide.

Quarterly Performance Trend

While our business is not highly seasonal in nature, we sometimes experience a timing lag between production and sales, which may result in volatility in our results of operations between periods. In addition, quarterly production is impacted by the timing of scheduled outages of our production facilities for maintenance, which typically occur in the second and fourth quarters. Finally, starting in the third quarter of 2023, as we ramp up production of separated rare earth materials, we expect that significant volumes of REO produced will be retained for separation and not sold as concentrate.

As noted above, as we evolve as a business and transition from a producer of rare earth concentrate to a producer of separated rare earth products, the metrics that management anticipates using to evaluate the business may change or be revised.

The following table presents our KPIs for the quarterly periods indicated:

	FY2023			FY2022				FY2021	
(in whole units or dollars)	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Rare earth concentrate									
REO Production Volume (MTs)	10,766	10,863	10,671	10,485	10,886	10,300	10,828	10,261	11,998
REO Sales Volume (MTs)	9,177	10,271	10,215	10,816	10,676	10,000	11,706	9,674	12,814
Realized Price per REO MT	$ 5,718	$ 6,231	$ 9,365	$ 8,515	$ 11,636	$ 13,918	$ 13,818	$ 10,101	$ 7,693
Production Cost per REO MT	$ 2,020	$ 1,938	$ 1,978	$ 1,928	$ 1,653	$ 1,750	$ 1,594	$ 1,525	$ 1,449
Separated NdPr products									
NdPr Production Volume (MTs)	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NdPr Sales Volume (MTs)	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A = Not applicable as there was neither NdPr production nor sales volume in these periods.

Liquidity and Capital Resources

Liquidity refers to our ability to generate sufficient cash flows to meet the cash requirements of our business operations, including working capital and capital expenditure needs, contractual obligations, debt service and other commitments. In recent years, our principal sources of liquidity have been financing through the consummation of the business combination with Fortress Value Acquisition Corp. in November 2020, the issuance of the Convertible Notes in March 2021, and net cash from operating activities. As of September 30, 2023, we had $1,084.7 million of cash, cash equivalents and short-term investments and $690.0 million principal amount of long-term debt.

Our results of operations and cash flows depend in large part upon the market prices of REO and particularly the price of rare earth concentrate. Rare earth concentrate is not quoted on any major commodities market or exchange and demand is currently constrained to a relatively limited number of refiners, a significant majority of which are based in China. Although we believe that our cash flows from operations and cash on hand are adequate to meet our liquidity requirements for the foreseeable future, uncertainty exists as to the market price of REO, as evidenced by the volatility experienced in 2022, especially in light of the COVID-19 pandemic, including the emergence of new and potential future variants. Volatility in the market price of REO has continued in 2023 due to concerns over the global economic conditions and actual or perceived concerns over increases in the supply of and/or decreases in demand for rare earth products.

Our current working capital needs relate mainly to our mining and beneficiation operations. However, as we transition to selling separated rare earth products, and advance our Stage III magnetics initiatives, we anticipate our working capital needs will continue to increase. With our Stage II optimization project substantially complete, our principal capital expenditure requirements relate mainly to developing the HREE Facility, further investing in Mountain Pass, and constructing the Fort

Worth Facility, as well as periodic repairs and maintenance of mining and rare earth processing equipment. Our future capital requirements will also depend on several other factors, including future acquisitions and potential additional investments in further downstream production.

The completion of our mission to become a fully integrated domestic magnetics producer is expected to be capital intensive. In accelerating the strategic opportunity for the separation of HREE, enhancements were made to the initial scope of the Stage II project. Including these enhancements and other factors impacting the remaining cost of completion and including certain early design and procurement costs associated with the HREE Facility, and the development and construction costs of the Fort Worth Facility, as well as other growth and infrastructure investments at Mountain Pass, we expect to spend up to approximately $270 million of capital costs in 2023. We expect to incur further costs for the HREE Facility and the Fort Worth Facility in 2024, in addition to investing in other growth and maintenance projects.

