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

FORM 10-K

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

For the fiscal year ended June 30, 2024

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 001-41279

5E ADVANCED MATERIALS, INC.

(Exact name of Registrant as specified in its Charter)

Delaware	**87-3426517**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
9329 Mariposa Road, Suite 210 Hesperia, CA	**92344**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (442) 221-0225

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

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, $0.01 par value	**FEAM**	**The Nasdaq Global Select Market**

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

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

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

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

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

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

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

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

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

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

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately $54.9 million as of December 31, 2023 (based on the last reported sale price of such stock on the Nasdaq Global Select Market on that date).

As of September 6, 2024, the number of shares outstanding of the registrant's common stock was 68,826,797.

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Selected Definitions

- "5E Boron Americas" refers to 5E Boron Americas, LLC (f/k/a Fort Cady (California) Corporation).
- "ABR" refers to American Pacific Borates Limited, a company incorporated under the laws of Australia.
- "ASX" refers to the Australian Securities Exchange.
- "Board" refers to the 5E Advanced Materials, Inc. Board of Directors.
- "Bylaws" refers to the Amended and Restated Bylaws of 5E Advanced Materials, Inc.
- "CDI" refers to a CHESS Depositary Interest.
- "CERLA" refers to the Comprehensive Environmental Response, Compensation and Liability Act.
- "Certificate of Incorporation" refers to the Amended and Restated Certificate of Incorporation of 5E Advanced Materials, Inc.
- "Common Stock" refers to the Company's common stock, par value $0.01 per share.
- "Company" refers to 5E Advanced Materials, Inc., a Delaware corporation.
- "Corporations Act" refers to the Australian Corporations Act, 2001 (Cth).
- "EPA" refers to the U.S. Environmental Protection Agency.
- "EPC" refers to engineering, procurement and construction.
- "Exchange Act" refers to the Exchange Act of 1934, as amended.
- "FEL" refers to front end loading, a stage gated project management system (with a number to the corresponding stage, e.g., FEL-2.)
- "LCE" refers to lithium carbonate equivalents.
- "MST" refers to million short tons.
- "Nasdaq" refers to the Nasdaq Global Select Market.
- "PFS" refers to a Pre-feasibility Study.
- "ppm" refers to parts per million.
- "Project" refers to the 5E Boron Americas (Fort Cady) Complex.
- "Reorganization" refers to the transactions pursuant to which, among other things, we (i) issued (a) to eligible shareholders of ABR either one share of our Common Stock for every ten ordinary shares of ABR or one CDI over our Common Stock for every one ordinary share of ABR, in each case, as held on the Scheme record date and (b) to ineligible shareholders proceeds from the sale of the CDIs to which they would otherwise be entitled by a broker appointed by ABR, who sold the CDIs in accordance with the terms of a sale facility agreement and remitted the proceeds to ineligible shareholders, (ii) cancelled each of the outstanding options to acquire ordinary shares of ABR and issued replacement options representing the right to acquire shares of our Common Stock on the basis of a one replacement option for every ten existing ABR options held, (iii) maintained an ASX listing for its CDIs, with each CDI representing 1/10th of a share of Common Stock, (iv) delisted ABR's ordinary shares from the ASX, and (v) became the parent company to ABR.
- "Scheme" refers to a statutory Scheme of Arrangement under Australian law under Part 5.1 of the Corporations Act.
- "SEC" refers to the U.S. Securities and Exchange Commission.
- "Securities Act" refers to the Securities Act of 1933, as amended.
- "QPs" refers to Qualified Persons, as defined by SEC Regulation S-K 1300.

TRADEMARKS AND TRADE NAMES

This Annual Report on Form 10-K contains, and incorporates by reference, references to trademarks, service marks and trade names belonging to us or other entities. All trademarks, service marks and trade names included or incorporated by reference into this Annual Report on Form 10-K are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this Annual Report on Form 10-K or the documents incorporated by reference herein, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that the respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report and documents incorporated by reference herein may include statements that express our and our subsidiaries' opinions, expectations, beliefs, plans, goals objectives, assumptions or projections regarding future events or future financial performance and results, financial condition, business strategy, including certain projections, milestones, targets, business trends and other statements that are not historical facts. These statements constitute forward-looking statements within the meaning of the Safe Harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements can generally be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "seeks," "projects," "forecasts," "budgets," "targets," "aims," "intends," "plans," "may," "will," "should," "could," "would," "will be," "will continue," "will likely result" and similar expressions, and in each case including their negative or other variations of comparable terminology. However, not all forward-looking statements contain these identifying words. Forward-looking statements reflect management's expectations regarding our future growth, results of operations, operational and financial performance and business prospects and opportunities. Such forward-looking statements are based on available current market material and management's expectations, beliefs and forecasts concerning future events impacting our business.

The forward-looking statements in this Annual Report on Form 10-K are only predictions. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available. These forward-looking statements are subject to a number of known and unknown risks, uncertainties, assumptions, and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including risks described in the section titled "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

Other sections of this Annual Report on Form 10-K include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this report or to conform these statements to actual results or to changes in our expectations. You should read this Annual Report on Form 10-K and the documents that we reference or incorporate by reference in this Annual Report on Form 10-K and have filed as exhibits to this report with the understanding that our actual future results, levels of activity, performance, and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

SUMMARY RISK FACTORS

The following is a summary of the material risks and uncertainties we have identified, which should be read in conjunction with the more detailed description of each risk factor contained below.

Risks Related to Our Business

- There is substantial doubt regarding our ability to continue as a going concern.
- We will need to obtain additional financing to continue as a going concern and advance our development and operations.
- We have incurred significant net operating losses since our inception and anticipate the same for the foreseeable future.
- Our future performance is difficult to evaluate because we have no or only a limited operating history.
- If we do not obtain additional financing and maintain sufficient funds our business may be at risk.
- Our inability to successfully operate the SSF or complete further technical and economic studies may impact the Project.
- We have invested and plan to continue to invest significant amounts of capital in the Project.
- We have no history of mineral production.
- We may be unable to develop or acquire certain intellectual property required to implement our business strategy.
- Third parties may claim that we infringe on their proprietary intellectual property rights.
- All of our business activities are now in the exploration stage.
- We are an exploration stage company with no known Proven or Probable Mineral Reserves.
- Estimates relating to the development of the Project and mine plan are uncertain.
- We depend on a single mining project.
- Our long-term success will depend ultimately on our ability to achieve and maintain profitability.
- Our growth depends upon the continued growth in demand for end use for borates, lithium, and related minerals.
- Changes in technology or other developments could adversely affect demand for lithium.
- Our growth depends upon the continued growth in demand for electric vehicles.
- Our long-term success will depend on our ability to enter into and deliver product under supply agreements.
- If the estimates and assumptions we use for planning are inaccurate, our future growth rate may be adversely affected.
- The cost and availability of electricity and natural gas are subject to volatile market conditions.
- Uncertain global economic conditions could have a material adverse effect on our business.
- Our business could be affected by macroeconomic risks.
- Government efforts to combat inflation could lead to higher financing and Project completion costs.
- We are subject to strict laws governing business practices and non-compliance with such laws may be costly.
- Inadequate infrastructure may constrain our future mining operations.
- Title to mineral properties and related water rights is complex and there is a risk our properties may have title deficiencies.
- Restrictions on our ability to obtain, recycle and dispose of water may impact our ability to execute our operations.
- We are subject to various environmental, operational and land-use regulations that could affect our ability to grow.
- The mining industry is historically a cyclical industry and market fluctuations could adversely affect our business.
- Fluctuations in the value of the United States dollar relative to other currencies may adversely affect our business.
- We face risks relating to mining, exploration, and mine construction.
- Mineral exploration and development, such as our proposed operations, are subject to extraordinary risks.
- Our proposed facilities or operations could be adversely affected by natural or human causes outside of our control.
- A shortage of skilled technicians and engineers may further increase our operating costs.
- A shortage of equipment or disruption in our supply chain could adversely affect our ability to operate our business.
- Disruptions in production at our proposed facilities may have a material adverse impact on our business.
- Failure by our vendors or suppliers to use legal or ethical business practices may adversely affect our proposed business.
- Competition with and new production of borates, lithium, and other minerals could adversely affect our business.
- Industry consolidation may result in increased competition.

- We are subject to significant environmental and government regulations and compliance costs are significant.
- We may face increased costs and be subject to liability resulting from the generation and disposal of certain wastes.
- Land reclamation requirements may be burdensome on our financial position.
- The physical consequences of climate change could have a material adverse effect on our properties and operations.
- New climate-related disclosure obligations could result in additional costs of compliance, litigation or reputational risk.
- We are required to obtain, maintain, and renew governmental permits which is often costly and time-consuming.
- Litigation or arbitration proceedings may be commenced against us and adverse rulings may adversely affect our business.
- We are vulnerable to the risks associated with operating in a single geographic region.
- The operation or development of our facilities could be adversely affected by other parties.
- We plan to invest significant amounts of capital in a variety of exploration activities, which involve risk and uncertainty.
- Our future success depends on the continuing efforts of our management and key employees.
- We will need to increase the size of our organization and we may be unable to manage our growth effectively.
- Our directors and officers may in the future be in a position of a conflict of interest.
- The transition to new Chief Executive and Chief Financial Officers will be critical to our success and our business.
- We have experienced significant turnover in our senior management team.
- We may acquire additional businesses or assets, form joint ventures or make investments in other companies.
- Global economic instability, supply chain issues, inflation and fuel and energy costs may affect our business.
- We could be subject to information technology system failures, network disruptions, and breaches in data security.

Risks Relating to Our Common Stock and CDIs

- The market price and trading volume of our Common Stock and CDIs may be volatile.
- We incur significant costs as a result of being publicly traded in the United States and Australia.
- We incur increased costs and effort as a result of operating as a U.S. listed public company.
- An active trading market for our Common Stock and CDIs may not be sustained.
- We do not anticipate paying dividends and capital appreciation, if any, will be your sole source of gain.
- Securities or industry analysts may or may not publish research about our business, which may impact our trading value.
- We are an "emerging growth company" and "smaller reporting company" and have reduced disclosure requirements.
- Internal controls may not be designed correctly or fail affecting investor confidence in us.
- Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.
- Our Certificate of Incorporation and Bylaws may contain provisions unfavorable to our Common Stock and CDI holders.
- Raising additional capital could adversely affect the voting power or value of our Common Stock and CDIs.
- Nasdaq may de-list our securities from its exchange if we fail to comply with the continued listing standards, including as related to the price of our Common Stock.
- Sales by our existing shareholders can reduce the market price of our Common Stock and CDIs.
- We are a holding company and depend on our subsidiaries to generate cash to fund our operations and expenses.
- Our Bylaws restrict the forum in which shareholders may obtain a favorable judicial forum for disputes.

Risks Related to the Convertible Notes

- There are risks associated with our Convertible Notes that could adversely affect our business and financial condition.
- Servicing our debt requires a significant amount of cash.
- Our Convertible Notes are secured by a security interest in substantially all of our assets.
- Conversion of the Convertible Notes will dilute the ownership interest of our existing stockholders.
- We may require additional financing to sustain or grow our operations.

Risks Relating to our Reorganization

We may be unable to achieve some or all of the benefits that we expect to achieve from the Reorganization.

CAUTIONARY NOTE REGARDING RESERVES

Unless otherwise indicated, all mineral resource and reserve estimates included in this report have been prepared in accordance with, and are based on the relevant definitions set forth in, the SEC's Mining Disclosure Rules and Regulation S-K 1300 (each as defined below). Mining disclosure in the United States was previously required to comply with SEC Industry Guide 7 (the "SEC Industry Guide 7") under the Exchange Act. In accordance with the SEC's Final Rule 13-10570, Modernization of Property Disclosure for Mining Registrant, the SEC has adopted final rules, effective February 25, 2019, to replace SEC Industry Guide 7 with new mining disclosure rules (the "Mining Disclosure Rules") under sub-part 1300 (Title 17, Part 229, Items 601 and 1300 until 1305) of Regulation S-K ("Regulation S-K 1300") of the Securities Act. Regulation S-K 1300 replaces the historical property disclosure requirements included in SEC Industry Guide 7. Regulation S-K 1300 uses the Committee for Mineral Reserves International Reporting Standards ("CRIRSCO")-based classification system for mineral resources and mineral reserves and accordingly, under Regulation S-K 1300, the SEC now recognizes estimates of "Measured Mineral Resources," "Indicated Mineral Resources" and "Inferred Mineral Resources," and require SEC-registered mining companies to disclose in their SEC filings specified information concerning their mineral resources, in addition to mineral reserves. In addition, the SEC has amended its definitions of "Proven Mineral Reserves" and "Probable Mineral Reserves" to be substantially similar to international standards. The SEC Mining Disclosure Rules more closely align SEC disclosure requirements and policies for mining properties with current industry and global regulatory practices and standards, including the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, referred to as the "JORC Code." While the SEC now recognizes "Measured Mineral Resources," "Indicated Mineral Resources" and "Inferred Mineral Resources" under the SEC Mining Disclosure Rules, investors should not assume that any part or all of the mineral deposits in these categories will be converted into a higher category of mineral resources or into mineral reserves. Investors are also cautioned not to assume that any measured mineral resources, indicated mineral resources, or inferred mineral resources are guarantees of actual resource amounts or that such amounts will be economically or legally mineable.

The following terms, as defined in Regulation S-K 1300, apply within this report:

Measured Mineral Resource ("Measured" or "Measured Mineral Resource")	is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.
Indicated Mineral Resource ("Indicated" or "Indicated Mineral Resource")	is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.
Inferred Mineral Resource ("Inferred" or "Inferred Mineral Resource")	is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.
Probable Mineral Reserve ("Probable" or "Probable Mineral Reserve")	is the economically mineable part of an indicated and, in some cases, a measured mineral resource.

Proven Mineral Reserve ("Proven" or "Proven Mineral Reserve")	is the economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.

Incorporated by reference as Exhibit 96.1 to this filing is an amended and restated technical report, with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the "Amended Initial Assessment Report"). The purpose of the Amended Initial Assessment Report is to support the disclosure of mineral resource estimates for the Project, which is further described in the Business and Properties item of this report. The Amended Initial Assessment Reports was prepared in accordance with the SEC's Mining Disclosure Rules and Regulation S-K Subpart 1300 and Item 601(b)(96) (technical report summary).

UNLESS OTHERWISE EXPRESSLY STATED, NOTHING CONTAINED IN THIS FILING IS, NOR DOES IT PURPORT TO BE, A TECHNICAL REPORT SUMMARY PREPARED BY A QUALIFIED PERSON PURSUANT TO AND IN ACCORDANCE WITH THE REQUIREMENTS OF SUBPART 1300 OF SECURITIES EXCHANGE COMMISSION REGULATION S-K.

CAUTIONARY NOTE REGARDING EXPLORATION STAGE COMPANIES

We are an exploration stage company and do not currently have any known mineral reserves and cannot expect to have known mineral reserves unless and until an appropriate technical and economic study is completed for Fort Cady or any of our other properties that shows Proven or Probable Mineral Reserves as defined by Regulation S-K 1300. We currently do not have any Proven or Probable Mineral Reserves. There can be no assurance that Fort Cady or any of our other properties contains or will contain any such SEC-compliant Proven or Probable Mineral Reserves or that, even if such reserves are found, the quantities of any such reserves warrant continued operations or that we will be successful in economically recovering them.

CAUTIONARY NOTE REGARDING INDUSTRY AND MARKET DATA

This filing includes information concerning our industry and the markets in which we will operate that is based on information from various sources including public filings, internal company sources, various third-party sources and management estimates. Our management estimates regarding our position, share and industry size are derived from publicly available information and its internal research and are based on a number of key assumptions made upon reviewing such data and our knowledge of such industry and markets, which we believe to be reasonable. While we believe the industry, market and competitive position data included in this report is reliable and is based on reasonable assumptions, such data is necessarily subject to a high degree of uncertainty and risk and is subject to change due to a variety of factors, including those described in "Cautionary Note Regarding Forward-Looking Statements," "Summary Risk Factors," "Risk Factors" and elsewhere in this filing. These and other factors could cause results to differ materially from those expressed in the estimates included herein. We have not independently verified any data obtained from third-party sources and cannot assure you of the accuracy or completeness of such data.

PART 1

Items 1 and 2. Business and Properties

Overview

We are an exploration stage company focused on becoming a vertically integrated global leader and supplier of specialty boron and advanced boron derivative materials whose mission is to enable decarbonization, increase food security, and ensure domestic supply of critical materials. We hold 100% of the rights through ownership in the Project located in southern California, through our wholly owned subsidiary 5E Boron Americas. Our Project is underpinned by a mineral resource that includes boron and lithium, with the boron being contained in a conventional boron mineral known as colemanite. In 2022, our facility was designated as Critical Infrastructure by the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency. Our vision is to safely process boric acid and lithium carbonate through sustainable best practices to enable decarbonization, food security and domestic supply surety.

We hold 100% of the ownership rights in the Project through 5E Boron Americas. Through a multi-phased approach, we plan to develop the Project into a large-scale boron and lithium complex. The Project is based on a conventional colemanite deposit, which is a hydrated calcium borate mineral found in evaporite deposits, and we believe it is one of the largest known new conventional boron deposits globally. The deposit hosts a mineral resource from which we intend to extract and process into boric acid, boron advanced materials, lithium carbonate, and potentially other co-products on a commercial scale. These materials are scarce in resource, currently subject to supply risk as a large portion of their consumption in the United States is sourced from foreign producers and are essential for supporting critical industries. When the Project is successfully developed, we believe that we can become an important supplier helping to provide supply security for these materials in the United States. The importance of the Project and its mineral resource has been recognized by it being designated as Critical Infrastructure by the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency. The Project is also expected to serve as an important supply source of boric acid that we intend to process and develop into boron specialty and advanced materials over time.

Our Strengths

We believe the following key strengths will help us toward our goal of becoming an important supplier of boron specialty and advanced materials, complemented by lithium carbonate production capabilities:

Strategically Positioned to Benefit from Expected Substantial Demand Growth as Decarbonization Efforts Intensify and Future Facing Markets Develop. We are an exploration-stage company aiming to develop a materials resource of high-quality borates and other key materials, such as lithium, currently positioned as inputs into key technologies and industries that address climate change, support decarbonization, and support food and domestic security sectors. We believe factors such as government regulation and incentives and capital investments across industries will drive demand for end-use applications like solar and wind energy infrastructure, neodymium-ferro-boron magnets, lithium-ion batteries, and other critical material applications. We expect any such growth in demand to increase the need for borates and other advanced materials that we seek to produce. In addition, products with future facing applications, including in the semi-conductor, life sciences, aerospace, military and automotive markets, are also expected to drive demand growth. As a result of our broader focus on the boron specialty and advanced materials rather than specific end use applications, we believe we can be well-positioned to be an important domestic supplier to a number of different sectors benefiting from their expected growth.