Our estimated costs or estimated time to complete and commission these projects may increase, potentially significantly, due to factors outside of our control. While we believe that we have sufficient cash resources to fund these initiatives and operating working capital in the near term, we cannot assure this. If our available resources prove inadequate to fund our plans or commitments, we may be forced to revise our strategy and business plans or could be required, or elect, to seek additional funding through public or private equity or debt financings; however, such funding may not be available on terms acceptable to us, if at all. Any delays in our ongoing capital projects or substantial cost increases, including construction costs and related materials costs related to their execution, could significantly impact our ability to maximize our revenue opportunities and adversely impact our business and cash flows.

Debt and Other Long-Term Obligations

Convertible Notes: In March 2021, we issued $690.0 million aggregate principal amount of 0.25% unsecured green convertible senior notes that mature, unless earlier converted, redeemed or repurchased, on April 1, 2026 (the "Convertible Notes"), at a price of par. Interest on the Convertible Notes is payable on April 1st and October 1st of each year, beginning on October 1, 2021.

The Convertible Notes are convertible into shares of our common stock at an initial conversion price of $44.28 per share, or 22.5861 shares, per $1,000 principal amount of notes, subject to adjustment upon the occurrence of certain corporate events. However, in no event will the conversion price exceed 28.5714 shares of common stock per $1,000 principal amount of notes.

We aim to allocate an amount equal to the net proceeds from the Convertible Notes offering to existing or future investments in, or the financing or refinancing of, eligible "green projects." Eligible green projects are intended to reduce our environmental impact and/or enable the production of low-carbon technologies. Pending such allocation of the net proceeds to eligible green projects, we may use the net proceeds from the Convertible Notes offering for general corporate purposes.

Equipment Notes: We have previously entered into several financing agreements for the purchase of equipment, including trucks, tractors, loaders, graders, and various other machinery. As of September 30, 2023, we had $5.3 million in principal (and accrued interest) outstanding under the equipment notes.

Leases: We have lease arrangements for certain equipment and facilities, including office space, vehicles and equipment used in our operations. As of September 30, 2023, we had future expected lease payment obligations totaling $10.5 million, with $0.9 million due within the next 12 months. See Note 9, "Leases," in the notes to the unaudited Condensed Consolidated Financial Statements for further information.

Asset Retirement and Environmental Obligations: See Note 7, "Asset Retirement and Environmental Obligations," in the notes to the unaudited Condensed Consolidated Financial Statements for our estimated cash requirements to settle asset retirement and environmental obligations.

Cash Flows

The following table summarizes our cash flows:

(in thousands, except percentages)	For the nine months ended September 30, 2023	2022	Change $	Change %
Net cash provided by (used in):				
Operating activities	$ 76,480	$ 314,419	$ (237,939)	(76)%
Investing activities	$ 337,831	$ (1,041,727)	$ 1,379,558	N/M
Financing activities	$ (8,577)	$ (19,435)	$ 10,858	(56)%

N/M = Not meaningful.

Net Cash Provided by Operating Activities: Net cash provided by operating activities decreased by $237.9 million for the nine months ended September 30, 2023, as compared to the prior year period, reflecting a decrease in revenue, an increase in inventories to support our Stage II separations facilities as well as our Stage III initiatives, and a $6.3 million increase in cash paid for income taxes, as compared to the prior year period. The decrease in net cash provided by operating activities was partially offset by a $19.9 million increase in interest received on our short-term investments and money market funds for the nine months ended September 30, 2023, as compared to the prior year period. In addition, $13.6 million of our revenue was excluded from cash provided by operating activities for the nine months ended September 30, 2022, since that portion of the sales price was retained by Shenghe to reduce the debt obligation, with no similar amount in the current year period.

Net Cash Provided by (Used in) Investing Activities: Net cash provided by investing activities was $337.8 million for the nine months ended September 30, 2023, compared to net cash used in investing activities of $1,041.7 million in the prior year period. The change related primarily to $705.1 million in higher gross sales and maturities of short-term investments, coupled with $653.1 million in lower purchases of short-term investments when compared to the prior year period. Additions to property, plant and equipment for the nine months ended September 30, 2023, decreased by $25.4 million when compared to the prior year period, and related primarily to construction spend on our Stage II optimization project, the Fort Worth Facility, and the HREE Facility.

Net Cash Used in Financing Activities: Net cash used in financing activities decreased by $10.9 million for the nine months ended September 30, 2023, as compared to the prior year period, reflecting lower tax withholding on stock-based awards and lower principal payments on debt obligations and finance leases, principally due to a $2.9 million payment to Shenghe in the prior year period to fully satisfy the debt obligation.

Non-GAAP Financial Measures

We present Adjusted EBITDA, Adjusted Net Income, Adjusted Diluted EPS, Production Costs, and Free Cash Flow, which are non-GAAP financial measures that we use to supplement our results presented in accordance with GAAP. These measures may be similar to measures reported by other companies in our industry and are regularly used by securities analysts and investors to measure companies' financial performance. Adjusted EBITDA, Adjusted Net Income, Adjusted Diluted EPS, Production Costs, and Free Cash Flow are not intended to be substitutes for any GAAP financial measures and, as calculated, may not be comparable to other similarly titled measures of performance or liquidity of other companies within our industry or in other industries. As noted above, we no longer utilize Total Value Realized since we do not expect to receive any additional tariff rebates, which we previously adjusted from our revenue as determined in accordance with GAAP.

Adjusted EBITDA

We calculate Adjusted EBITDA as our GAAP net income or loss before interest expense, net; income tax expense or benefit; and depreciation, depletion and amortization; further adjusted to eliminate the impact of stock-based compensation expense; start-up costs; transaction-related and other non-recurring costs; accretion of asset retirement and environmental obligations; gain or loss on disposals of long-lived assets; and other income or loss. We present Adjusted EBITDA because it is used by management to evaluate our underlying operating and financial performance and trends. Adjusted EBITDA excludes certain expenses that are required in accordance with GAAP because they are non-recurring, non-cash or are not related to our underlying business performance. This non-GAAP financial measure is intended to supplement our GAAP results and should not be used as a substitute for financial measures presented in accordance with GAAP.

The following table presents a reconciliation of our Adjusted EBITDA, which is a non-GAAP financial measure, to our net income (loss), which is determined in accordance with GAAP:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	2023	2022	2023	2022
Net income (loss)	$ (4,276)	$ 63,177	$ 40,566	$ 221,997
Adjusted for:				
Depreciation, depletion and amortization	16,751	2,096	37,076	12,763
Interest expense, net	1,396	1,224	4,147	4,455
Income tax expense (benefit)	(200)	20,934	13,166	72,067
Stock-based compensation expense[(1)]	6,298	7,806	19,041	25,019
Start-up costs[(2)]	7,082	1,383	15,474	3,703
Transaction-related and other non-recurring costs[(3)]	1,642	502	7,124	638
Accretion of asset retirement and environmental obligations	227	418	681	1,255
Loss on disposals of long-lived assets, net	1,087	—	5,897	258
Other income, net	(14,456)	(6,168)	(41,970)	(8,574)
Adjusted EBITDA	$ 15,551	$ 91,372	$ 101,202	$ 333,581

(1) Principally included in "Selling, general and administrative" within our unaudited Condensed Consolidated Statements of Operations.

(2) Relates to certain costs included in "Advanced projects, start-up, development and other" within our unaudited Condensed Consolidated Statements of Operations that do not qualify for capitalization incurred in connection with the initial commissioning and starting up of our separations capability at Mountain Pass and our metal alloy and magnet-making capabilities at Fort Worth prior to the achievement of commercial production. These costs include payroll of employees directly involved in such commissioning activities, training costs, costs of testing and commissioning the new circuits and processes, and other related costs. Given the nature and scale of the related costs and activities, management does not view these as normal, recurring operating expenses, but rather as non-recurring investments to develop such capabilities. Therefore, we believe it is useful and necessary for investors to understand our core operating performance in current and future periods by excluding the impact of these start-up costs.