Attractive Geographic Location with a Potential to Address Global Supply Challenges and National Security Concerns. Over the last three years, the United States has taken action to reinforce existing supply chains and access to critical materials, while working to secure the domestic supply. In February 2022, the Project was designated as Critical Infrastructure by the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency, which we believe is a testament to its potential importance as a U.S.-based source of boron, lithium and other materials. This designation supports our goal of playing an important role in providing critical materials domestically, while simultaneously addressing the currently challenged global supply chain. The global boron market is exposed to potential supply risks. There are currently only two major global suppliers (Eti Maden and Rio Tinto Borax) who together represent approximately 80-85% of total supply, with Eti Maden representing approximately 60% of global supply. Similarly, there are only a small number of domestic lithium carbonate suppliers today in the United States. The Project is located in Southern California and, if successfully commercialized, we expect it will have the ability to supply U.S. markets and industries with these two key materials, and thereby help reduce reliance on foreign sources. Our plans to develop U.S.-based downstream capabilities are similarly expected to allow us to onshore additional components of the overall boron supply chain that have historically been concentrated in Asia and other foreign regions.

Our Project is Based on one of the Largest Known New Conventional Boron Deposits in the World and Includes a Complementary Lithium Resource that has the Potential to Enable Us to Become an Important Participant in the U.S. Lithium Market. The Project deposit is a rare colemanite borate deposit, and we believe it is one of the largest known new deposits of colemanite globally. The Amended Initial Assessment Report estimates a combined 5.80 million short tons ("MST") of Measured Mineral Resource plus Indicated Mineral Resource at the Project of boric acid (H_3BO_3) and 141,000 short tons of lithium carbonate equivalent. The mineral

resource estimate also identified 8.17 million short tons of Inferred Mineral Resource of boric acid (H_3BO_3) and 166,000 short tons of lithium carbonate equivalent. Across the three mineral resource categories there is an estimated 13.97 million short tons of boric acid and 307,000 short tons of lithium carbonate equivalent using a 2% cut-off grade. We believe that the complementary lithium resource at the Project, if successfully developed, has the potential to enable us to become an important participant in the U.S. lithium market. We believe the size and quality of our Project resource also positions us to become a long-term supplier, if and when the site becomes operational.

We Believe Our Approach for Developing and Commercializing the Project, along with our Orientation towards Decarbonization-Enabling Materials and Industries can Position us Well to Focus On Sustainability Initiatives. We believe that the boron and lithium materials we plan on producing will support industries and applications that enable decarbonization and emission reduction, such as electric vehicles and green energy. These industries are important contributors to and supporters of the United Nations Sustainability Development Goals ("SDG's"), which include accelerating a net-zero future, promoting sustainable infrastructure, improving global nutrition and health as well as promoting innovation. Further, we believe that our extraction techniques will help us create a set of infrastructure that is aligned with the industries we plan on supporting. Our method of in-situ extraction is expected to source water from our hydrology wells while providing for closed loop water recycling which we expect will help reduce overall water consumption and provide for efficient energy management. In-situ extraction is also traditionally associated with less above ground land disturbance than traditional resource extraction methods, while using fewer fossil fuels. Given our early stage of development, we believe we have a unique opportunity to develop and grow our business and a potential sustainability advantage, including building a diverse Board and leadership team as well as creating strong corporate governance policies, in each case focused on sustainability matters. Our focus will be to have a positive impact on the prosperity of local communities by supporting job creation, providing specialized training, targeting local procurement and investment, all of which are important given the local community near the Project is designated an economic development zone by the State of California.

Our Strategy

Our strategy is founded on leveraging our large mineral resource, related proposed infrastructure project, project development and advanced materials expertise to develop a vertically integrated business focused on boron specialty and advanced materials, complemented by lithium production capabilities. We intend to continue to thoughtfully develop our business over time in a systematic manner. In September 2023, the EPA provided us with authorization to commence step-rate testing, a process where water is injected into the ore body which seeks to establish the porosity and measure the fracture gradient of the ore body, which forms a base-line parameter for operation of the wellfield. During the next month, we initiated and completed step-rate testing and submitted our results to EPA. During November 2023, the EPA provided authorization, after reviewing our step-rate testing results, to begin in-situ mining operations pursuant to an Underground Injection Control permit and in January 2024, we began well-field injection with acid and began extracting valuable minerals from the Project in the form of a Pregnant Leach Solution ("PLS"). In April 2024, we commenced commercial operations of the SSF, began to process the PLS and ultimately produced our first batch of boric acid from the SSF. We plan to continue to run the SSF to refine our operations, more effectively optimize detail engineering of our proposed large-scale complex, estimate capital expenditures required to build our proposed large-scale complex and to produce boric acid for customer qualification. Upon successful customer qualification, we plan to deliver larger volumes of boric acid from the SSF to customer production facilities for product validation. Concurrently with the planning for the commencement of commercial operation of the SSF, we selected Fluor Corporation ("Fluor") as our EPC service provider. The initial scope of Fluor's work will be to lead FEL-2 which will directly feed into the upgrading of the Company's current S-K 1300 technical document into a PFS, and ultimately to the construction of our proposed large-scale complex that we believe will provide us with the ability to commercially produce salable products including boric acid and lithium carbonate, while opportunistically developing downstream boron advanced material processing capabilities to extract greater value out of the boron supply chain.

Key elements of our strategy include:

Develop and Commercialize the Project to Produce an Economical and Secure Supply of Boron and Lithium and Focusing on a more Environmentally Friendly In-Situ Extraction Process as Compared to Traditional Mining. Our initial objective is to develop our Project's boron and lithium resource and achieve a commercial extraction volume of borates, lithium and other co-products safely and profitably with an aim to rely on a more environmentally friendly in-situ extraction process as compared to traditional mining. The SSF, which commenced operations in April 2023, is expected to serve as a foundation for future design, engineering, and cost optimization of our planned large-scale complex as well as provide samples for customer qualification and offtake. If and when the large-scale complex is fully operational, we believe that we can have an opportunity to be a long-term supplier of boric acid and lithium carbonate, and the Project can serve as an important internal supply source for our development of downstream specialty and advanced materials.

Establish Competitive Market Positions in High Value, High Margin Markets for Boron Specialty and Advanced Materials and Lithium that Address Decarbonization, Food Security, and production of Domestic Supply. We are seeking to establish competitive market positions in high value in use, high margin, and high technology boron specialty and advanced materials and lithium markets. We believe that as a result of the global push to address climate change and achieve decarbonization, as well as increasing challenges related to food security and geopolitical instability, key sectors such as electric vehicle manufacturing, clean energy infrastructure,

food and fertilizers, and domestic security, will experience significant growth in the future. As a result, these sectors are expected to require secure and substantial new supplies of key inputs such as boron and lithium to support their growth. Assuming the successful commercial completion of our large-scale complex, we believe we will have the opportunity to become one of the largest suppliers of boric acid and lithium carbonate in the domestic U.S. and international markets. Over time, we plan on developing downstream boron advanced materials capabilities to convert boric acid into boron advanced materials. These boron advanced materials may support higher technology applications across the fields of semi-conductors, life sciences, aerospace, military, energy and automotive markets and would allow us to extract greater value from our processes and supply chain. Downstream boron advanced materials capabilities may be developed over time through a combination of internal research and development, commercial partnerships or joint ventures with other organizations or research institutions, or via the acquisition of intellectual property related to processing and manufacturing.

Sign Offtake Agreements and Develop Commercial Partnerships to Expand High-Performance Boron and Lithium Product Capabilities and Embed Ourselves in Customer Supply Chains. As part of the commercialization plans for the Project, we plan on dedicating resources for marketing efforts to establish commercial offtake agreements for the sale of boric acid and lithium carbonate. We believe sales of these materials will support our strategy of achieving a durable revenue base, which can be used to fund subsequent incremental capacity plans and generate cash necessary for investments in downstream boron advanced materials capabilities. As we develop our downstream materials business, we plan to collaborate with customers and partners to support their development of high-performance applications in the areas of clean energy infrastructure, electric transportation, and high-grade fertilizers among other end uses. These commercial partnerships are expected to be an important element of embedding us within global supply chains and positioning us as an essential supplier of boron specialty and advanced materials. We intend to invest in research and development initiatives with an aim to support our customers' product development and create intellectual property for us.

Corporate History and Reorganization

American Pacific Borates Limited, our former parent company, was incorporated in October 2016 under the laws of Western Australia for the purpose of acquiring the rights in the Project from Atlas Precious Metals, Inc. The acquisition of Fort Cady (California) Corporation was completed in May 2017 and ABR's ordinary shares were subsequently admitted for official quotation on the ASX in July 2017.

We were incorporated in the State of Delaware on September 23, 2021, as a wholly owned subsidiary of ABR for the purposes of effecting the Reorganization (as defined herein).

We received all the issued and outstanding shares of ABR pursuant to a statutory Scheme of Arrangement under Part 5.1 of the Australian Corporations Act ("Scheme"). The Scheme was approved by ABR's shareholders at a general meeting of shareholders held on December 2, 2021. Following shareholder approval, the Scheme was approved by the Federal Court of Australia on February 24, 2022.

After completion of the Scheme, we listed our Common Stock on Nasdaq under the symbol "FEAM" on March 15, 2022 and de-listed ABR from the ASX on March 8, 2022.

Pursuant to the Reorganization, we issued to the shareholders of ABR either one share of our Common Stock for every ten ordinary shares of ABR or one CDI for every one ordinary share of ABR, in each case, as held on the Scheme record date. Eligible shareholders of ABR (those whose residence at the record date of the Scheme is in Australia, New Zealand, Canada, Hong Kong, Ireland, Papua New Guinea, Singapore, Malaysia, Thailand, or the United States) received CDIs by default. In order to receive Common Stock, eligible shareholders were required to complete and submit an election form to ABR's registry no later than 5:00 pm (AEDT) on March 2, 2022. Ineligible shareholders did not receive CDIs or shares of Common Stock but instead received the proceeds from the sale of the CDIs to which they would otherwise have been entitled by a broker appointed by ABR. The appointed broker sold the CDIs in accordance with the terms of a sale facility agreement and remitted the proceeds to ineligible shareholders. Additionally, we canceled each of the outstanding options to acquire ordinary shares of ABR and issued replacement options representing the right to acquire shares of our Common Stock on the basis of one replacement option for every ten existing ABR options held. We maintain an ASX listing for our CDIs, with each CDI representing 1/10th of a share of Common Stock. Holders of CDIs are able to trade their CDIs on the ASX and holders of shares of our Common Stock are able to trade their shares on Nasdaq.

Following completion of the Reorganization, ABR became a wholly owned subsidiary of 5E Advanced Materials, Inc.

SSF Update

The SSF is our smaller scale boron facility which serves as a foundation for future design, engineering, and cost optimization for our proposed large-scale complex as well as provide product for customer qualification and offtake. The SSF is an essential step in the overall Project development plan and is serving as our initial extraction and processing facility.

In September 2023, the EPA provided us with authorization to commence step-rate testing, a process where water is injected into the ore body which seeks to establish the porosity and measure the fracture gradient of the ore body. The outcome of the step-rate testing forms a base-line parameter for operation of the wellfield mining operations. Shortly after approval to conduct step-rate testing,

we initiated and completed the testing and submitted our results to EPA. During November 2023, the EPA provided authorization to begin in-situ mining operations pursuant to an Underground Injection Control permit and in January 2024, we began well-field injection and began extracting valuable minerals from the Project in the form of a Pregnant Leach Solution ("PLS"). In April 2024, we commenced commercial operations of the SSF, began to process the PLS through crystallization, and achieved our first batch of boric acid from the SSF. Before year-end, we began our customer qualification program by shipping kilogram samples to interested customers. The SSF is designed to initially produce up to 2,000 short tons of boric acid annually and targets initial production of lithium carbonate, with optionality built in to scale up to a run rate of 9,000 short tons and commensurate increased lithium and bi-product production with an incremental capital investment. Our operations team is currently working towards our next production target of three short tons of boric acid per day while we optimize product quality and production rates. The initial high-quality run-of-mine head grade of boric acid provided validation of our initial operational assumptions which we hope will facilitate discussions with stakeholders around funding options for the Phase 1 of the commercial facility and securing commercial contracts for our future products. We plan to continue to run the SSF to refine our operations, more effectively optimize detail engineering of our proposed large-scale complex, estimate capital expenditures required to build our proposed large-scale complex and to produce boric acid for customer qualification. Upon successful customer qualification, we plan to deliver larger volumes of boric acid from the SSF to customer production facilities for product validation.

Fort Cady

Our Amended Initial Assessment Report added further definition to our large boron resource and established the existence of a lithium mineral resource that we believe could provide us with potential lithium carbonate production. Due to the current favorable market backdrop and growing importance of critical materials, we continue to focus primarily on further defining our boron and lithium resources, and to work towards developing a large-scale boron and lithium complex for the extraction of boric acid, lithium carbonate, and other valuable bi-products. A focus on boron and lithium extraction and related end markets is aligned with our mission to become a global leader in enabling industries addressing decarbonization, food security, and production of domestic supply and our focus on high value in use materials and applications.

The SSF is serving as a foundation for future design, engineering, and cost optimization for our proposed large-scale complex. We believe that the successful commissioning of the SSF in 2024 was an important step to obtaining critical information that will help enable us to optimize the efficiency, output and economic profile of our proposed large-scale complex. As such, we expect to incorporate value engineering and cost structure optimization into the continued technical and economic analysis of the proposed large-scale complex. During January 2024, we selected Fluor Corporation ("Fluor") as the Company's EPC services provider, and they have begun to progress plans for the proposed large-scale complex processing plant, including defining infrastructure and detailed engineering. The initial scope of Fluor will be to lead FEL-2 which will directly feed into the upgrading of the Company's current S-K 1300 technical Initial Assessment Report into a PFS upon completion.

During the 2023 fiscal year, we released our Amended Initial Assessment Report, prepared in accordance with Regulation S-K 1300. We believe the report demonstrates a world-class resource, management's firm understanding and direction for the business, and a phased approach to scale production, which can position the company to achieve profitability, generate cash flow, and reduce risk. The Amended Initial Assessment Report includes a revised mineral resource estimate for boric acid and lithium carbonate, estimates for capital costs and operating expenses, and a bottoms-up economic analysis based on a phased approach to scaling production. The financial model for the economic analysis includes preliminary market studies and independent pricing forecasts for boric acid and lithium carbonate. As part of our Amended Initial Assessment Report, we engaged two external EPC firms to assist management with our capital cost estimate, which we utilized as the basis to stage a formal process to request proposals for detail design of the proposed large-scale complex, which was ultimately awarded to Fluor in January 2024.

The Amended Initial Assessment Report outlines three phases for the larger-scale facility:

- Phase 1 targets production of 90,000 short tons of boric acid and 1,100 short tons of lithium carbonate. Given the permitting hurdles and time to obtain final EPA approval and resource constraints in fiscal year 2024, we are now targeting to reach initial commercial production in the second half of calendar year 2026 or first half of calendar year 2027.
- Phase 2 and Phase 3 target incremental production increases of 180,000 short tons of boric acid and 2,200 short tons of lithium carbonate in each phase.
- Full operation includes 450,000 short tons of boric acid and 5,500 short tons of lithium carbonate per annum.

The initial capital cost estimate outlined in the technical report for Phase 1 is $288 million before contingency and owner's cost. With owner's cost and 25% contingency, Phase 1 capital is estimated at $373 million. With commercial operation of the SSF now underway, we will continue operating the facility to optimize costs, provide samples to future customers for qualification and offtake, and progress FEL-2 and ultimately FEL-3 engineering for the proposed large-scale complex. Completion of FEL-2 and FEL-3 engineering is expected to provide the necessary estimates to publish a final feasibility study and a construction decision for the proposed large-scale complex.

Competition

The mining industry is highly competitive. According to Global Market Insights, there were two major competitors in the borates industry, Rio Tinto Borates ("RTB") and Eti Maden, the latter of which is owned by the Turkish government. If we are successful in bringing the Project into production, we would be competing with those two large competitors in the borates industry, one global mining conglomerate and one state-owned enterprise, each of which we believe are generally well-funded and established. We, therefore, may be at a significant disadvantage in the course of obtaining materials, supplies, labor and equipment from time to time. Additionally, we are, and expect to continue to be, an insignificant participant in the business of mining exploration and development for the foreseeable future. According to Global Market Insights, together they supplied approximately 85% of global boron production demand which has led to a global duopoly, with Eti Maden alone having supplied approximately 60% of the world's recent demand.

Additionally, the lithium industry is highly competitive, and according to a Woods Mackenzie report, the market was dominated by Albemarle Corporation, Sociedad Quimica y Minera De Chile S.A., Jiangxi Gangfeng Lithium Co. Ltd., Tianqi Lithium Corp., and Livent Corporation, all of which we believe are generally well-funded and established.

When the Project is successfully developed and commercialized, the primary factors that we will be competing upon include, without limitation, the amount and quality of our material resource, the pricing of our products, and the quality of our customer support and service. Furthermore, prospective customers may consider additional factors such as the geographic location of our operations and the reputation of our business when compared to our competitors.

Customers

Because we have not yet begun production of mineral products, we currently do not have any binding supply agreements with customers. In June 2024, we began our customer qualification program with initial shipments of kilogram samples. We have multiple letters of intent to collaborate with various customers and are continuing to build our customer pipeline.

Governmental Regulation

We are subject to numerous and extensive federal, state and local laws, regulations, permits and other legal requirements applicable to the mining and mineral processing industry, including those pertaining to employee health and safety, air emissions, water usage, wastewater and stormwater discharges, air quality standards, greenhouse gas emissions, waste management, plant and wildlife protection, handling and disposal of hazardous and radioactive substances, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, the discharge of materials into the environment and groundwater quality and availability. Our business may be affected in varying degrees by government regulation such as restrictions on production, price controls, tax increases, expropriation of property, environmental and pollution controls or changes in conditions under which minerals may be marketed. An excess supply of certain minerals may exist from time to time due to lack of markets, restrictions on exports, and numerous factors beyond our control. These factors include market fluctuations and government regulations relating to prices, taxes, royalties, allowable production and importing and exporting minerals. These laws, regulations, permits and legal requirements have had, and will continue to have, a significant effect on our results of operations, earnings and competitive position.

Federal legislation and implementing regulations adopted and administered by the EPA, the Bureau of Land Management (the "BLM"), the Fish and Wildlife Service, including legislation such as the federal Clean Water Act ("CWA"), the Safe Drinking Water Act (the "SDWA"), the Clean Air Act, as amended (the "CAA"), the National Environmental Policy Act (the "NEPA"), CERCLA, and the Resource Conservation and Recovery Act (the "RCRA"), have a direct bearing on our proposed solution mining and processing operations. These federal initiatives are often administered and enforced through state agencies operating under parallel state statutes and regulations.