(3) The majority of the amounts are included in "Advanced projects, start-up, development and other" within our unaudited Condensed Consolidated Statements of Operations, and pertain to legal, professional services, and other costs associated with non-recurring transactions.

Adjusted Net Income and Adjusted Diluted EPS

We calculate Adjusted Net Income as our GAAP net income or loss excluding the impact of stock-based compensation expense; start-up costs; transaction-related and other non-recurring costs; gain or loss on disposals of long-lived assets; and other items that we do not consider representative of our underlying operations; adjusted to give effect to the income tax impact of such adjustments; and the release of valuation allowance. We calculate Adjusted Diluted EPS as our GAAP diluted earnings or loss per share ("EPS") excluding the per share impact, using adjusted diluted weighted-average shares outstanding, of stock-based compensation expense; start-up costs; transaction-related and other non-recurring costs; gain or loss on disposals of long-lived assets; and other items that we do not consider representative of our underlying operations; adjusted to give effect to the income tax impact of such adjustments; and the release of valuation allowance. Adjusted Net Income and Adjusted Diluted EPS exclude certain expenses that are required in accordance with GAAP because they are non-recurring, non-cash, or not related to our underlying business performance. To calculate the income tax impact of such adjustments on a year-to-date basis, we utilize an effective tax rate equal to our income tax expense excluding material discrete costs and benefits, with any impacts of changes in effective tax rate being recognized in the current period. We present Adjusted Net Income and Adjusted Diluted EPS because it is used by management to evaluate our underlying operating and financial performance and trends. These non-GAAP financial measures are intended to supplement our GAAP results and should not be used as a substitute for financial measures presented in accordance with GAAP.

The following table presents a reconciliation of our Adjusted Net Income, which is a non-GAAP financial measure, to our net income (loss), which is determined in accordance with GAAP:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands)	2023	2022	2023	2022
Net income (loss)	$ (4,276)	$ 63,177	$ 40,566	$ 221,997
Adjusted for:				
Stock-based compensation expense[(1)]	6,298	7,806	19,041	25,019
Start-up costs[(2)]	7,082	1,383	15,474	3,703
Transaction-related and other non-recurring costs[(3)]	1,642	502	7,124	638
Loss on disposals of long-lived assets, net	1,087	—	5,897	258
Other	(1)	(23)	(42)	(247)
Tax impact of adjustments above[(4)]	(4,806)	(2,299)	(12,684)	(7,170)
Release of valuation allowance[(5)]	—	(2,427)	—	(2,427)
Adjusted Net Income	$ 7,026	$ 68,119	$ 75,376	$ 241,771

(1) Principally included in "Selling, general and administrative" within our unaudited Condensed Consolidated Statements of Operations.

(2) Relates to certain costs included in "Advanced projects, start-up, development and other" within our unaudited Condensed Consolidated Statements of Operations that do not qualify for capitalization incurred in connection with the initial commissioning and starting up of our separations capability at Mountain Pass and our metal alloy and magnet-making capabilities at Fort Worth prior to the achievement of commercial production. These costs include payroll of employees directly involved in such commissioning activities, training costs, costs of testing and commissioning the new circuits and processes, and other related costs. Given the nature and scale of the related costs and activities, management does not view these as normal, recurring operating expenses, but rather as non-recurring investments to develop such capabilities. Therefore, we believe it is useful and necessary for investors to understand our core operating performance in current and future periods by excluding the impact of these start-up costs.

(3) The majority of the amounts are included in "Advanced projects, start-up, development and other" within our unaudited Condensed Consolidated Statements of Operations, and pertain to legal, professional services, and other costs associated with non-recurring transactions.