The CERCLA, and comparable state statutes, impose strict, joint and several liability on current and former owners and operators of sites and on persons who disposed of or arranged for the disposal of hazardous substances found at such sites. It is not uncommon for the government to file claims requiring clean-up actions, demands for reimbursement for government-incurred clean-up costs, or natural resource damages, or for neighboring landowners and other third parties to file claims for personal injury and property damage allegedly caused by hazardous substances released into the environment. The RCRA, and comparable state statutes, govern the disposal of solid waste and hazardous waste and authorize the imposition of substantial fines and penalties for noncompliance, as well as requirements for corrective actions. The CERCLA, RCRA, and comparable state statutes can impose liability for clean-up of sites and disposal of substances found on exploration, mining and processing sites long after activities on such sites have been completed.

The CAA restricts the emission of air pollutants from many sources, including processing activities. Any future processing operations by us may produce air emissions, including fugitive dust and other air pollutants from stationary equipment, storage facilities and the use of mobile sources such as trucks and heavy construction equipment, which are subject to review, monitoring and/or control requirements under the CAA and state air quality laws, as administered by the Mojave Desert Air Quality Management District ("MDAQCD"). New equipment and facilities are required to obtain permits before work and operations can begin. Once

constructed or obtained, we may need to incur additional capital costs to ensure such facilities and equipment remain in compliance with applicable rules and regulations. In addition, permitting rules do impose limitations on our estimated production levels or result in additional capital expenditures in order to comply with the rules. We have received Authorization to Construct air permits for up to 270,000 tons of borates per year. We expect that we will need to modify these permits as engineering designs are finalized.

The CWA, and comparable state statutes, imposes restrictions and controls on the discharge of pollutants into waters of the United States. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by the EPA or an analogous state agency. We received a Water Board Order from the Lahontan Regional Water Quality Control Board (the "LRWQCB") in 1988 and remain in compliance with the permit conditions. The LRWQCB regulates surface activities, such as ponds, that have the potential to allow process solutions to leak into the subsurface.

The CWA regulates storm water from facilities and generally requires a storm water discharge permit. The Project is located within a closed basin; therefore, the stormwater regulations do not apply either during construction or operations. We have requested and received a Notice of Non-Applicability ("NONA") from the LRWQCB. The CWA and comparable state statutes provide for civil, criminal and administrative penalties for unauthorized discharges of pollutants and impose liability on parties responsible for those discharges for the costs of cleaning up any environmental damage caused by the release and for natural resource damages resulting from the release.

The SDWA and the Underground Injection Control ("UIC") program promulgated thereunder, regulate the drilling and operation of subsurface injection wells. The EPA directly administers the UIC program in California. The program requires that a Class III UIC Solution Mining Permit be obtained before drilling an injection-recovery well. We have obtained a Class III UIC Permit to construct and operate a borate solution mine, with approval and bonding for our injection-recovery and water monitoring wells. During November 2023, the EPA provided authorization to begin in-situ mining operations pursuant to our Class III UIC permit. We expect that the EPA will grant authorization for additional wells as requested subject to an increase of the reclamation bonding amount. Violation of the Class III UIC Permit conditions, the SDWA and related UIC regulations and/or contamination of groundwater by mining related activities may result in fines, penalties, and remediation costs, among other sanctions and liabilities under the SWDA and state analogs. In addition, third party claims may be filed by landowners and other parties claiming damages for alternative water supplies, property damages, and bodily injury.

The Federal Land Policy Management Act (the "FLPMA") governs the way in which public lands administered by the U.S. Bureau of Land Management are managed. The General Mining Law of 1872 and the FLPMA authorize U.S. citizens to locate mining claims on federal lands open to mineral entry. Borates are a locatable mineral, and locatable mineral deposits within mining claims such as the Project may be developed, extracted and processed under a Plan of Operations approved by the BLM. The NEPA requires a review of all projects proposed to occur on public lands.

The NEPA and comparable state statute, California Environmental Quality Act ("CEQA") requires federal agencies to integrate environmental considerations into their decision-making processes by evaluating the environmental impacts of their proposed actions, including issuance of permits to mining facilities, and assessing alternatives to those actions. The Barstow Office of the BLM issued a Record of Decision ("ROD") for the Environmental Impact Statement ("EIS") in 1994. The existing ROD does not have an expiration date, and minor modifications may be required in the future, but are not required to begin operating.

Solution mining does not meet the definition of a mine under the Federal Mine Safety and Health Act of 1977 (the "Mine Act"), as amended by the Mine Improvement and New Emergency Response Act of 2006 (the "MINER Act"). Solution mining and processing activities are covered by the regulations adopted by the California Occupational Safety and Health Administration ("CalOSHA"). Therefore, our proposed operations will need to comply with the CalOSHA regulations and standards, including development of Safe Operating Procedures and training of personnel. At this time, it is not possible to predict the full effect that new or proposed statutes, regulations and policies will have on our operating costs, but any expansion of existing regulations, or making such regulations more stringent may have a negative impact on the profitability of the operations.

When operational, the Project will be required to maintain a comprehensive safety program. Employees and contractors will be required to complete initial training, as well as attend annual refresher sessions, which cover potential hazards that may be present at the facility. Workers at the facility will be entitled to compensation for any work-related injuries. The State of California may consider changes in workers' compensation laws from time-to-time. Our costs will vary based on the number of accidents that occur at the Project and the costs of addressing such claims. We are and will be required to maintain insurance under various state workers' compensation programs under the statutory limits for the current and proposed operations at the Project and the offices in California.

We generally are required to mitigate long-term environmental impacts by stabilizing, contouring, re-sloping, and revegetating various portions of a site after well-field and processing operations are completed as well as plugging and abandoning injection recovery, water monitoring and exploration drilling holes. Comprehensive environmental protection and reclamation standards must be met during the course of, and upon completion of, mining activities, and any failure to meet such standards may subject us to fines, penalties or other sanctions. Reclamation efforts will be conducted in accordance with detailed plans, which are reviewed and approved by the EPA, BLM, LRWQCB, and San Bernardino County on a regular basis. We currently have reclamation obligations and we have arranged a surety bond and pledged certificates of deposits for reclamation with the State and Federal regulatory

agencies. At this time, land disturbance certificate of deposits for approximately $311 thousand are in place with the County of San Bernardino and a surety bond is posted for $1.5 million held for EPA reclamation.

We may be required to obtain new permits and permit modifications, including air, UIC permit, construction and occupancy permits issued by the San Bernardino County, California government, to complete our development plans. To obtain, maintain and renew these and other environmental permits and perform any required monitoring activities, we may be required to conduct environmental studies and collect and present to governmental authorities data pertaining to the potential impact that the current development plan or future operations may have upon the environment.

Environmental, safety and other laws and regulations continue to evolve which may cause us to meet stricter standards and give rise to greater enforcement, result in increased fines and penalties for noncompliance, and result in a heightened degree of responsibility for us and our officers, directors and employees. Future laws, regulations, permits or legal requirements, as well as the interpretation or enforcement of existing requirements, may require substantial increases in capital or operating costs to achieve and maintain compliance or otherwise delay, limit or prohibit our development plans and future operations, or other restrictions upon, our development plans or future operations or result in the imposition of fines and penalties for failure to comply.

Complying with these regulations is complicated and requires significant attention and resources. Our employees have a significant amount of experience working with various federal, state and local authorities to address compliance with such laws, regulations and permits. However, we cannot be sure that at all times we have been or will be in compliance with such requirements. We expect to continue to incur significant sums for ongoing regulatory expenditures, including salaries, and the costs for monitoring, compliance, remediation, reporting, pollution control equipment and permitting. In addition, we plan to invest significant capital to develop infrastructure to ensure it operates in a safe and environmentally sustainable manner.

We are not aware of any probable government regulations that would materially impact us at this time, however there can be no assurance that regulations may not arise in the future that may have a negative effect on our results of operations, earnings and competitive position.

Dependence on Key Vendors, Suppliers and Global Supply Chain

Construction of an in-situ leaching mining operation and processing plant at the Project will require local resources of contractors, construction materials, energy resources, employees, and housing for employees. The Project has good access to Interstate-40 ("I-40"), which connects it to numerous sizable communities between Barstow and the greater Los Angeles area which we believe can offer access to transportation, construction materials, labor, and housing. The Project currently has limited electrical service sufficient for mine office and storage facilities on site but will require an upgrade for plant operations and wellfield facilities. The SSF is operated on liquid natural gas and we are currently exploring options for upgrading electrical services to the Project. An electrical transmission corridor operated by Southern Cal Edison ("SCE") extends north-eastward through the eastern part of the Project. We currently have two water production wells in an aquifer within our permit boundary, but water is limited in the Mojave Desert. Currently no natural gas connects to the Project, but we are negotiating services with two suppliers in the region with multiple gas transmission pipeline located proximal to the Project.

Employees

As of June 30, 2024, we had 57 full-time employees and no part-time employees. We expect to significantly increase the number of employees with each phase of production at the Project.

We use the services of independent consultants and contractors to perform various professional services, including land acquisition, legal, environmental, accounting and tax services. In addition, we utilize the services of independent contractors to perform construction, geological, exploration and drilling operation services and independent third-party engineering firms assist with the design, engineering, and cost optimization of the proposed large-scale complex.

Intellectual Property

We have no material patents, trademarks, licenses, franchises, concessions or royalty agreements. We have entered into an Alternative Work Schedule agreement (the "AWS") with certain non-exempt employees engaged with the operation of the SSF. The AWS is a contractual arrangement that provides for a work schedule that varies from the standard eight hours per day, five days per work week schedule in favor of a 12-hour alternating day and night shift plan that allow us to better operate the SSF 24-hours a day. Under the AWS, employees are entitled to overtime pay if they work beyond the established alternative workweek schedule. The AWS is terminable at our discretion at any point in time but requires two-thirds of affected employees to affirmatively vote for its termination.

Exploration

In July 2021, we purchased an additional three parcels of land adjacent to the Project, which we expect to become an exploration target to support proposed resource expansion drilling activities. An exploration target is a statement or estimate of the

exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tons and range of grade (or quality), relates to mineralization for which there has been insufficient exploration to estimate a mineral resource. The exploration target described relates to the southeastern area outside the existing resource boundary of the Project deposit.

Seasonality

We have no properties that are subject to material restrictions on its operations due to seasonality. However, we note that given the Project's location in the Mojave Desert, the site may be impacted by extreme heat in the summer season. In addition, the desert terrain of the Project does not adequately absorb water and is subject to flash flooding in the instance of significant rain.

Corporate Office

Our principal executive offices are located at 9329 Mariposa Road, Suite 210, Hesperia, California. Our telephone number is +1 (442) 221-0225.

Properties

Fort Cady Project (AKA 5E Boron Americas Project)

The Project is located in the Mojave Desert region in eastern San Bernardino County, California, approximately 36 miles east of Barstow, near the town of Newberry Springs and two miles south of I-40. The Project lies approximately 118 miles northeast of Los Angeles, California, or approximately half-way between Los Angeles and Las Vegas, Nevada. Access to the Project is eastbound from Barstow on I-40 to the exit for Newberry Springs. From the exit of Newberry Springs, travel continues south on County Road 20796 for 2.2 miles to an unnamed dirt road bearing east for another 1.1 miles to the mine office and plant site at the Project.

The Project area operates with electricity and is well served by other infrastructure, including I-40 and the main Burlington Northern Santa Fe ("BNSF") rail line serving Los Angeles, California running immediately north alongside I-40. There are three main natural gas transmission lines along the I-40. The two southern transmission lines are owned and operated by SCE, while the northern transmission line is owned and operated by Kinder Morgan. The port of Los Angeles and its sister port, the port of Long Beach, are in relatively close proximity. The Project will likely attract personnel from the Barstow-Victorville area.

The Project deposit is in a prospective area for borate and lithium mineralization and is fundamental to our strategy to become a globally integrated supplier of boric acid, lithium carbonate and advanced boron derivatives. The deposit mineralization is colemanite and the Project has a similar geological setting as RTB's Boron open-pit mine and Nirma Limited's Searles Lake operations, situated approximately 75 miles west- northwest and 90 miles northwest of Project, respectively.



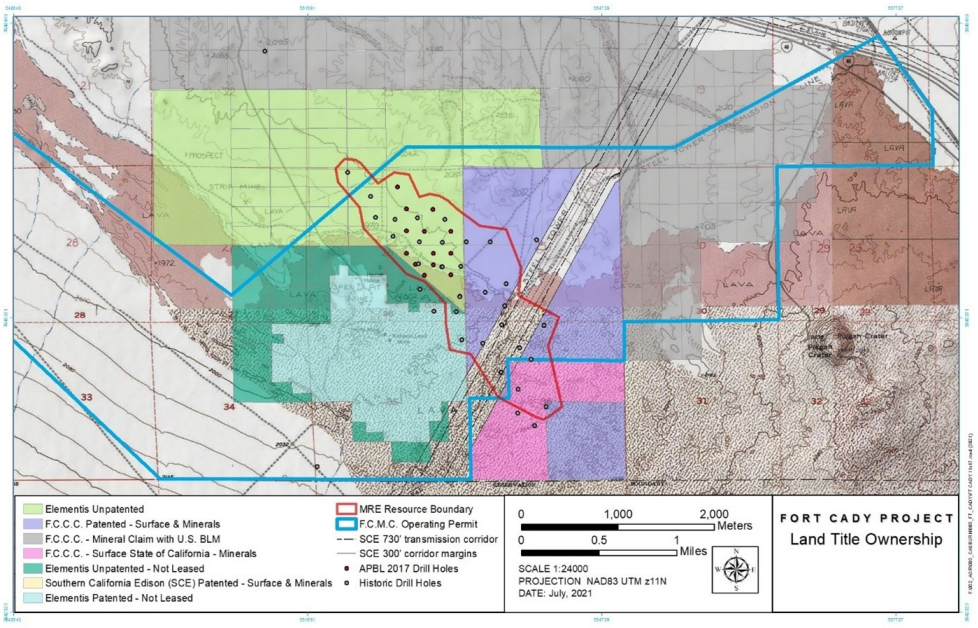
Mineral Title

We own fee simple (private) lands in Sections 25 and 36 of Township 8 North, Range 5 East of the San Bernardino Principal Meridian. An electrical transmission corridor, operated by SCE, tracts from the northeast to the southwest through the fee lands with SCE having surface and subsurface control to a depth of 500 feet, affecting approximately 91 acres of surface lands in the two sections. While this limits surface access to the land, mineralization remains accessible as the ore body occurs at depths more than 1,000 feet.

We currently hold two unpatented lode claims and 117 unpatented placer claims with the BLM within the U.S. Department of the Interior. Both lode claims were originally filed by Duval Corporation ("Duval") in 1978. Placer claims were filed between October 29, 2016, and February 24, 2017. A review of the BLM Mineral & Land Record System database shows claim status as filed with next assessment fees due annually on September 1. These lode and placer claims do not sit over the mineral resource.

Lastly, 272 acres of land located in Section 36 of Township 8 North, Range 5 East of the San Bernardino Principal Meridian, are split estate, with the surface estate owned by us and the mineral estate is owned by the State of California. These lands are available to us through a mineral lease from the California State Lands Commission. We own the remaining lands, with the minerals underlying the transmission line available subsurface.

Overview of Mining Locations



Fort Cady History

Discovery of the Project borate deposit occurred in 1964 when Congdon and Carey Minerals Exploration Company found several zones of colemanite, a calcium borate mineral, between the depths of 1,330 feet to 1,570 feet below ground surface in Section 26. In September 1977, Duval initiated land acquisition and exploration activities near Hector, California. By March 1981, Duval had completed 34 exploration holes, plus one potential water well. After evaluation of the exploration holes, Duval considered several mining methods. Subsequent studies and tests performed by Duval indicated that in-situ mining technology was feasible. Duval commenced limited testing and pilot-scale solution mining operations in June 1981.

Mountain States Mineral Enterprises, Inc. ("MSME") purchased the project from Duval in 1985 and, in 1986, conducted an additional series of tests. MSME eventually sold the project to Fort Cady Mineral Corporation ("FCMC") in 1989. A Plan of Operations ("PoO") was submitted in 1990, which triggered the permitting review process under the NEPA and California Environmental Quality Act ("CEQA"). At the time, the Project was located on both public and private lands. The public lands are managed by the BLM under NEPA and the private lands are administered by San Bernardino County Land Use Planning ("SBC - LUP") under CEQA. Based upon the activities described in the PoO, under the NEPA regulations, the BLM determined that an EIS

was required while CEQA and SBC - LUP determined that an Environmental Impact Report ("EIR") was required. Under a Memorandum of Understanding, the two agencies completed a joint EIS and EIR. The EIS and EIR process followed clearly defined requirements for public participation in studies, such as threatened and endangered species, cultural resources, light, noise, and impacts to local communities. The studies were completed, as was the public participation process, which resulted in a 1994 ROD from the BLM and approval from San Bernardino County, the California lead agency.

Duval commenced limited-scale solution mining tests in June 1981. Between 1981 and 2001, subsequent owners drilled an additional 17 wells, which were used for a series of injection testing and pilot-scale operations. In July 1986, tests were conducted by MSME, where dilute hydrochloric acid solution was injected into the ore body. The acid dissolved the colemanite and was then withdrawn from the same well.

The first phase of pilot plant operations was conducted between 1987 and 1988. Approximately 550 short tons of boric acid were produced. The test results were positive; thus, the Project was viewed as commercially viable. In preparation for the permitting process, feasibility studies, detailed engineering and test works were completed with FCMC receiving the required permits for a commercial-scale operation. Final approval for commercial-scale solution mining and processing was attained in 1994.

A second phase of pilot plant operations occurred between 1996 and 2001, during which approximately 2,200 tons of a synthetic colemanite product, marketed as CadyCal 100, were produced. Commercial-scale operations were not commissioned due to low product prices and other priorities of the controlling entity. For many years, boron was used in traditional applications such as cleaning supplies and ceramics, which never formulated in a strong pull-side demand investment thesis where pricing justified further development of the Project.

In 2017, a group of Australian investors identified the Project and formed the investment thesis that the boron market had similar dynamics to the lithium market a decade earlier. Like the lithium market ten years prior, the market was dominated by a few companies with a compelling pull-side demand growth story fueled by future-facing applications targeting decarbonization and critical materials. Prior to lithium-ion batteries and electric vehicles, lithium was used in traditional everyday applications like boron's use in recent years. As a result of the investment thesis that boron is the next lithium, the group of Australian investors formed ABR and issued shares to Atlas Precious Metals in exchange for Fort Cady (California) Corporation, the entity holding the mineral and property rights of the Project. In 2017, ABR underwent an initial public offering on the ASX and progressed exploration and development of the Project. In September 2021, ABR created a subsidiary, 5E Advanced Materials, Inc., and through a scheme of arrangement, which is a court order process of law, reorganized the Company which placed the Company at the top of the corporate structure. Upon 5E Advanced Materials, Inc. becoming the parent company of the organization, in March 2022, we direct listed on the Nasdaq and became an SEC issuer.