(4) Tax impact of adjustments is calculated using an adjusted effective tax rate, which excludes the impact of discrete tax costs and benefits, to each adjustment. The adjusted effective tax rates were 29.8%, 26.7%, 23.8% and 24.4% for the three and nine months ended September 30, 2023 and 2022, respectively.

(5) Reflects the impact of a release of a portion of our valuation allowance.

The following table presents a reconciliation of our Adjusted Diluted EPS, which is a non-GAAP financial measure, to our diluted earnings (loss) per share, which is determined in accordance with GAAP:

	For the three months ended September 30,		For the nine months ended September 30,	
	2023	2022	2023	2022
Diluted earnings (loss) per share	$ (0.02)	$ 0.33	$ 0.22	$ 1.16
Adjusted for:				
Stock-based compensation expense	0.03	0.04	0.10	0.13
Start-up costs	0.04	0.01	0.08	0.02
Transaction-related and other non-recurring costs	0.01	—	0.04	—
Loss on disposals of long-lived assets, net	0.01	—	0.03	—
Tax impact of adjustments above[(1)]	(0.03)	(0.01)	(0.07)	(0.03)
Release of valuation allowance	—	(0.01)	—	(0.01)
Adjusted Diluted EPS	$ 0.04	$ 0.36	$ 0.40	$ 1.27
Diluted weighted-average shares outstanding[(2)]	177,231,717	193,409,857	193,632,662	193,438,939
Assumed conversion of restricted stock[(3)]	582,144	—	—	—
Assumed conversion of restricted stock units[(3)]	438,803	—	—	—
Adjusted diluted weighted-average shares outstanding[(2)(3)]	178,252,664	193,409,857	193,632,662	193,438,939

(1) Tax impact of adjustments is calculated using an adjusted effective tax rate, which excludes the impact of discrete tax costs and benefits, to each adjustment. The adjusted effective tax rates were 29.8%, 26.7%, 23.8% and 24.4% for the three and nine months ended September 30, 2023 and 2022, respectively.

(2) The Convertible Notes were antidilutive for both GAAP purposes and for purposes of calculating Adjusted Diluted EPS for the three months ended September 30, 2023.

(3) The assumed conversion of restricted stock and restricted stock units was antidilutive for GAAP purposes for the three months ended September 30, 2023. For purposes of calculating Adjusted Diluted EPS, we have added back the assumed conversion of restricted stock and restricted stock units since they would not be antidilutive when using Adjusted Net Income as the numerator in the calculation of Adjusted Diluted EPS.

Production Costs

Production Costs, which we use to calculate our KPI, Production Cost per REO MT, is a non-GAAP financial measure. Production Cost per REO MT is a key indicator of our concentrate production efficiency. As mentioned above, in completing the transition to separated rare earth products, we may determine that Production Cost per REO MT, which is a metric focused solely on Stage I concentrate operations, and consequently, Production Costs, are no longer meaningful in evaluating and understanding our business or operating results.

The following table presents a reconciliation of our Production Costs to our cost of sales (excluding depreciation, depletion and amortization), which is determined in accordance with GAAP, as well as the calculation of Production Cost per REO MT:

	For the three months ended September 30,		For the nine months ended September 30,	
(in thousands, unless otherwise stated)	**2023**	**2022**	**2023**	**2022**
Cost of sales (excluding depreciation, depletion and amortization)	$ 22,217	$ 22,417	$ 69,137	$ 67,682
Adjusted for:				
Stock-based compensation expense[1]	(842)	(889)	(2,759)	(2,110)
Shipping and freight	(1,867)	(3,796)	(6,150)	(10,548)
Other	(968)	(89)	(1,582)	(1,225)
Production Costs	18,540	17,643	58,646	53,799
Divided by:				
REO sales volume (in MTs)	9,177	10,676	29,663	32,382
Production Cost per REO MT (in dollars)	$ 2,020	$ 1,653	$ 1,977	$ 1,661

(1) Pertains only to the amount of stock-based compensation expense included in "Cost of sales" within our unaudited Condensed Consolidated Statements of Operations.