Access and Infrastructure

We continue to develop operating infrastructure for the Project in support of extraction and processing activities. A manned gate is located on the Project access road and provides required site-specific safety briefings and monitors personnel entry and exit to the site. Personnel is predominantly sourced from the surrounding area including Barstow, California and Victorville, California.

The Union Pacific rail line from Las Vegas, Nevada to Los Angeles, California runs adjacent to I-15, and a BNSF rail line, which connect to the Union Pacific rail line runs subparallel to I-40 and adjacent to the Project. A rail loadout is located approximately 1.2 miles north of the National Trails Highway on a road that bears north and located 0.4 miles west of San Bernardino County Road 20796. San Bernardino County operates six general aviation airports with the closest airport to the Project being the Barstow-Daggett Airport located approximately 23 miles west of the Project on the National Trails Highway. Commercial flight service is available through five airports in the greater Los Angeles area and in Las Vegas, Nevada. A dedicated cargo service airport is located approximately 65 miles southwest of the Project.

Construction of the SSF was performed by contractors in the Los Angeles, California metro area with additional local resources supporting contracting, construction materials, energy sources, employees, and housing. The Project has good access to I-40 which connects it to numerous sizable communities between Barstow, California and the greater Los Angeles area offering excellent access to transportation, construction materials, labor, and housing. The Project currently has limited electrical service that is sufficient for mine office and storage facilities on site but will require upgrade for plant and wellfield facilities. The SSF is operating on liquid natural gas and we are currently exploring options for upgrading electrical services to the Project. An electrical transmission corridor operated by SCE extends northeastward through the eastern part of the Project. The Project has two water wells located nearby to support in-situ leaching operations. Currently no natural gas connects to the Project, but we are negotiating services with two suppliers in the region with three natural gas transmission pipelines running along I-40 near the Project.

The plant site currently has a 1,600 square foot mine office building, a control room, storage buildings, an analytical laboratory, an approximately 20-acre production facility called the Small-Scale Facility, four production wells, and an intended gypsum storage area occupying 17 acres. Gypsum is a byproduct of past pilot plant production and is intended to be a future byproduct that can be sold to the regional market.

Project Permits

We currently have the following Project permits in place:

1.The MDAQCD has issued Authorization to Construct ("ATC") permits for up to 270,000 tons per year boric acid and 80,000 tons per year sulphate of potash. Upon final review and inspection of equipment and operations by MDAQCD, the ATC will be replaced with an Operating Permit ("OP"). The permits have been renewed annually. Any modifications to or replacement of process equipment may require a modification to the existing permit. All modifications must meet National Ambient Air Quality Standards and MDAQCD requirements. There is no reclamation or closure requirement under MDAQCD.

2.The LRWQC issued the current Order Permit in 1988. The Permit includes all existing surface impoundments. We remain compliant with the permit by complying with the monitoring requirements and submitting quarterly reports. A Final Permanent Closure Plan has been submitted to LRWQCB for closure of the existing impoundments. There is a reclamation and closure requirement by LRWQCB. The bond amount to close the ponds is included in San Bernardino County Land Use Planning Financial Assurance Cost Estimate. This is currently a cash bond.

3.The LRWQCB also issued a NONA, verifying that the Project does not require a stormwater permit for either construction or operations. The NONA was issued as the Project is in a closed basin with no stormwater discharge. There is no reclamation or bonding requirement associated with the NONA.

4.SBC - LUP issued the Mining and Reclamation Permit in 1994, based upon the 1990 PoO and subsequent EIR. The PoO was amended, and the permit was modified in 2019 to address changes such as relocation of the process plant, elimination of a highway rail crossing and additional rights to water. The Project is not located within a water district with adjudicated water rights. Therefore, water rights are granted by SBC - LUP through the Mining and Reclamation Permit. The Mining and Reclamation Permit includes Condition of Approval requirements for engineering and planning, as well as requirements to eliminate impacts to desert tortoises. We will be modifying the PoO to 270,000 tons per year of boric acid, which will require a modification to the Mining and Reclamation Plan. The Company has submitted and maintains a cash bond with the California State Mining and Reclamation Agency, as administered by SBC – LUP. The financial assurance cost estimate ("FACE") is updated annually. The FACE includes demolition of all existing structures, regrading, and revegetation of all disturbance on private lands. This bond also includes plugging and abandonment of all wells located outside the EPA UIC purview.

5.The BLM issued a ROD in 1994, establishing the EIS boundary. The ROD authorizes mining of borates at a rate of 90,000 tons per year. The ROD also has requirements for company activities to eliminate adverse impacts to desert tortoises and cultural resources. We have submitted and maintains a cash bond with the BLM for grading and reclamation of disturbance on public lands.

6.The EPA retains primacy for Class III solution mining UIC permits in the State of California. The EPA issued the UIC permit for the Project in August 2020. The permit defines the Area of Review ("AOR") boundary. All subsurface solution mining activities, including monitoring wells and injection wells, are located within the AOR boundary.

SSF Update

During November 2023, the EPA provided authorization to begin in-situ mining operations pursuant to a UIC permit and in January 2024, we began well-field injection and began extracting valuable minerals from the Project in the form of PLS. In April 2024, we commenced commercial operations of the SSF, began to process the PLS and ultimately produced our first batch of boric acid from the SSF. The SSF is designed to initially produce up to 2,000 short tons of boric acid annually and targets initial production of lithium carbonate, with optionality built in to scale up to a run rate of 9,000 short tons and commensurate increased lithium production with an incremental capital investment. Our operations team is currently working towards our next production target of three short tons of boric acid per day while we optimize product quality and production rates. The initial high-quality run-of-mine head grade of boric acid provided validation of our initial operational assumptions which we hope will facilitate discussions with stakeholders around funding options for the Phase 1 of the commercial facility and securing commercial contracts for our future products. We plan to continue to run the SSF to refine our operations, more effectively optimize detail engineering of our proposed large-scale complex, estimate capital expenditures required to build our proposed large-scale complex and to produce boric acid for customer qualification. Upon successful customer qualification, we plan to deliver larger volumes of boric acid from the SSF to customer production facilities for product validation.

Amended Initial Assessment Report

During the 2023 fiscal year, we released our Amended Initial Assessment Report, prepared in accordance with Regulation S-K 1300. We believe the report demonstrates a world-class resource, management's firm understanding and direction for the business, and a phased approach to scale production, which can position the Company to achieve profitability, generate cash flow, and reduce risk. The Amended Initial Assessment Report includes a revised mineral resource estimate for boric acid and lithium carbonate,

estimates for capital costs and operating expenses, and a bottoms-up economic analysis based on a phased approach to scaling production. The financial model for the economic analysis includes preliminary market studies and independent pricing forecasts for boric acid and lithium carbonate. As part of our Amended Initial Assessment Report, we engaged two external EPC firms to assist management with our capital cost estimate, which we utilized as the basis to stage a formal process to request proposals for detail design of the proposed large-scale complex, which was ultimately awarded to Fluor in January 2024.

The Amended Initial Assessment Report outlines three phases for the larger-scale facility:

•Phase 1 targets production of 90,000 short tons of boric acid and 1,100 short tons of lithium carbonate. Given the permitting hurdles and time to obtain final EPA approval and resource constraints in fiscal year 2024, we are now targeting to reach initial commercial production in the second half of calendar year 2026 or first half of calendar year 2027.

•Phase 2 and Phase 3 targets incremental production increases of 180,000 short tons of boric acid and 2,200 short tons of lithium carbonate in each phase.

•Full operation includes targeting production of 450,000 short tons of boric acid and 5,500 short tons of lithium carbonate per annum.

Plan of Operations

Upon successful development of the Project, we expect to mine and process colemanite and lithium rich minerals to produce boric acid, lithium carbonate, and gypsum. The boric acid produced is planned to be further produced into second, third and fourth boron derivatives. Initially, we expect to derive revenue principally from the sale of boric acid, lithium carbonate, and gypsum. As our advanced materials strategy develops, we intend to produce revenue from boron specialty and advanced materials further enabling decarbonization and defense applications.

The Project deposit is planned to be mined via in-situ leaching solution mining to recover borate and lithium from the mineralized horizons, which is a technique that has been utilized for several decades in the production of uranium, salt, bromine, potash and soda ash. The use of in-situ technology for boron extraction was developed on the Project property in the 1980s. In-situ solution mining depends on void spaces and porosity, permeability, ore zone thickness, transmissivity, storage coefficient, piezometric surface, and hydraulic gradient as well as reaction and extraction method efficiencies. There are various ways of developing the wellfield for in-situ leaching, including a “push-pull” mechanism where wells function as both injection and recovery wells; line drive; and multiple spot patterns. In addition to the vertical wells, horizontal drilling for well development is also being evaluated as a potential option for the Project. The mine wellfield development and the pattern will ultimately depend on the hydrogeologic model and the cost benefit analysis of various patterns and options as well as inputs on optimization efforts expected to be obtained from the continued operation of the SSF.

The recovery of boron from the colemanite mineral at the Project is currently occurring through in-situ mining and boric acid is being produced at the SSF. The in-situ mining method includes injecting a weak hydrochloric acid (“HCl”) solution (containing <5% HCl in substantially recycled water solution with regenerated HCl) through wells drilled into the colemanite ore body. The injected acid remains in the formation for a limited period of time to allow reaction with the alkaline ore body and leach the colemanite ore. Boric acid, lithium carbonate, and calcium chloride are then withdrawn from the wells as products of the chemical reaction.

The extracted solution is pumped to the processing facility where boric acid is crystallized from the solution to produce boric acid. The crystallized boric acid is dried, sized, and bagged as final product. Other boron products are expected to be prepared for market, as required, by end-use customers. Lithium and gypsum are expected to be recovered from the remaining solution after boric acid processing with the final solution being substantially recycled back into the resource deposit. Lithium is expected to be produced via conversion to lithium carbonate, while by-product gypsum after precipitation will either be dried and sold or stored in the gypsum storage facility for later sale. Within the processing facility, some HCl is regenerated from the gypsum precipitation process as a result of the sulfuric acid acidification of the process recycle stream. The weak HCl solution is combined with recycled water to produce the make-up solution for reinjection into the formation. The process operates a zero liquid discharge evaporator and produces no liquid waste.

Mineral Resource Estimate

In December of 2018, Mr. Louis Fourie of Terra Modeling Services (“TMS”) completed an updated JORC resource report for the Project. That report identified a Measured plus Indicated mineral resource estimate of 52.7 million tonnes (Mt) containing an average grade of 6.02% B_2O_3 and 367 ppm of Li. This was followed in 2021 by an initial assessment report (the "Initial Assessment Report") prepared in accordance with Regulation S-K 1300 which utilized and verified the previous reporting, as there were no significant exploration activities undertaken on the Project between 2018 and 2021, although changes in the Mineral holdings did occur, and the mineral Resource was subsequently updated. Since 2021, there have been 13 additional wells drilled as part of a monitoring well and testing program. One well, IR2-01-01, was cored and assayed at the Saskatchewan Research Council (“SRC”),

following the same methodologies as before. The data from this drill hole was quality assessed, and subsequently added to this Resource update, which has also been modified with changes in the mineral holdings as described in Section 3, as well as cut-off grade as described below. In May 2023, we updated and released an amendment to our initial assessment report with our mineral resources pursuant to the requirements of Regulation S-K 1300. Incorporated by reference as Exhibit 96.1 to this filing is a further amended and restated technical report, with a revised report date of February 2, 2024, report date of May 11, 2023, and report effective date of April 1, 2023 (the "Amended Initial Assessment Report"). The report was prepared by QPs including Company management and third-party independent companies TMS, Confluence Water Resources, LLC, Barr Engineering Co., Escalante Geological Services LLC, and Mike Rockandel Consulting LLC. All QPs have the necessary experience per Regulation S-K 1300 and material assumptions and information pertaining to the disclosure of our mineral resources, including material assumptions relating to all modifying factors, price estimates, and scientific and technical information, as described in the Amended Initial Assessment Report, remain current as of June 30, 2024.

Mineral Resources

Regulation S-K 1300 defines a "mineral resource" as a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. A mineral resource is a reasonable estimate of mineralization, considering relevant factors such as cut-off grade, likely mining dimensions, location, or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

A "measured mineral resource" is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

An "indicated mineral resource" is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

An "inferred mineral resource" is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource considered when assessing the economic viability of a mining project must be presented along with economic viability excluding inferred resources and may not be converted to a mineral reserve.

Resource Assumptions

Key assumptions used in the economic assessment include in-situ leading mining operation delivering 7% boric acid in solution (head grade) to an above ground processing plant; cash operating costs of $686 per ton of boric acid produced; 92% conversion of boric acid in solution to saleable boric acid powder (recovery rate); 81.9% recovery of in-situ boron (extraction ratio), based upon a Hazen Research analytical report and a sales price of boric acid based on a forward-looking model from regression of historical pricing. A detailed financial model using a discount rate of 8% delivered a positive net present value to support the cut-off grade and more broadly the resulting mineral resource estimation.

Resource Methodology

The database used for resource estimate includes 34 holes completed by Duval, three holes completed by FCMC, and 15 holes we completed for a cumulative total of 52 drill holes and a cumulative sampled length of 82,994 feet. The database has been updated with the data from hole IR2-01-01 and is current. Drilling coordinates in the database are in UTM NAD 83-11, and depths and elevations are reported in meters. Borate is listed as weight percent (%) B_2O_3 and Li as ppm. The drilling database contains 5,920 analytical values for B_2O_3 and 5,082 analytical values for Li.

Core recovery for the 2017 drilling program ranged from 93% to 100% with an overall average of 97.60%. Core recovery records for earlier drilling conducted by Duval and FCMC are not available, but based on missing intervals in the drilling database, core recovery likely exceeded 90% in the core drilling. The QP, Mr. Louie Fourie, completed a thorough review and verification of the drilling database and found that reasonable care was taken to collect and dispatch samples for analysis and the database is of sufficient quality to support a mineral resource estimate.

TMS developed a gridded geologic model of the Project using Vulcan™ software. The mineralization does not correlate to lithological markers as the entire sequence is predominantly lacustrine mudstone. However, detailed examination of the analytical results reveals distinct mineralized horizons. The deposit was delineated based on these patterns of mineralization into four mineralized horizons, two non-mineralized or weakly mineralized interbeds and two non-mineralized horizons bounding the deposit. The grid model was constructed across the deposit area, with a grid cell size of 25 meters by 25 meters. Grids represent the bounding elevation surfaces of key horizons, thicknesses, and analytical grades. Mineral horizon grids were interpolated using an Inverse Distance Squared ("ID2") algorithm. Mineralization is spatially defined by a resource boundary using 150 meters from the last intersection of mineralization in a drill hole. Grids are masked to the outside of the resource boundary.

Using composites for each mineralized horizon, variograph was successful for B_2O_3 grades for the Major Mineralized Horizon ("MMH"), Intermediate Mineralized Horizon ("IMH"), and the Lower Mineralized Horizon ("LMH"). Variogram modeling was unsuccessful for the Upper Mineralized Horizon and with Li in all horizons. Grids representing B_2O_3 grades for the MMH, IMH, and LMH were constructed using Ordinary Kriging using the constructed variograms. ID2 interpolation was used with all remaining grade grids using the same spatial limits established with the horizon grids.

Cut-off Grade

A 5.0% B_2O_3 cut-off grade was previously established by Duval and was carried forth by TMS in their JORC resource reporting, as well as for the previous initial assessment. In the previous initial assessment, the QP indicated that the then-cut-off grade is conservative and that effective recovery along with detailed economic analysis will be needed for reserve estimation.

An in-depth assessment of cut-off grade was undertaken in the Amended Initial Assessment Report, incorporating the result of leaching tests, mining and processing costs, and commodity pricing. Elevated boric acid pricing has allowed for a re-evaluation of grade cutoff and the ability to address lower grade areas in the ore body. This assessment is based on assumptions in the financial model detailed in Section 19 on the Amended Initial Assessment Report (see Exhibit 96.1). The sales price for boric acid had increased to the upper $1,400's per short ton as of June 30, 2023, and current forecasts and market studies are indicative of this pricing when the Project achieves commercial production. For this evaluation, boric acid pricing of $1,400 per short ton was used along with price forecasting based on work by an independent third-party. A similar methodology was applied for lithium carbonate prices and forecasts. The result of this exercise is a 2.0% financially viable driven grade cutoff, where the costs are near the forecasted price for boric acid. The geologic model used the 2% B_2O_3 cutoff which has a Boric Acid equivalent cutoff of 3.55% H_3BO_3.

Fort Cady Mineral Resource Estimate as of April 1, 2023

Results of the mineral resource estimation are shown in the table below. The resource estimate contains a combined 74.31 million short tons of Measured plus Indicated resources with an average grade of 4.15% B_2O_3 and 356 ppm Li, using a 2% cut-off grade for B_2O_3. Independent market research assessed the spot price of boric acid and technical grade lithium carbonate to be $909 and $9,979 per short ton, respectively, as of June 30, 2024. In August 2024, Fastmarkets relaunched its coverage of boric acid spot pricing, which indicated a July 2024 pricing midpoint of $1,065 per short ton. Our Amended Initial Assessment estimates prices for boric acid and lithium carbonate of $1,726 and $30,316 per short ton in the first year of production as discussed in further detail of Section 16 and 19.3.1 of our Amended Initial Assessment Report filed as Exhibit 96.1. The mineral resource estimate also identifies 96.90 million short tons of Inferred resources under mineral control by the Company with an average grade of 4.75% B_2O_3 and 321 ppm Li. At this time, we have not yet established mineral reserves. Our Amended Initial Assessment Report assumes a metallurgical recovery factor of 81.9% for boric acid and 44.3% for lithium carbonate, and the reference point for the resource is in-situ prior to mining losses and processing losses. It is noted that these numbers are substantially different to previous reports, which is ascribed to the change in cut-off grade as detailed in the Amended Initial Assessment. Regulation S-K 1300 requires a current economic assessment to be completed which provides a reasonable basis for establishing the prospects of economic extraction of the mineral resource estimation.

Measured Resource	Horizon[1]	Tonnage (MST)	B_2O_3 (wt%)	H_3BO_3 (wt%)	Lithium (ppm)	B_2O_3 (MST)	H_3BO_3 (MST)	LCE (MST)
5E Land Patented, surface & minerals	UMH	1.37	4.58	8.14	308	0.06	0.11	0.002
	MMH	12.26	6.26	11.12	409	0.77	1.36	0.027
	IMH	8.86	5.25	9.33	386	0.47	0.83	0.018
	LMH	8.46	2.30	4.09	261	0.19	0.35	0.012
Total Measured Resource		30.95	4.81	8.55	357	1.49	2.65	0.059

Indicated Resource	Horizon[1]	Tonnage (MST)	B_2O_3 (wt%)	H_3BO_3 (wt%)	Lithium (ppm)	B_2O_3 (MST)	H_3BO_3 (MST)	LCE (MST)
5E Land Patented, surface & minerals	UMH	1.72	3.95	7.02	314	0.07	0.12	0.003
	MMH	20.21	5.50	9.77	368	1.11	1.97	0.040
	IMH	13.48	3.02	5.36	371	0.41	0.72	0.027
	LMH	7.94	2.36	4.19	302	0.19	0.33	0.013
Total Indicated Resource		43.35	4.09	7.27	355	1.77	3.15	0.082
Total Measured + Indicated Resource		74.31	4.15	7.37	356	3.26	5.80	0.141

Inferred Resource	Horizon[1]	Tonnage (MST)	B_2O_3 (wt%)	H_3BO_3 (wt%)	Lithium (ppm)	B_2O_3 (MST)	H_3BO_3 (MST)	LCE (MST)
5E Land Patented, surface & minerals	UMH	4.98	3.21	5.70	303	0.16	0.28	0.008
	MMH	37.60	6.08	10.80	295	2.29	4.06	0.059
	IMH	13.88	2.59	4.60	346	0.36	0.64	0.026
	LMH	7.07	2.13	3.79	267	0.15	0.27	0.010
5E surface, State of California minerals	UMH	4.86	3.75	6.66	311	0.18	0.32	0.008
	MMH	16.93	6.73	11.95	366	1.14	2.02	0.033
	IMH	9.24	2.43	4.32	365	0.22	0.40	0.018
5E Land Patented, surface & minerals, SE	UMH	0.42	4.02	7.14	287	0.02	0.03	0.001
	MMH	1.18	5.38	9.56	339	0.06	0.11	0.002
	IMH	0.74	2.45	4.35	331	0.02	0.03	0.001
Total Inferred Resource		96.90	4.75	8.43	321	4.60	8.17	0.166

* Using a 2% B_2O_3 cut-off grade, and no Lithium cut-off grade

[1] "UMH" is Upper Mineralized Horizon
"MMH" is Major Mineralized Horizon
"IMH" is Lower Mineralized Horizon

Commodity Pricing Assumptions

Our Amended Initial Assessment Report includes an economic analysis, and we obtained extensive market studies for boric acid and lithium carbonate. The market studies include an assessment of future supply and demand analysis as well as forecasted future price assumptions, as further detailed in Sections 16 and 19.3.1 of our Amended Initial Assessment Report, which is incorporated by reference as Exhibit 96.1. Our Amended Initial Assessment Report estimates the price for boric acid to be $1,726 per short ton in the initial year of commercial production, escalating to $2,305 per short ton in 2031 due to demand outpacing supply of boric acid, and then increasing at a compounded annual growth rate of 3% thereafter when supply and demand for boric acid are expected to normalize. Our Amended Initial Assessment Report estimates the price for technical grade lithium carbonate to be $30,316 per short ton in the initial year of commercial production, decreasing to $23,770 in 2040 based on independent price forecasts through such year, and then increasing at a compounded annual growth rate of 3% thereafter. Refer to the tables below for a summary of the prices utilized in our economic analysis included in our Amended Initial Assessment Report.

Year	2026	2030	2040	2055
Boric acid price per short ton	$ 1,726	$ 2,130	$ 3,010	$ 4,620
CAGR[1]		5.40%	4.05%	3.45%
Lithium carbonate price per short ton	$ 30,316	$ 21,792	$ 23,770	$ 36,908
CAGR[1]		-7.92%	-1.72%	0.68%

[1] Compounded annual growth rate is calculated based upon the initial price in 2026 for the respective product to the indicated year.

	Life of Mine Price Assumptions[1]			
	Measured and Indicated		Measured, Indicated and Inferred	
	Average	Range	Average	Range
Boric acid price per short ton	$ 2,401	$1,685 - $3,054	$ 3,120	$1,685 - $4,759
Lithium carbonate per short ton	$ 23,015	$19,861 - $30,316	$ 26,635	$19,861 - $37,454

[1] The Amended Initial Assessment Report includes economic analysis with inferred resources. As such, the economic analysis presented in Section 19 of the Amended Initial Assessment Report discloses with equal prominence the results of economic analysis in two scenarios; 1) an economic analysis using only measured and indicated resources, and 2) an economic analysis using measured, indicated, and inferred resources. The table above presents the average pricing and range of pricing for each scenario in the Amended Initial Assessment Report.

The Amended Initial Assessment Report was prepared based primarily on information available at the time of preparation, is subject to assumptions, conditions and is qualified by various limitations. The foregoing summary description of the Amended Initial Assessment Report is qualified by the full Amended Initial Assessment Report, which is included as an exhibit.

Internal Controls Disclosure

The Amended Initial Assessment Report indicates that the quality assurance and quality control ("QA/QC") procedures for the Duval and FCMC drill holes are unknown though the work products compiled during these historic drilling campaigns, suggests they were carried out by competent geologists following procedures considered standard practice at those times. Discussions held with the exploration geologist for Duval at the time of drilling and sampling indicate that Duval had internal QA/QC procedures in place to ensure that assay results were accurate. Geochemical analyses were carried out using X-Ray Fluorescence Spectrometry ("XRF"). XRF results were reportedly checked against logging and assay data.

For the database of drill holes, entire core hole sequences were sampled and dispatched by commercial carrier to the SRC for geochemical analysis. As part of the QA/QC procedures, internationally recognized standards, blanks and duplicates were inserted into the sample batches prior to submitting to SRC. SRC has been accredited by the Standards Council of Canada and conforms with the requirements of ISO/IEC 17025.2005. Upon receipt of samples, SRC completed an inventory of samples received, completing chain of custody documentation, and providing a ledger system tracking samples received and steps in process for sample preparation and analysis. Core samples were dried in their original sample bags, then jaw crushed. A subsample was split out using a sample riffler. The subsample was then pulverized with a jaw and ring grinding mill. The grinding mill was cleaned between each sample using steel wool and compressed air or by silica sand. The resulting pulp sample was then transferred to a barcode labeled plastic vial for analysis. All samples underwent a multi-element Inductively Coupled Plasma Optical Emission Spectroscopy ("ICP-OES"), using a multi-acid digestion for a range of elements. Boron was also analyzed by ICP-OES but underwent a separate digestion where an aliquot of the sample was fused in a mixture of $NaO_2/NaCO_3$ in a muffle oven, then dissolved in deionized water, prior to analysis. Major oxides were reported in weight percent. Minor, trace, and rare earth elements were reported in ppm. The detection limit for boron was 2 ppm and 1 ppm for lithium.

For the database of drill holes, a total of 2,118 core samples and 415 control samples were submitted for multi-element analysis to SRC. We submitted control samples, in the form of certified standards, blanks and coarse duplicates (bags with sample identification supplied for SRC to make duplicate samples). In addition to these control samples, SRC also submitted their own internal control samples in the form of standards and pulp duplicates. Certified standards, prepared by the National Institute of Standards and Technology, were submitted as part of our QA/QC procedures. No two standards in any single batch submission were more than two standard deviations from the analyzed mean, implying an acceptable level of precision of SRC instrumentation. SRC assayed two different standards, for its own QA/QC protocol and the QP found that the analytical precision for analysis of both standards was reasonable, with no two standards in any single batch submission being more than two standard deviations from the analyzed mean.

Blank samples inserted consisting of non-mineralized marble. One hundred and thirty-five blank samples were submitted, all of which had assay results of less than 73 ppm boron. The level of boron detected in the blanks was likely sourced from pharmaceutical (borosilicate) glass used during sample digestion. These boron concentrations are considered immaterial in relation to the boron levels detected in the colemanite mineralization and do not appear to represent carryover contamination from sample preparation. Lithium levels in the blank samples were also at acceptable levels with the majority of assays less than 15 ppm lithium. The four highest lithium levels in the blanks immediately followed samples that contained relatively high lithium concentrations. Overall, the concentration of the primary elements of interest (boron and lithium) in the blank samples were at levels considered to be acceptable, implying a reasonable performance for sample preparation.

A total of 136 duplicate samples were submitted to the SRC. SRC composed coarse duplicate samples using a Boyd rotary splitter. There was a good correlation between original and duplicate samples with a reasonable level of precision maintained in the results.

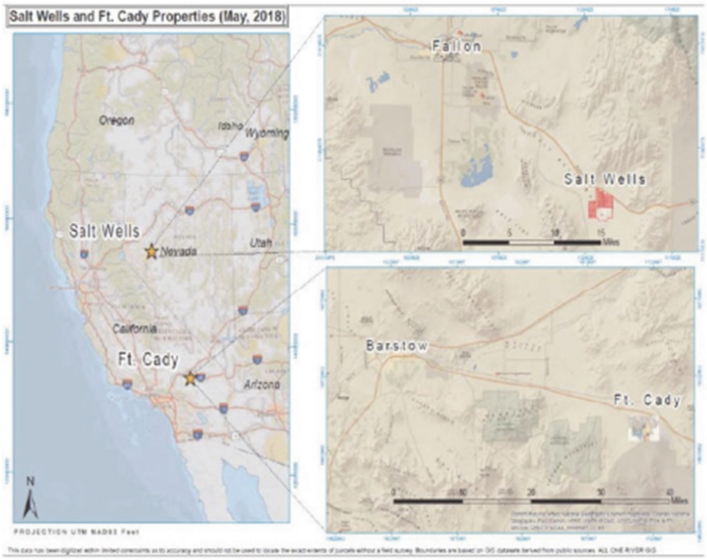
In the Amended Initial Assessment Report, the QPs made the following recommendations:

- Geochemistry: Completion of a long-term leach test with associated thin section mineralogy evaluation which will provide characterization, determine chemical variability, and aid in process feed chemistry.
- Geophysics: Additional geophysics (seismic, resistivity, gamma) and interpretation to determine 2D and 3D faults to assess risk and complexity of the deposit.
- Exploration and in-fill drilling: Drill six to ten holes in Section 25 and 26 to expand inferred resource and reclassify existing inferred resource to measured and indicated.
- Water expansion: Drill additional wells to further establish storativity east of Fault B and west of the Pisgah fault.

We expect to address these recommendations, as needed, as operation of the SSF and the proposed large-scale complex progresses.

Salt Wells Projects

In addition to the Project, we have an Earn-in Agreement with Great Basin Resources Inc. ("Great Basin") which allows us to acquire a 100% interest in the Salt Wells Projects in the State of Nevada if we incur project related expenditures described below. The Earn-in Agreement with Great Basin provides for a 3% revenue royalty if concentrates or ore of minerals are sold in the future. The Salt Wells Projects cover an area of 14 square miles and are considered prospective for borates and lithium in the sediments and lithium in the brines within the project area. The Salt Wells Projects are located in Churchill County, Nevada, 15.5 miles southeast on Route 50 from the town of Fallon, Nevada. The Salt Wells Projects are within close proximity to the Interstate 80 corridor, which provides ample access to infrastructure including rail and ports. The town of Fallon has a population of over 9,000 according to the 2020 United State Census Bureau as well as a municipal airport. The Salt Wells North project consists of 171 mineral claims and the Salt Wells South project consists of 105 mineral claims, with each claim being 20 acres.



Surface salt samples collected by us from the Salt Wells North project area were assayed in April 2018 and showed elevated levels of both lithium and boron with several results of over 500 ppm lithium and over 1% boric acid equivalent. With our focus on the Project in California, we assigned our Earn-in Agreement with Great Basin to Osmond Resources Limited ("Osmond"), an ASX listed exploration company. The agreement with Osmond provided optionality for us to retain an interest in the Salt Wells Project while deferring additional spending requirements to Osmond in the near term. On April 16, 2024, Osmond provided us with notice of their withdrawal from the Salt Wells Project. To date, the Company has spent approximately $544,000 on exploration activities.

Available Information

We make available free of charge on our website, *www.5eadvancedmaterials.com*, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to the Exchange Act, as soon as reasonably practicable after we electronically file such information with, or furnish it to, the SEC. These documents are also available on the SEC's website at *www.sec.gov*. The information on our website is not, and shall not be deemed to be, a part of this Annual Report on Form 10-K or incorporated into any of our other filings with the SEC.

Item 1A. Risk Factors

Each of the risks described below should be carefully considered, together with all of the other information contained in this Annual Report on Form 10-K, before making an investment decision with respect to our securities. In the event of the occurrence, reoccurrence, continuation or increased severity of any of the risks described below, our business, financial condition or results of operations could be materially and adversely affected, and you may lose all or part of your investment. The risks included here are not exhaustive. Other sections of this Annual Report may include additional factors which could adversely affect our business and financial performance. New risks emerge from time to time and it is not possible for management to predict all such risks, nor can it assess the impact of all such risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ materially.

Risks Relating to Our Business

There is substantial doubt regarding our ability to continue as a going concern. We will need to raise substantial additional funding, which may not be available on acceptable terms, if at all, to be able to continue as a going concern and advance our Project.

There is substantial doubt regarding our ability to continue as a going concern. Our existence in our current form is dependent upon our ability to obtain additional capital. Our cash and cash equivalents as of the date of will not be sufficient for us to continue as a going concern or to fund our long-term operations. Raising funds in the current economic environment is challenging and financing may not be available in sufficient amounts or on acceptable terms, if at all. The issuance of additional securities, whether equity or debt, or the possibility of such issuance, or the securing of financing that investors consider to be unfavorable to us, may cause the market price of our shares to decline. The sale of additional equity or debt securities may dilute the ownership of existing shareholders. If we are not able to procure additional financing and our cash balance falls below $7.5 million on or after December 31, 2024, an event of default under the 2024 Amended and Restated Note Purchase Agreement would occur if not cured after 30 days (See Risks Related to the Convertible Notes below in this Item 1A).

We will need to obtain additional financing to continue as a going concern and to continue our ongoing development and proposed operations.

We have limited assets upon which to develop and commence our business operations and to rely otherwise. We will need to seek significant additional funds in the future through equity or debt financings, government funding or grants, private capital, royalty agreements or customer prepayments, or other strategic alliances with third parties, either alone or in combination to fund our business plan and to complete our mining exploration initiative. Our business plan, which includes the development of the Project, has required and will continue to require substantial capital expenditures. We will require financing to fund our engineering phases, development, construction, and initial commercial production activities and are required to raise additional capital in respect of continuing our proposed mining exploration program, pre-production activities, including the Small-Scale Facility, legal, operational set-up, general and administrative, marketing, employee salaries and other related expenses. We have debt commitment letters providing for the issuance and sale of an aggregate of $6.0 million aggregate principal amount of secured convertible promissory notes, but such commitments expire if the transaction is not consummated prior to September 17, 2024. There is no guarantee we will be able to complete the debt financing by such deadline and, even if we do complete the financing, we will still need to raise additional capital in the future.

If we are unable to raise adequate funds, we may have to delay, reduce the scope of or eliminate some or all of our business plan expenditures, and the failure to procure such required financing could have a material and adverse effect on our business, liquidity, financial condition and results of operations as well as our ability to continue as a going concern. If we are unable to continue as a going concern, we might have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements. The inclusion of the going concern explanatory paragraph by our auditors, our lack of cash resources and our potential inability to continue as a going concern may materially adversely affect our business, share price, and our ability to raise new capital or to enter into critical contractual relations with third parties due to concerns about our ability to meet our contractual obligations.

Obtaining additional funding will be subject to various additional factors, including investor acceptance of our business plan, the status of our development program and ongoing results from our exploration and development efforts. If we are not able to secure adequate additional funding when needed, we will need to re-evaluate our operating plan and may be forced to make significant reductions in spending, extend payment terms with suppliers, liquidate assets where possible, limit, suspend or curtail planned development programs and cease operations entirely. Having insufficient funds may also require us to relinquish rights to assets and technology that we would otherwise prefer to develop ourselves, or on less favorable terms than we would otherwise choose. The foregoing actions and circumstances could materially adversely impact our business, liquidity, results of operations and future prospects.

Any such required financing may not be available in amounts or on terms acceptable to us or at all, and the failure to procure such required financing could have a material and adverse effect on our business, financial condition and results of operations, or

threaten our ability to continue as a going concern. In addition, if we are unsuccessful in raising the required funds, we may need to modify our operational plans to continue as a going concern, and we may have to delay, reduce the scope of or eliminate some or all of our planned development activities or proposed exploration programs at the Project and elsewhere. In the event additional capital resources are unavailable, we may also be forced to sell some or all of our properties in an untimely fashion or on less than favorable terms. Any of these factors could harm our operating results.

Until successful commercial production is achieved from the Project, allowing for the generation of sufficient revenue to fund our continuing operations, we will continue to incur operating and investing net cash outflows associated with, among other things, developing the Project, maintaining our properties and undertaking ongoing exploration and optimization activities. As a result, we rely on access to capital markets as a source of funding for our capital and operating requirements. We require additional capital to fund our ongoing operations, define mineralization, conduct further technical and economic studies (which may include a bankable feasibility study) and bring the Project into production, which will require funds for construction and working capital. We cannot assure you that such additional funding will be available to us on satisfactory terms, or at all, or that we will be successful in commencing and maintaining commercial borates or lithium extraction, production of boron advanced materials, or that our sales projections for these and other products will be realized.

Depending on the type and the terms of any financing we pursue, shareholders' rights and the value of their investment in our CHESS Depositary Interests ("CDIs") and common stock could be reduced. Any additional equity financing will dilute stockholdings, and new or additional debt financing, if available, may involve restrictions on financing and operating activities. In addition, if we issue secured debt securities, the holders of the debt would have a claim to our assets that would be prior to the rights of shareholders until the debt is paid. Interest on such debt securities would increase costs and negatively impact operating results. If the issuance of new securities results in diminished rights to holders of our Common Stock and CDIs, the market price of our Common Stock and CDIs could be negatively impacted. Any sale of securities will also need to comply with the applicable rules of the stock exchanges on which our securities are listed or quoted for trading. Further, strategic collaboration or royalty agreements may provide us with non-dilutive or minimally dilutive financing but adversely impact our future results of operations or capital resources. There is no guarantee that we will be able to secure any additional funding or be able to secure funding which will provide us with sufficient funds to meet our objectives, which may adversely affect our business and financial position.

We have incurred significant net operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.

We had an accumulated deficit of $200.0 million as of June 30, 2024, and we expect to incur significant discovery and development expenses in the foreseeable future related to the completion of exploration, development and commercialization of the Project. As a result, we expect we will continue to sustain substantial operating and net losses, and it is possible that we will never be able to sustain or develop the revenue levels necessary to attain profitability. If we are unable to raise sufficient capital when needed, our business, financial condition and results of operations could be materially and adversely affected, and we may need to modify our operational plans. In addition, if we were unable to raise sufficient capital in the future, it may be determined that we would be unable to continue as a going concern, which could have a further material adverse impact on our business and financial condition.

Our future performance is difficult to evaluate because we have no or only a limited operating history in the minerals industry and no revenue from our proposed extraction operations at our properties, which may negatively impact our ability to achieve our business objectives.