Free Cash Flow

We calculate Free Cash Flow as net cash provided by operating activities less additions to property, plant and equipment, net of proceeds from government awards used for construction. We believe Free Cash Flow is useful for comparing our ability to generate cash with that of our peers. The presentation of Free Cash Flow is not meant to be considered in isolation or as an alternative to cash flows from operating activities and does not necessarily indicate whether cash flows will be sufficient to fund cash needs.

The following table presents a reconciliation of our Free Cash Flow, which is a non-GAAP financial measure, to our net cash provided by operating activities, which is determined in accordance with GAAP:

	For the nine months ended September 30,	
(in thousands)	**2023**	**2022**
Net cash provided by operating activities[1]	$ 76,480	$ 314,419
Additions to property, plant and equipment, net[2]	(187,877)	(209,202)
Free Cash Flow	$ (111,397)	$ 105,217

(1) Under the terms of the A&R Offtake Agreement and pursuant to the accounting treatment thereof, $13.6 million of our revenue for the nine months ended September 30, 2022, was excluded from cash provided by operating activities since that portion of the sales price was retained by Shenghe to reduce the debt obligation.

(2) Amounts for the nine months ended September 30, 2023 and 2022, are net of $1.1 million and $5.1 million, respectively, in proceeds from government awards used for construction.

Critical Accounting Policies

A complete discussion of our critical accounting policies is included in our Form 10-K for the year ended December 31, 2022. There have been no significant changes in our critical accounting policies during the three months ended September 30, 2023.

Recently Adopted and Issued Accounting Pronouncements

Recently adopted and issued accounting pronouncements are described in Note 2, "Significant Accounting Policies," in the notes to the unaudited Condensed Consolidated Financial Statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in our market risk exposures for the three months ended September 30, 2023, as compared to those discussed in our Form 10-K for the year ended December 31, 2022.

ITEM 4. CONTROLS AND PROCEDURES

The Company's management, under the supervision and with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of September 30, 2023. Based on this evaluation, our principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures were effective as of September 30, 2023, to ensure that information required to be disclosed by the Company in reports we file or submit under the Exchange Act is (i) recorded, processed, summarized, evaluated and reported, as applicable, within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

There were no changes that occurred during the fiscal quarter covered by this Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may be subject to legal and governmental proceedings and claims in the ordinary course of business. We are not currently a party to any material legal or governmental proceedings, and, to our knowledge, none is threatened.

ITEM 1A. RISK FACTORS

The Company's business, reputation, results of operations and financial condition, as well as the price of the Company's common stock, can be affected by a number of factors, whether currently known or unknown, including those described in Part I, Item 1A. "Risk Factors" in our Form 10-K for the year ended December 31, 2022. When any one or more of these risks materialize from time to time, the Company's business, reputation, results of operations and financial condition, as well as the price of the Company's common stock, can be materially and adversely affected. There have been no material changes to the risk factors disclosed in our Form 10-K for the year ended December 31, 2022.

ITEM 4. MINE SAFETY DISCLOSURES

The 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 is included in Exhibit 95.1 to this Form 10-Q for the quarterly period ended September 30, 2023.

ITEM 5. OTHER INFORMATION

During the three months ended September 30, 2023, none of the Company's directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934) adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K of the Securities Act of 1933).

ITEM 6. EXHIBITS

Exhibit No.	Description
31.1*	CEO Certification pursuant to rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	CFO Certification pursuant to rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	CEO Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	CFO Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
95.1*	Mine Safety Disclosure pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Inline XBRL File (included in Exhibit 101).
*	Filed herewith.
**	Furnished herewith.

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.

MP MATERIALS CORP.

Dated: November 3, 2023

By: /s/ Ryan Corbett
Ryan Corbett
Chief Financial Officer