Although the Project deposit was identified over 50 years ago and significant work has been undertaken to refine the resource estimate and development plan since that time, including by our immediate predecessor, ABR, which undertook significant development activities to develop the resource estimate and mine plan for the Project, we have not realized any revenues to date from the sale of mineral products. To date, our operating cash flow needs have been financed primarily through equity financing and not through cash flows derived from our operations.

We currently produce an insignificant amount of material from our SSF and we have not sold any product derived from our properties. As a result, our revenues are expected to be determined, to a large degree, by the success of our operation of the SSF, development of our proposed large-scale complex at the Project, subsequent operating activities as well as ongoing commercial and marketing efforts to establish offtake contracts for material products. Our revenues will also be substantially impacted by the prevailing prices for boric acid and its derivatives, lithium carbonate, HCl, SOP and gypsum, to the extent that these products can be successfully extracted. At the present time, a recovery process for lithium has not been field tested and will likely not be addressed until recovery of boric acid is sufficiently operational. Furthermore, preliminary work regarding the recovery of SOP has been completed, but a determination has not been made as to whether or when SOP production will be included in the planned operations at the Project. For the products that we aim to successfully produce in the future, market prices are dictated by supply and demand, and we cannot predict or control the price we will receive for boric acid and its derivatives, lithium carbonate, HCl, SOP, gypsum and other bi-products. Although management has identified currently favorable market conditions concerning the supply and demand of boric acid, boron advanced materials and lithium carbonate, future market conditions may be significantly less favorable as a result of numerous factors, including many that are beyond the scope of our control.

We were incorporated in September 2021, and we have only recently begun to implement our current business strategy. As a result, we have little or no historical financial and operating information available to help you evaluate our future financial and operating performance. Therefore, it is possible that actual costs may increase significantly, and we may not be able to achieve our expected results. The Project may ultimately be less profitable than currently anticipated or may not be profitable at all, which could have a material adverse effect on our results of operations and financial position.

If we do not obtain additional financing and maintain sufficient funds to continue our ongoing development and proposed operations, our proposed business may be at risk or the execution of our business plan may be delayed.

We have limited assets upon which to develop and commence our business operations and to rely otherwise. As of June 30, 2024 and June 30, 2023, we had cash and cash equivalents of $4.9 million and $20.3 million, respectively. We have had recurring net losses from operations and an accumulated deficit of $200.0 million as of June 30, 2024 and $138.0 million as of June 30, 2023. Given our net losses and with only these funds, we will need to seek significant additional funds in the future through equity or debt financings, or strategic alliances with third parties, either alone or in combination with debt or equity financings to fund our business plan and to complete our mining exploration initiative. Our business plan, which includes the development of the Project, has required and will continue to require substantial capital expenditures. We will require financing to fund our planned pre-production activities and are required to raise additional capital in respect of continuing our proposed mining exploration program, pre-production activities, including the SSF, legal, operational set-up, general and administrative, marketing, employee salaries and other related expenses.

The full scope of our current business plan for the next 12 months includes, among other things: operation of the SSF to refine operations and progress customer qualification; operation of the SSF for several continuous months; progress FEL-2 and FEL-3 and detailed engineering; procure long lead item equipment including our crystallization units; optimize well-field design in an effort to reduce future mining capital and operational expenditures through various drilling techniques such as directional, horizontal and radial drilling; pursue and optimize infrastructure capital expenditures for the larger-scale facility which could include expansion of non-potable water resources, upgrading shore power, connection to a natural gas network, and constructing new access roads into and out of the location for our larger-scale facility; and continue hiring team members necessary to support our operation efforts of becoming a global producer of boric acid, lithium carbonate, gypsum, and other bi-products. It will be necessary for us to obtain additional financing during the next 12 months for us to fund and achieve the full scope of our current business plan. Further, we have incurred net losses and negative operating cash flows in each quarter since our inception and expect to incur significant losses in future periods as we continue to increase our expenses to pursue the development of our business.

Additional development work will be required beyond the scope of our current 12-month business plan in order to optimize, design and engineer operational processes at our proposed large-scale complex at the Project, which we expect will assist in our technical and economic analysis of the Project. Such additional development work may include additional drilling and detailed engineering work, continued operation of the SSF to get additional input, and the preparation of a feasibility study (if any), among others. We expect to source the capital needed for such additional development work from additional capital raises or other financing activities.

Our ability to raise additional funds may also be adversely impacted by, an economic slowdown, higher inflation, increased interest rates, supply chain issues, diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates, and uncertainty about economic stability. If the equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive.

Certain market disruptions may increase our cost of borrowing or affect our ability to access one or more financial markets. Such market disruptions could result from:

•adverse economic conditions;

•adverse general capital market conditions;

•poor performance or cyclical decline of the borates, lithium, or mining industries in general;

•bankruptcy or financial distress of unrelated companies or marketers engaged in the borates or lithium industries;

•significant decrease in demand for borates or lithium; or

•adverse regulatory actions that affect our development and construction plans or the use of borates or lithium generally.

Our previous development plans were focused on boron and SOP extraction and developing a large-scale complex without first developing a smaller scale pilot facility, such as the SSF. In May 2023, we updated our technical report summary and three phases of scaled production which represented a change in project scope compared to our previous business plans. Our new business plan includes:

•a focus on boron and lithium extraction (as opposed to boron and SOP under our previous plans).

•Phase 1 targets production of 90,000 short tons of boric acid and 1,100 short tons of lithium carbonate with targeted initial commercial production in the second half of calendar year 2026 or first half of calendar year 2027.

•Phase 2 and Phase 3 target incremental production increases of 180,000 short tons of boric acid and 2,200 short tons of lithium carbonate in each phase.

•Full operation includes targeting production of 450,000 short tons of boric acid and 5,500 short tons of lithium carbonate per annum.

These project scope changes, taken together with cost inflation, have resulted in a material increase to our previously estimated capital expenditure budget required to complete our proposed large-scale complex. As a result, we currently expect a material increase to our capital expenditure budget compared to the previously published estimates and our internal cost estimates. In addition, the capital expenditures related to our proposed large-scale complex continue to be subject to change as our technical and economic analysis progresses. Such changes could also be material, including without limitation as a result of potential future price increases for major equipment or labor, and future operating data from our SSF which may result in changes in the design and engineering of our proposed large-scale complex. The foregoing factors may lead to materially higher costs, delays or the inability to complete our proposed large-scale complex as planned or on commercially reasonable terms or at all. Furthermore, it could take several months or longer for the operating data from the SSF to be sufficiently calibrated and reliable to provide reasonable input into the future design, engineering and cost optimization for our proposed large-scale complex, as well as the expected total capital expenditures and ongoing required operating expenditures related thereto. As a result, depending on the timing, nature, quality and specificity of the data we receive from the operational SSF, we may require significant additional capital before we can progress the development of our proposed large-scale complex. Such additional capital may be needed to fund further detailed engineering work necessary to prepare a feasibility study (if any), including engineering work to define, with a reasonable degree of certainty, the capital expenditures required for our proposed large-scale complex and in particular related to equipment and drilling. We may also need additional capital for continued operation of the SSF to obtain test and flow data required to complete such detailed engineering work. As a result, we can provide no assurance that we will be able to meet our expected timelines, capital expenditure and costs estimates with respect to either the ongoing operation of our SSF or proposed large-scale complex and we may need significant additional capital to pursue our operating plans, which capital may not be available to us on commercially reasonable terms or at all. Our inability to obtain any such required additional capital on commercially reasonable terms would have a material adverse impact on our business, operations, liquidity and financial position.

Our inability to successfully operate the SSF, and our inability to complete further technical and economic studies (including a bankable feasibility study) with respect to the Project, may have a material adverse impact on the Project.

The SSF is our smaller scale boron facility which serves as a foundation for future design, engineering, and cost optimization for our proposed large-scale complex at the Project focused on boron and lithium. We believe that the successful operation of the SSF is an important path to obtaining critical information that will help enable us to optimize the efficiency, output and economic profile of our proposed large-scale complex. Until the SSF has been operational for several months, we will not have access to more refined inputs for estimating capital and operational expenditures required to complete further technical and economic studies (such as a bankable feasibility study) with respect to our proposed large-scale complex at the Project. Such further technical and economic studies may be required to assist in determining the economic recoverability of mineral resources for the Project. In addition, our current abbreviated approach to process development provides for both pilot scale and large-scale process design for the Project to be undertaken in parallel. This approach has a higher risk of requiring re-work of certain parts, which could lead to potential delays and increased design costs. An abbreviated process development approach may also lead to technical risk, and higher capital and operating expenditures. We cannot assure you that the SSF, and subsequently our proposed large-scale complex at the Project, will be completed on schedule, within budget or at all, or achieve an adequate return on investment. We are also a newly formed company which makes it more difficult for you to evaluate our track record of meeting various milestones or target completion deadlines.

Our inability to successfully operate the SSF may delay or prevent the completion of further technical and economic studies (including any bankable feasibility study). Our ability to complete further technical and economic studies (including any bankable feasibility study) could materially and adversely impact our ability to secure additional funding and thereby delay or otherwise have a material adverse impact on the Project. For example, a successfully operating SSF is required to complete further technical and economic studies (such as a bankable feasibility study), including studies complying with the relevant Regulation S-K 1300 requirements to present reserves and otherwise determine commercial viability of the Project.

We have begun working on further technical and economic analysis of the Project and released an Amended Initial Assessment Report in May 2023, which we will continue to further refine. This continued technical and economic analysis is subject to change and may lead to a separate technical study, an update to our Amended Initial Assessment Report or a more comprehensive study (such as a bankable feasibility study). However, we currently cannot assure you of the form and scope of this continued technical and economic analysis, and we may conclude that the completion of any such further studies (including a bankable feasibility study) may not be commercially reasonable, necessary or possible at all.

Even if such further technical and economic studies (including a bankable feasibility study) are completed on time, there is no guarantee that they will produce favorable outcomes. If the outcomes are not favorable, we may be unable to extrapolate a Regulation S-K 1300 compliant Indicated or Inferred Mineral Resource to a Regulation S-K 1300 Probable or Proven Mineral Reserve and to demonstrate commercial viability. Additional exploration may be required which would require significant additional investments and financing. Even with further exploration, there is no assurance that the Project will result in a profitable commercial mining operation. Any such further study (including a bankable feasibility study) may also indicate that substantial additional financing will be required to complete the Project. We cannot give any assurance that we will be successful in completing any such financing or that such financing will be available to us if and when required or on satisfactory terms, or at all.

We have invested and, subject to availability of adequate capital, plan to continue to invest significant amounts of capital in the Project on exploration and development activities, which involve many uncertainties and future operating risks that could prevent us from realizing profits on expected timeframes or at all.

In total, we have spent in excess of $144 million on the Project thus far, including resource drilling, metallurgical test works, well injection tests, permitting activities, construction and operation of the Small-Scale Facility, and pilot-scale test works. For year ended June 30, 2024, our capital expenditures per our statement of cash flows were $7.2 million.

Our business is capital intensive. Specifically, the exploration and recovery of boric acid and lithium, the mining costs, the maintenance of machinery and equipment, and the compliance with applicable laws and regulations, each require substantial capital expenditures. Subject to the availability of adequate capital, we plan to continue to invest significant capital over the next several years on the development of the Project to bring it into production and will have to continue to invest capital to maintain or increase the amount of mineral resources we hold and our rates of production once commercialization of the Project has occurred. Mining exploration is highly speculative in nature, involves many risks and is frequently unsuccessful. Development and production activities may involve many uncertainties and operating risks that could prevent us from realizing profits, putting pressure on our consolidated balance sheet and credit rating. Unforeseen issues, including increasing the required amount of capital expenditure necessary to bring the Project into production, the impact of volatile boric acid and its derivatives, lithium carbonate, hydrochloric acid ("HCl"), sulphate of potash ("SOP") and gypsum prices, our ability to enter into supply contracts with buyers, and obstacles or complexities that could arise in the environmental or permitting process may cause us not to proceed with any one or a combination of these activities. Moreover, once mineralization is discovered, it may take a number of years from the initial phases of drilling before production is possible, during which time the economic feasibility of production may change. We previously targeted reaching initial commercial production in fiscal year 2026. Given the permitting hurdles and time to obtain final EPA approval and resource constraints in fiscal year 2024, we are now targeting to reach initial commercial production in the second half of calendar year 2026 or first half of calendar year 2027. This target continues to be dependent on a number of factors and assumptions, including obtaining the requisite funding for, and the successful construction of, our proposed large-scale complex, in addition to obtaining and maintaining applicable permits, and there can be no assurance that we will be able to meet any such target on time, on budget, or at all due to many factors including our limited experience in successful construction of similar projects, the complexity of the project, supply chain issues, higher costs, construction delays, cost overruns, planned and unplanned shutdowns, turnarounds, outages and other delays and interruptions. If and when production begins, no assurance can be given that we will be able to maintain our production levels or generate sufficient cash flow, capitalize a sufficient amount of our net profit or have access to sufficient equity investments, bank loan or other debt financing alternatives to fund our capital expenditure at a level necessary to continue our exploration and exploitation activities. In addition, we cannot assure you that existing or future projects, if approved and executed, will be completed on schedule, within budget or achieve an adequate return on investment.

The amounts and timing of expenditures will depend on the progress of ongoing development, the results of consultants' analyses and recommendations, the rate at which operating losses are incurred, and other factors, many of which are beyond our control. Whether the mineral deposits we have discovered will be successfully extracted depends on a number of factors, which include, without limitation, the particular attributes of the deposit, prices for the minerals and the volatility of their respective markets, and governmental regulations. If we cannot complete development activities and commence and maintain mining operations, we may never generate revenues and will never become profitable.

The Project may be delayed, more costly than anticipated or unsuccessful for many reasons, including declines in boric acid and its derivatives, lithium carbonate, HCl, SOP and gypsum prices, cost overruns, project implementation schedule slippage, shortages of or delays in the delivery of equipment or purpose-built components from suppliers, escalation in capital costs estimates, mechanical or technical difficulties, increases in operating costs structures, possible shortages of construction or other personnel, other labor shortages or industrial action, pandemic or localized epidemic, environmental occurrences during construction that result in a failure to comply with environmental regulations or conditions on development, or delays and higher-than expected costs, unanticipated natural disasters, accidents, miscalculations, unanticipated financial events, political or other opposition, litigation, acts of terrorism, operational difficulties or other events associated with such construction that may result in the delay, suspension or termination of the Project, resulting in further costs, the total or partial loss of our investment and a material adverse effect on our results of operations, financial performance and prospects.

We have no history of mineral production and we may not be able to successfully achieve our business strategies, including our downstream processing ambitions.

We are an exploration stage company and we have no history of mining or refining mineral products from our properties. As such, any future revenues and profits are uncertain. There can be no assurance that the Project will successfully reach commercial-scale production of minerals or otherwise generate operating earnings. Advancing projects from the exploration stage into development and commercial production requires significant capital and time and will be subject to further technical and economic studies, permitting requirements and construction of mines, processing plants, roads and related works and infrastructure. We will continue to incur losses until mining-related operations successfully reach commercial production levels and generate sufficient revenue to fund continuing operations. There is no certainty that we will generate revenue from any source, operate profitably or provide a return on investment in the future.

In addition, substantial additional capital will be required to develop and support potential downstream processing capabilities at the Project. The economic viability of the production of boron advanced materials at the Project will be dependent on a number of factors beyond the scope of our control, including the market demand for and competitive landscape of the boron advanced materials that we hope to produce. We cannot assure you that our downstream processing ambitions will operate profitably or provide a return on investment in the future.

We may be unable to develop or acquire certain intellectual property required to implement our business strategy successfully.

A key element of our long-term business strategy is to develop high-performance, boron specialty and advanced materials that support downstream applications in the areas of clean energy infrastructure, electric transportation, and high-grade fertilizers among other end uses. To implement this strategy successfully, we may need to license certain intellectual property related to these downstream processes and/or develop to ability, or collaborate with, purchase or form a joint venture with commercial partners. In addition, other licenses that may be necessary for some of these downstream processing steps have not yet been obtained. Any failure to establish or maintain collaborative, joint venture or licensing arrangements for the production of boron or lithium specialty products on favorable terms could adversely affect our business and prospects. No assurances can be given that we will be able to successfully license any such intellectual property, or that we will be able to do so on favorable terms. If we materially breach the obligations in any future licensing agreements, the licensor typically has the right to terminate the license and we may not be able to market products that are covered by the license, which could adversely affect our competitive business position and harm our business prospects. In addition, any claims brought against us by any future licensors could be costly and time-consuming and would divert the attention of our management and key personnel from our business operations.

Other licenses that may be necessary for some of our proposed downstream processing steps have not yet been obtained. Any failure to establish or maintain collaborative, joint venture or licensing arrangements for the production of boron or lithium specialty products on favorable terms could adversely affect our business and prospects.

Third parties may claim that we infringe on their proprietary intellectual property rights, and resulting litigation may be costly, result in diversion of management's time and efforts, require us to pay damages or prevent us from marketing our future products.

Our commercial success will depend in part on not infringing, misappropriating or violating the intellectual property rights of others. From time to time, we may be subject to legal proceedings and claims, including claims of alleged infringement of trademarks, copyrights, patents and other intellectual property rights held by third parties. In the future, third parties may sue us for alleged infringement of their proprietary or intellectual property rights. We may not be aware of whether our products do or will infringe existing or future patents or the intellectual property rights of others. Any litigation in this regard, regardless of outcome or merit, could result in substantial costs and diversion of management and technical resources as well as harm to our brand, any of which could adversely affect our business, financial condition and results of operations. If the party claiming infringement were to prevail, we could be forced to discontinue the use of the related technology or design and/or pay significant damages unless we enter into royalty or licensing arrangements with the prevailing party or are able to redesign our products or processes to avoid infringement. Any such license may not be available on reasonable terms, if at all, and there can be no assurance that we would be able to redesign our products or processes in a way that would not infringe the intellectual property rights of others. In addition, any payments we are required to make and any injunction we are required to comply with as a result of such infringement could harm our reputation and financial results.

All of our business activities are now in the exploration stage and there can be no assurance that our exploration efforts will result in commercial development.

All of our operations are at the exploration stage and there is no guarantee that any such activity will result in commercial production. Limited drilling has been conducted at the Project to date, which makes the extrapolation of a Regulation S-K 1300 compliant Indicated or Inferred resource to a Regulation S-K 1300 compliant Probable or Proven Mineral Reserve impossible without further drilling and engineering. We intend to engage in additional exploratory drilling and engineering while we operate the SSF, but we can provide no assurance of future success from our planned additional drilling program and engineering. The exploration for

boron and lithium involves significant risks which even a combination of careful evaluation, experience and knowledge cannot eliminate. While the discovery of these minerals may result in substantial rewards, few properties which are explored are ultimately developed into producing mines. Major expenses may be required to locate and establish Proven Mineral Reserves, to develop processes and to construct mining and processing facilities at a particular site, including at the Project. It is impossible to ensure that the exploration programs planned by us or any future development programs will result in a profitable commercial mining operation. There is no assurance that our mineral exploration activities will result in any discoveries of commercial quantities of boron or lithium, or any other materials. There is also no assurance that, even if commercial quantities of ore are discovered, any mineral property will be brought into commercial production. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: the particular attributes of the deposit, such as size, grade and proximity to infrastructure, the run of mine solution produced, engineering of the plant and process to produce a commercial product, prices of minerals and the volatility of their respective markets; and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. These factors and others are beyond our control, and the effects of these factors cannot be accurately predicted. Our long-term profitability will be in part related to the cost and success of our proposed exploration programs and any subsequent development programs at the Project and elsewhere.

We are an exploration stage company with no known Proven or Probable Mineral Reserves, our estimates of resources and mineralized material are inherently uncertain and subject to change, and the volume and grade of ore actually recovered may vary from our estimates.

We are an exploration stage company, with no Proven or Probable Mineral Reserves. Limited drilling has been conducted at the Project to date, which makes the extrapolation of a Regulation S-K 1300 compliant Indicated or Inferred resource report to a Regulation S-K 1300 compliant Probable or Proven Mineral Reserve report impossible without further drilling and engineering. There can be no assurance that the Project deposit contains Proven or Probable Mineral Reserves, as defined by Regulation S-K 1300, or that even if such reserves are found, that we will be successful in economically recovering them. Investors should not assume that the mineral resource estimates described under "Properties—Mineral Resource Estimate" will ever be extracted. Few properties which are explored are ultimately developed into producing mines. Major expenses may be required to locate and establish Proven or Probable Mineral Reserves, to develop processes and to construct mining and processing facilities at a particular site. It is impossible to ensure that the exploration programs planned by us or any future development programs will result in a profitable commercial mining operation. There is no assurance that our mineral exploration activities will result in any discoveries of commercial quantities of borates or lithium.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Probable or Proven Mineral Reserves. Furthermore, development projects such as ours have no operating history upon which to base estimates of Proven or Probable Mineral Reserves and estimates of future cash operating costs. Such estimates are, to a large extent, based upon the interpretation of reserves and estimates of future cash operating costs as well as the interpretation of geological data obtained from drill holes and other sampling techniques, and technical and economic studies (including feasibility studies) that derive estimates of cash operating costs based upon anticipated tonnage and grades of minerals to be mined and processed estimates of cash operating costs based upon anticipated tonnage and grades of minerals to be mined and processed, comparable facility and equipment operating costs, anticipated climatic conditions and other factors. In addition, mineral resource estimates prepared by different reserve professionals based upon the analysis of the same geologic data may vary significantly from each other based upon the inherent subjective judgments included in such estimates. As a result, actual cash operating costs and economic returns based upon development of resources may differ significantly from those originally estimated. Moreover, significant decreases in actual or expected prices may mean Proven or Probable Mineral Reserves, if and when established, will be uneconomical to mine.

The Project deposit has had a significant amount of prior drilling and is the subject of at least three separate historic mineral resource estimates, including a 2018 initial feasibility study prepared for ABR and a second feasibility study, originally released in April 2020 and updated further in February 2021. None of the prior ABR mineral resource estimates were Regulation S-K 1300 compliant. The Amended Initial Assessment Report released in May 2023, and further revised on February 2, 2024, contains a combined 74.31 million short tons of Measured plus Indicated resources with an average grade of 4.15% B_2O_3 and 356 ppm Li, using a 2% cut-off grade for B_2O_3. At this time, our Amended Initial Assessment Report does not include any known Proven or Probable Mineral Reserves and there are no other Regulation S-K 1300 compliant feasibility studies, including a bankable feasibility study. Additional time and expenditures are required to potentially establish Probable or Proven Mineral Reserves sufficient to commercially mine and to construct, complete and install mining and processing facilities in those properties that are actually mined and developed. Any expenditures that we may make in the exploration of any mineral property or the development of any boron advanced materials may not result in the discovery of any commercially exploitable mineral deposits or such boron advanced materials.

The mineral resource estimates stated in this filing and extracted from the Amended Initial Assessment Report represent the amount of boron acid and lithium carbonate that the QP in that report estimated at May 2023, has determined could be economically and legally extracted or produced at the time of the mineral resource determination. There can be no assurance that our disclosed mineral resource estimates will be recovered and any material reductions in the quantity of mineral resources or the related grades or

increase cost of production could have a material adverse effect on our business, financial condition or prospects. Estimates of resources and reserves are subject to considerable uncertainty, and the estimation of mineral resources is a subjective process. Such estimates are expressions of judgment based on knowledge, experience and industry practice at the time of the estimation and will be, to a large extent, based on the interpretations, which may be imprecise or which may later prove to be inaccurate, of geologic data obtained from drill holes and other exploration techniques and which may not necessarily be indicative of future results. Estimates made at a given time may change significantly in the future when new information becomes available. We expect that our estimates of resources will change to reflect such updated information. Resource estimates may be revised upward or downward based on the results of current and future drilling, testing or production levels, significantly lower borate or lithium prices as a result of a decrease in commodity prices, increases in operating costs, reductions in metallurgical recovery or other modifying factors, and this could result in material write-downs of our investment in mining properties and increased amortization, reclamation and closure charges. Such revisions may also render previously disclosed estimates of mineral resources uneconomical. We cannot assure that any particular level of recovery of borates or other minerals from discovered mineralization will in fact be commercially realized. The exploration and development of mineral deposits involves a high degree of financial risk over a significant period of time which a combination of careful evaluation, experience and knowledge of management may not eliminate.

We are engaged in the business of exploring and developing mineral properties with the intention of locating economic deposits of minerals. Our property interests are at the pre-commercial-production stage. Accordingly, it is unlikely that we will realize profits in the short term, and we cannot assure you that we will realize profits in the medium to long term. Any profitability from our business in the future will be dependent upon development of an economic deposit of minerals and further exploration and development of other economic deposits of minerals, each of which is subject to numerous risks that are outside of our control.

Producers use feasibility studies for undeveloped ore bodies to derive estimates of capital and operating costs based upon anticipated tonnage and grades of ore to be mined and processed, the predicted configuration of the ore body, expected recovery rates of minerals from the ore, the costs of comparable facilities, the costs of operating and processing equipment and other factors. We cannot assure you that we will complete any such feasibility study. Actual operating and capital cost and economic returns on projects may differ significantly from original estimates. Further, it may take many years to commence production, during which time, the economic feasibility of production may change.

In addition, pre-production projects like the Project have no operating history upon which to base estimates of future operating costs and capital requirements. Exploration project items, such as any future estimates of reserves, mineral recoveries or cash operating costs will to a large extent be based upon the interpretation of geologic data, obtained from a limited number of drill holes and other sampling techniques, and future feasibility studies (if any). We cannot assure you that we will complete any such feasibility study. Actual operating costs and economic returns of any and all exploration projects may materially differ from the costs and returns estimated, and accordingly our financial condition, future results of operations, and cash flows may be negatively affected.

Estimates relating to the development of the Project and mine plan are uncertain and we may incur higher costs and lower economic returns than estimated.

Mine development projects such as the Project typically require a number of years and significant expenditures during the development phase before production is possible. These projects could experience unexpected problems and delays during development, construction and mine start-up. Our decisions concerning the development of the Project deposit have been based on the results of multiple studies performed under the JORC Code and our Amended Initial Assessment Report, which have estimated the anticipated economic returns of the Project. The actual profitability or economic feasibility of the Project may differ from our estimates as a result of any of the following risks normally encountered in the mining industry, such as:

- changes in tonnage, grades and metallurgical characteristics of ore to be mined and processed;
- changes in input commodity and labor costs;
- the quality of the data on which engineering assumptions are made;
- adverse geotechnical conditions;
- availability of adequate and skilled labor force, adequate machinery and equipment;
- availability, supply and cost of water and power;
- fluctuations in inflation;
- availability and terms of financing;
- delays in obtaining environmental or other government permits or approvals or changes in the laws and regulations related to project development or operations;

•changes in tax laws, the laws and/or regulations around royalties and other taxes due to the local, state and federal governments and any royalty agreements;

•weather or severe climate impacts, including, without limitation, prolonged or unexpected precipitation, drought, forest fires and/or sub-zero temperatures;

•accidental fires, floods, earthquakes or other natural disasters;

•controlling water and other similar mining hazards;

•liability for pollution, other environmental damage, or harm to plants or animals, including endangered or protected species;

•potential delays and restrictions in connection with health and safety issues, including pandemics and infectious diseases;

•potential delays relating to social and community issues, including, without limitation, issues resulting in labor disputes, protests, road blockages or work stoppages;

•uncertainties regarding our ability to successfully implement downstream processing and reach full revenue potential;

•potential challenges to mining activities or to permits or other approvals or delays in development and construction based on claims of disturbance of cultural resources or the inability to secure consent for such disturbance; and

•other known and unknown risks involved in the conduct of exploration, development and the operation of mines.

Any one of the aforementioned risks may cause substantial delays to the Project and require significant capital outlays, adversely affecting our future earnings and competitive position and, potentially our financial viability. In addition, the nature of some of these risks is such that liabilities could exceed any applicable insurance policy limits or could be excluded from coverage. As many of the risks described above are also risks against which we cannot insure or against which we may elect not to insure, we are not fully insured against all potential risk incident to our business. The potential costs which could be associated with any liabilities not covered by insurance, or in excess of insurance coverage, or compliance with applicable laws and regulations could be substantial. As a result of market conditions, certain insurance may become unavailable or available only for reduced amounts of coverage. If we were to incur a significant liability for which we were not fully insured, it could have a material adverse effect on our business, results of operations, financial condition and liquidity.

We depend on a single mining project.

The Project accounts for all of our mineral resources and the current potential for the future generation of revenue. Any adverse development affecting the Project will have a material adverse effect on our business, prospects, profitability, financial performance and results of operations. These developments include, but are not limited to, the inability to obtain necessary permits or financing to develop the Project, changes in technical parameters of project development, changes in costs or anticipated costs which may make it uneconomic to develop and/or operate the Project, unusual and unexpected geologic formations, seismic activity, rock bursts, flooding, drought, and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, property, and which could hinder the development and future operation of the Project. If the Project is completed to management's contemplated target production capacity of up to 450,000 tons per year of boric acid, it may exceed the limits of our existing permits, which would require us to seek modifications to the permits. There can be no assurance that we could obtain any required permit modifications. Based on the May 2023 mineral resource estimate in the Amended Initial Assessment Report and assuming we reach economically viable production, the Project, by its nature, will have a defined production life (the period during which extraction will remain viable). Ultimately, we will be required to replace and expand our resources and any established reserves if we are to maintain operating revenues. In the absence of additional mineral projects, we will be solely dependent on the Project for our revenue and profits, if any. Our ability to maintain or increase our annual production will be dependent, in significant part, on our ability to expand the Project, bring new projects into production and to complete acquisitions.

Our long-term success will depend ultimately on our ability to achieve and maintain profitability and to develop positive cash flow from our proposed operating activities.

Our long-term success, including the recoverability of the carrying values of our assets, our ability to acquire and develop additional projects, and continuing with the exploration, development and commissioning and operating activities of the Project will depend ultimately on our ability to achieve and maintain profitability and to develop positive cash flow from our operations by establishing ore bodies that contain commercially recoverable borates, lithium, and other minerals and to develop these into profitable operating activities. The economic viability of our future operating activities has many risks and uncertainties including, but not limited to:

•a significant, prolonged decrease in the market price of borates, lithium, and other minerals;

•difficulty in marketing and/or selling borates, lithium, and other minerals;

•significantly higher than expected capital costs to construct the Project;

•significantly higher than expected extraction costs;

•significantly lower than expected borates, lithium, and other minerals extraction;

•significant delays, reductions or stoppages of borates, lithium, and other minerals extraction activities;

•the introduction of significantly more stringent regulation affecting our activities; and

•global political, economic and market conditions, including political disturbances, war, terrorist attacks and changes in global trade policies.

Our future operating activities may change as a result of any one or more of these risks and uncertainties, and we cannot assure you that any ore body that we extract mineralized materials from will result in achieving and maintaining profitability and developing positive cash flow.

Our growth depends upon the continued growth in demand for end use and future facing applications that require borates, lithium, and related minerals and compounds we expect to produce.

Our growth is dependent upon the continued adoption and demand by consumers of end use applications, such as solar and wind energy infrastructure, neodymium-ferro-boron magnets, and lithium-ion batteries, and future facing applications, including the semi-conductor, aerospace, military, and automotive markets, which currently require borates, lithium, and related minerals and compounds we expect to produce. If the market for such applications does not develop as we expect, or develops more slowly than we expect, our business, prospects, financial condition and results of operations will be affected. The market for such end use applications is relatively new, rapidly evolving, and could be affected by numerous external factors such as:

•government regulations;

•tax and economic incentives;

•rates of consumer adoption; and

•competition.

Changes in technology or other developments could adversely affect demand for lithium compounds or result in preferences for substitute products.

Lithium and its derivatives are preferred raw materials for certain industrial applications, such as rechargeable batteries. For example, current and future high energy density batteries for use in electric vehicles will rely on lithium compounds as a critical input. The pace of advances in current battery technologies, development and adoption of new battery technologies that rely on inputs other than lithium compounds or a delay in the development and adoption of future high nickel battery technologies that utilize lithium hydroxide could significantly and adversely impact our prospects and future revenues. Many materials and technologies are being researched and developed with the goal of making batteries lighter, more efficient, faster charging and less expensive, some of which could be less reliant on lithium hydroxide or other lithium compounds. Some of these technologies, such as commercialized battery technologies that use no, or significantly less, lithium compounds, could be successful and could adversely affect demand for lithium batteries in personal electronics, electric and hybrid vehicles and other applications. We cannot predict which new technologies may ultimately prove to be commercially viable and on what time horizon. In addition, alternatives to industrial applications dependent on lithium compounds may become more economically attractive as global commodity prices shift. Any of these events could adversely affect demand for and market prices of lithium, thereby resulting in a material adverse effect on the economic feasibility of extracting any mineralization we discover at our properties and reducing or eliminating any reserves we may identify in the future.

Our growth depends upon the continued growth in demand for electric vehicles with high performance lithium compounds.

Our growth is dependent upon the continued adoption of electric vehicles by consumers. If the market for electric vehicles does not develop as we expect, or develops more slowly than we expect, our business, prospects, financial condition and future results of operations will be adversely affected. The market for electric vehicles is relatively new, rapidly evolving, and could be affected by numerous external factors, such as:

•government regulations and automakers' responses to those regulations;

•tax and economic incentives;

•rates of consumer adoption, which is driven in part by perceptions about electric vehicle features (including range per charge), quality, safety, performance, cost and charging infrastructure;

•competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles, and high fuel-economy internal combustion engine vehicles;

•volatility in the cost of battery materials, oil and gasoline;

•rates of customer adoption of higher performance lithium compounds; and

•rates of development and adoption of next generation high nickel battery technologies.

Our long-term success will depend on our ability to enter into and deliver product under supply agreements.

Because we have not yet begun production of mineral products, we currently do not have any binding supply agreements with any customers. We may encounter difficulty entering into or maintaining supply agreements for our products, may fail to deliver required minimum amounts required by such agreements or may experience production costs in excess of the fixed price to be paid to us under such agreements.

In May 2021, we announced the entry into a non-binding letter of intent with Compass Minerals America Inc. ("Compass Minerals"), a subsidiary of NYSE-listed Compass Minerals, Inc., to progress negotiations with respect to Compass Minerals taking responsibility for the sales and marketing of SOP from our operations.

In September 2021, we announced the entry into a non-binding letter of intent with Borman Specialty Materials. Under the terms of the letter of intent, we agreed to work together towards a binding agreement for the supply of boric acid and other boron specialty and advanced materials, which will be used to manufacture products with critical applications for future global markets, including the semi-conductor, life sciences, aerospace, military and automotive markets.

In May 2022, we also announced the entry into a non-binding letter of intent with Rose Mill. Under the terms of the letter of intent, we agreed to work together on supplying advanced materials that focus on industrial and military applications.

In June 2022, we signed a non-binding letter of intent with Corning Incorporated for the supply of boron and lithium materials, technical collaboration to develop advanced materials and potential financial accommodations in support of a commercial agreement.

In December 2022, we signed a non-binding letter of intent with Estes Energetics to collaborate in producing boron based materials for solid rocket motors used in U.S. space and military applications.

In May 2023, we signed a non-binding letter of intent with Orbital Composites to provide boron feedstock for 3D printing of wind turbines, permanent magnets, and boron carbide for defense applications.

We cannot assure you that the conditions to the closing of any of these non-binding agreements, which have not yet been completed, will be satisfied or, as applicable, waived or that the non-binding agreements will be finalized at all. Likewise, non-binding agreements that have not yet been completed may be completed on terms that differ, perhaps substantially, from those described herein. If the closing conditions are not satisfied or waived on a timely basis, or if another event occurs delaying, preventing or terminating these non-binding agreements, or if we are otherwise unable to enter into binding product and supply agreements, such delay, failure or termination of the non-binding agreements, or inability to enter into binding product and supply agreements, could cause uncertainty or other negative consequences that may materially and adversely affect our business, financial performance and operating results.

Our business, results of operations and financial condition may be materially and adversely affected if we are unable to enter into similar agreements with other parties, we are unable to mutually agree to matters required by the non-binding agreements with Compass Minerals, Borman Specialty Materials, Rose Mill, Corning, Estes Energetics, and Orbital Composites and are unable to deliver the product required by such agreements, we are otherwise unable to enter into binding product and supply agreements, or we experience costs in excess of the price set forth in such agreements.

If the estimates and assumptions we use to determine the size of our total addressable market are inaccurate, including its current size, growth trajectory, and the underlying factors that may drive future growth in overall market size, particularly for boron where there is limited third party published research and market forecasting, our future growth rate may be adversely affected, and the potential growth of our business may be limited.

Our estimate of the annual total addressable market for our proposed products is based on a number of internal and third-party estimates, which are based on a number of factors, including, without limitation, historical and current global demand and pricing, the number and geographic location of global and regional suppliers and their current capacity capabilities, and the growing number of end-use applications and demand for such applications. Market estimates and growth forecasts are subject to significant uncertainty and are based on assumptions and estimates that may prove to be inaccurate. Even if the market in which we compete meets our size estimates and forecasted growth, our business could fail to grow at similar rates, if at all. Our market opportunity is also based on the

assumption that our existing and future offerings will be more attractive to our customers and potential customers than competing products and services. If these assumptions prove inaccurate, our business, financial condition and results of operations could be adversely affected.

The cost and availability of electricity and natural gas are subject to volatile market conditions.

Mining development projects and operations consume large amounts of raw materials and energy. We rely on third parties for the supply of energy we consume and will consume in our development and mining activities. The prices for and availability of electricity, natural gas, oil and other energy resources are all also subject to worldwide supply and demand, volatile market conditions, often affected by weather conditions, as well as political and economic factors beyond our control. Variations in the cost of raw materials, and of energy, which primarily reflects market prices for oil and natural gas, may significantly affect our operating results from period to period. We must have dependable delivery of energy in order to develop and ultimately operate our facilities. Accordingly, we are at risk in the event of an energy disruption. Prolonged black-outs or brown-outs or disruptions caused by natural disasters, or other means, would substantially disrupt our production. Moreover, we expect much of our finished borate products to be delivered by truck. Unforeseen fluctuations in the price of fuel attributable to fluctuations in crude oil prices would also have a negative impact on our costs or on the costs of many of our future customers. In addition, changes in certain environmental regulations in the U.S., including those that may impose output limitations or higher costs associated with climate change or greenhouse gas emissions legislation, could substantially increase the cost of inputs to our operations, such as energy, to us and other borate producers.

Uncertain global economic conditions could have a material adverse effect on our business, financial condition, results of operations or prospects, including the pricing of our products.

Our financial results are tied to global economic conditions and their impact on levels of consumer confidence and consumer spending. Global consumer markets can be impacted by significant U.S. and international economic downturns, such as the current levels of inflation and the global credit crunch experienced in 2008. Continued high levels of inflation or a return to a recession or a weak recovery, due to factors that include, but are not limited to, disruptions in financial markets in the United States, or elsewhere, federal budget, tax or trade policy issues in the United States, political upheavals, war or unrest economic sanctions against trading nations, and demonetization, could cause us to experience significant cost increases and revenue declines due to deteriorated consumer confidence and spending, and a decrease in the availability of credit or on commercially acceptable terms, which could have a material adverse effect on our business prospects or financial condition.

Our business is also dependent upon certain industries, such as energy, automotive, agriculture, transportation, petrochemical and original equipment manufacturing, and these are also cyclical in nature. Therefore, these industries may experience their own significant fluctuations in demand for our products based on such things as economic conditions, energy prices, consumer demand and infrastructure funding decisions by governments. Many of these factors are beyond our control. As a result of the volatility in the industries we plan to serve, we may ultimately have difficulty increasing or maintaining our level of sales or profitability. If the industries we serve were to suffer a downturn, then our business may be further adversely affected.

Our business could be affected by macroeconomic risks.

Our operations and performance depend significantly on global and regional economic conditions. Macroeconomic conditions, including inflation, slower growth or recession, changes to fiscal and monetary policy, tighter credit, higher interest rates, high unemployment and currency fluctuations can materially adversely affect demand for our products and services. In addition, confidence and spending can be materially and adversely affected in response to financial market volatility, negative financial news, declines in income or asset values, energy shortages and cost increases, labor and healthcare costs and other economic factors. An adverse impact on demand for our products, uncertainty about, or a decline in, global or regional economic conditions can have a significant impact on our suppliers and other partners. Potential effects include financial instability; inability to obtain credit to finance operations and purchases of our products; and insolvency. We cannot predict the timing or scale of these various macroeconomic conditions, but they could have a material adverse effect on our business, results of operations and financial condition.

Government efforts to combat inflation, along with other interest rate pressures arising from a recently inflationary economic environment, could lead to higher financing and Project completion costs.

Over the past several years, global and U.S. levels of monetary inflation have been higher than recent historical averages. Government entities have taken various actions to combat inflation, such as raising interest rate benchmarks. Government entities may continue their efforts, or implement additional efforts, to combat inflation, which could include among other things continuing to raise interest rate benchmarks or maintaining interest rate benchmarks at elevated levels. Such government efforts, along with other interest rate pressures arising from an inflationary economic environment, could lead to higher financing costs and have material adverse effect on our business, financial condition and results of operations.

We are subject to anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, which could adversely affect our business, results of operations and financial condition.

The U.S. Departments of Justice, Commerce, State and Treasury and other federal agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of economic sanctions laws, export control laws, the U.S. Foreign Corrupt Practices Act (the "FCPA"), and other federal statutes and regulations, including those established by the Office of Foreign Assets Control ("OFAC"). Under these laws and regulations, as well as other anti-corruption laws, anti-money laundering laws, export control laws, customs laws, sanctions laws and other laws governing our operations, various government agencies may require export licenses, may seek to impose modifications to business practices, including cessation of business activities in sanctioned countries or with sanctioned persons or entities and modifications to compliance programs, which may increase compliance costs, and may subject us to fines, penalties and other sanctions. A violation of these laws or regulations would negatively affect our business, financial condition and results of operations.

We are continuing to implement policies and procedures designed to ensure compliance by us and our directors, officers, employees, representatives, consultants and agents with the FCPA, OFAC restrictions and other export control, anti-corruption, anti-money-laundering and anti-terrorism laws and regulations. We cannot assure you, however, that our policies and procedures are or will be sufficient or that directors, officers, employees, representatives, consultants and agents have not engaged and will not engage in conduct for which we may be held responsible, nor can we assure you that our business partners have not engaged and will not engage in conduct that could materially affect their ability to perform their contractual obligations to us or even result in our being held liable for such conduct. Violations of the FCPA, OFAC restrictions or other export control, anti-corruption, anti-money laundering and anti-terrorism laws or regulations may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could have a material adverse effect on our business, financial condition and results of operations.

Inadequate infrastructure may constrain our future mining operations, including at the Project.

Any potential commercial production at the Project will depend on adequate infrastructure. In particular, reliable power sources, water supply, transportation and surface facilities are all necessary to develop and operate mines. Failure to adequately meet these infrastructure requirements or changes in the cost of such inputs could affect our ability to develop or commence production at the Project and could have a material adverse effect on our business, financial condition, results of operations, cash flows or prospects.

Title to mineral properties and related water rights is a complex process and we may suffer a material adverse effect in the event the Project property or other properties that we may acquire are determined to have title deficiencies.

Acquisition of title to mineral properties and related water rights is a very detailed and time-consuming process. Title to, and the area of, mineral properties may be disputed. Although we have obtained a title opinion in respect to our Project interests, we cannot give any assurance that title to such property will not be challenged or impugned. Mineral properties sometimes contain claims or transfer histories that examiners cannot verify. A successful claim that we do not have title to the Project property or lack appropriate water rights could cause us to lose any rights to explore, develop and mine any minerals on that property, without compensation for our prior expenditures relating to such property.

Restrictions on our ability to obtain, recycle and dispose of water may impact our ability to execute our development plans in a timely or cost-effective manner.

Water is an essential component of our planned mining processes. We currently have two water production wells in an aquifer within our permit boundary, but water is limited in the Mojave Desert. If our demand for water were to outpace supply, our ability to perform mining operations could be restricted or made more costly. Along with the risks of other extreme weather events, drought risk, in particular, is likely increased by climate change. If we are unable to obtain sufficient water to use in our operations, we may be unable to economically produce our target minerals, which could have an adverse effect on our financial condition, results of operations and cash flows.

The development, construction and proposed operation of our properties and projects is subject to various environmental and operational regulations, and risks relating to land use restrictions and potential opposition from landowners, environmental groups and other third parties, all of which could adversely affect or prevent our ability to grow.

Our properties and projects are subject to numerous environmental laws, regulations, guidelines, policies and other requirements relating to, among other things, local land use, zoning, building and operational laws and regulations. We may also operate in jurisdictions with little or no land use regulations or programs for installation and operation of our generation and storage projects. Requirements that are in place for mining projects may require conformance with specified generation capacities, sound levels, radar setbacks, as well as restrictions on communications interference, hazards to aviation or navigation, or other potential nuisances.

Mining projects may experience local opposition in certain markets due to claims based on these alleged nuisances, concerns about land use conversion from agriculture or undeveloped land to mining, or other claims of potential adverse health or environmental impacts, such as misuse of water resources, landscape degradation, land use, food scarcity or price increase. We could experience significant opposition from third parties, including environmental non-governmental organizations, local landowners, neighborhood groups, municipalities and other entities either during the permit application process, including during any public hearings, comment periods or appeal proceedings, or after environmental permits are issued. We could also experience renewed opposition if any permit requires amendment.

Any such opposition may be taken into account by government officials responsible for granting the relevant permits, which could result in the permits being delayed, not being granted or being granted solely on the condition that we carry out certain corrective measures to our proposed projects (including at the Project), which could materially increase our operational costs. In addition, we may become subject to legal proceedings or claims contesting the construction or operation of our projects or permits required thereunder. Any such delays, permit restrictions, legal proceedings or disputes (even if ultimately decided in our favor) could materially delay our ability to complete construction of a project (including at the Project) in a timely manner, or at all, materially increase the costs associated with commencing or continuing such project's commercial operations or harm our reputation. Any settlement of claims or unfavorable outcomes or developments relating to these proceedings or disputes, such as judgments for monetary damages, injunctions or denial or revocation of permits, could have a material adverse effect on our business, financial condition, results of operations, and reputation.

The mining industry is historically a cyclical industry and market fluctuations in the prices of borates, lithium, and lithium byproducts and other minerals could adversely affect our business.

We may derive revenues from the extraction and sale of borates, lithium and other minerals. The marketability of minerals is affected by numerous factors beyond our control. These factors include government regulations relating to pricing, taxes, royalties, allowable production, imports, exports, prevailing price, price volatility, supply, changes in buyer preferences and demand for borates and other minerals. The prices of such commodities have historically fluctuated, and may in the future fluctuate widely and may be affected by numerous factors beyond our control, including international, economic and political trends, domestic and foreign tax policy, the price of imports of commodities, the cost of exploration, development, production and processing mineral ore, available transportation capacity, expectations of inflation, currency exchange fluctuations, interest rates, global or regional consumptive patterns, speculative activities, increased production due to new or improved extraction and production developments and methods, technological changes in the markets for the end products and the overall supply and demand for minerals. The effect of these factors on the price of borates, lithium, and other minerals, and therefore the economic viability of any of our exploration properties, cannot accurately be predicted. Additionally, new production of lithium hydroxide or lithium carbonate from current or new competitors in the lithium markets could adversely affect prices. In recent years, new and existing competitors have made investments to increase the supply of lithium hydroxide and lithium carbonate. Any additional supply (including as a result of such investments) could have an adverse effect on the price of such materials. Only limited information is available with respect to the status of new lithium production capacity expansion projects being developed by current and potential competitors, and, as such, we cannot make accurate projections regarding the future capacities of current and possible new entrants into the market and the dates on which such capacities could become available on the market. If these potential projects are completed in the short term, they could adversely affect market lithium prices, thereby resulting in a material adverse effect on the economic feasibility of extracting any minerals we discover.

Changes in commodity prices would affect our revenues and may reduce the amount of funds available to reinvest in development activities. Reductions in mineral prices not only reduce our revenues and profits but could also reduce the quantities of any reserves that are commercially recoverable. Declining mineral prices may also adversely impact our operations by requiring a review of the commercial feasibility of any of our proposed exploration and development programs. Any such review may indicate a material adverse effect on the economic feasibility of our proposed business.

Fluctuations in the value of the United States dollar relative to other currencies may adversely affect our business.

Fluctuations in the value of the dollar can be expected to affect our business. A strong U.S. dollar would likely result in imported borate and lithium products being comparatively less expensive, potentially resulting in more imports of borate products into the U.S. by our foreign competitors, while a weak U.S. dollar may have the opposite impact on imports.

We face risks relating to mining, exploration, and mine construction, if warranted, on our properties.

Our level of profitability, if any, in future years will depend to a great degree on boron and lithium prices and whether our exploration-stage properties can be brought into production. Exploration and development of boron and lithium resources are highly speculative in nature, and it is impossible to ensure that the currently proposed and future exploration programs and/or feasibility studies on our existing properties will establish reserves. Whether it will be economically feasible to extract boron and lithium depends on a number of factors, including, but not limited to: the particular attributes of the deposit, such as size, grade and proximity to infrastructure; boron and lithium prices and volatility of the market for each; mining, processing and transportation costs; the willingness of lenders and investors to provide project financing on commercially reasonable or favorable terms; labor costs and

possible labor strikes; and governmental regulations, including, without limitation, regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting materials, foreign exchange, environmental protection, employment, worker safety, transportation, and reclamation and closure obligations. The effect of these factors cannot be accurately predicted, but any one or a
combination of these factors may result in us receiving an inadequate return on invested capital. In addition, we are subject to the risks normally encountered in the mining industry, such as:

- the discovery of unusual or unexpected geological formations;
- accidental fires, floods, earthquakes, severe weather or other natural disasters;
- unplanned power outages and water shortages;
- construction delays and higher than expected capital costs due to, among other things, supply chain disruptions, higher transportation costs and inflation;
- controlling water and other similar mining hazards;
- explosions and mechanical failure of equipment;
- operating labor disruptions and labor disputes;
- the ability to obtain suitable or adequate machinery, equipment or labor;
- our liability for pollution or other hazards; and
- other unknown risks involved in the conduct of exploration and operation of mines.

The nature of these risks is such that liabilities could exceed any applicable insurance policy limits or could be excluded from coverage. There are also risks against which we cannot insure or against which we may elect not to insure. The potential costs, which could be associated with any liabilities not covered by insurance or in excess of insurance coverage, or compliance with applicable laws and regulations may cause substantial delays and require significant capital outlays, adversely affecting our future earnings and competitive position and potentially our financial viability.

Mineral exploration and development, such as our proposed operations, are subject to extraordinary risks.

Mineral exploration, development and production involves many risks which even a combination of experience, knowledge and careful evaluation may not be able to overcome. The industrial activities conducted at our facilities present significant risk of serious injury or death to our employees, customers or other visitors to our operations, notwithstanding our safety precautions, including our material compliance with federal, state and local employee health and safety regulations. While we have in place policies and procedures to minimize such risks, we may nevertheless be unable to avoid material liabilities for an injury or death. Our operations will be subject to geological, technical and operating hazards and risks inherent in the exploration for mineral resources and, if we discover a mineral resource in commercially exploitable quantity, our operations could be subject to all of the hazards and risks inherent in the development and production of resources, including liability for pollution or similar hazards against which we cannot insure or against which we may elect not to insure. Any such event could result in work stoppages and damage to property, including damage to the environment. Even though we maintain workers' compensation insurance and a general liability policy to address the risk of incurring material liabilities for injury or death, there can be no assurance that the insurance coverage will be adequate or will continue to be available on the terms acceptable to us, or at all, which could result in material liabilities for an injury or death. The payment of any liabilities that arise may have a material adverse impact on us.

Our proposed facilities or operations could be adversely affected by natural or human causes outside of our control, such as natural disasters, wars or health epidemics or pandemics.

We may be impacted by natural disasters, wars, health epidemics or pandemics, terrorist attacks, civil unrest, cyber threats or attacks, or other events outside of our control. For example, the Project is located in San Bernardino County, California near active faults, which could lead to nearby earthquakes. If major disasters such as earthquakes, wildfires, health epidemics or pandemics, floods, drought, or other events occur, or our information system or communications network breaks down or operates improperly, our ability to achieve or continue operations at the Project may be seriously damaged, or we may have to stop or delay our proposed exploration and development, and eventually production and shipment of our products. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

A shortage of skilled technicians and engineers may further increase our operating costs, which may materially adversely affect our results of operations.

Efficient production of boron and lithium products using modern techniques and equipment requires skilled technicians and engineers. In addition, our efforts will significantly increase the number of skilled operators, maintenance technicians, engineers and other personnel required to successfully operate our business. In the event that we are unable to hire, train and retain the necessary number of skilled technicians, engineers and other personnel there could be an adverse impact on our labor costs and our ability to reach anticipated production levels in a timely manner, which could have a material adverse effect on our results of operations.

A shortage of equipment or disruption in our supply chain could adversely affect our ability to operate our business.

We are dependent on various supplies and equipment to carry out our mineral exploration and, if warranted, development operations. Any shortage of such supplies, equipment and parts could have a material adverse effect on our ability to carry out our operations and therefore limit or increase the cost of potential future production.

Further, we are subject to risk from fluctuating market prices of certain raw materials, including steel, fiberglass reinforced plastic, and bulk chemicals, which are necessary to the construction, maintenance and operation of our assets. The price of these raw materials may be affected by supply restrictions or other market factors (including inflation) from time to time. Some of the components and materials related to our assets are sourced from outside the United States through arrangements with various vendors, and there were delays in obtaining these components and materials as a result of the COVID-19 pandemic, shipping and transportation constraints, and other supply chain disruptions. Political, social or economic instability in regions where these components and materials are made could cause future disruptions in trade.

Actions in various countries have created uncertainty with respect to tariff impacts on the costs of some of these components and materials. The degree of our exposure is dependent on (among other things) the type of some of these components and materials. Significant price increases for these raw materials could reduce our operating margins, and could harm our business, financial condition, and results of operations.

In particular, bulk chemicals are critical to the operation of our business. These raw materials are in high demand, subject to price fluctuations and of limited availability. If manufacturers are not able to procure enough of these components or procure them in a timely manner, this would have a material adverse effect on the development of our products and in turn, our business, financial conditions and results of operations. Significant price increases for bulk chemicals in particular may have an adverse impact on the economic viability of our proposed development and operating activities.

Disruptions in production at our proposed facilities may have a material adverse impact on our business, results of operations and/or financial condition.

Manufacturing facilities in our industry are subject to planned and unplanned production shutdowns, turnarounds, outages and other disruptions. Any serious disruption at our proposed facilities could impair our ability to use our facilities and have a material adverse impact on any future revenues and increase our costs and expenses. Long-term production disruptions may allow competitors to be sought for alternative supply which could further adversely affect our profitability or delay or keep us from reaching commercial development at all.

Unplanned production disruptions may occur for external reasons including natural disasters, weather, disease, strikes, transportation interruption, government regulation, political unrest or terrorism, or internal reasons, such as fire, unplanned maintenance or other manufacturing problems. We may experience delays in construction, equipment procurement, or in completing our proposed large-scale complex on time. Any such production disruption could have a material impact on our proposed operations, operating results and financial condition.

Failure by our vendors or our component or raw material suppliers to use legal or ethical business practices and comply with applicable laws and regulations may adversely affect our proposed business.

We do not control our vendors or suppliers or their business partners. Accordingly, we cannot guarantee that they follow legal or ethical business practices, such as fair wage practices and compliance with environmental safety and other local laws. A lack of demonstrated compliance could lead us to seek alternative manufacturers or suppliers, which could increase our costs and result in delayed delivery of components and raw materials, or other disruptions of our operations. Violation of labor or other laws by our manufacturers or suppliers or the divergence of a supplier's labor or other practices from those generally accepted as ethical in the U.S. or other markets in which we do and expect to do business could also attract negative publicity for us and harm our proposed business.

Competition with and new production of borates, lithium, and other minerals from current or new competitors in the market could adversely affect prices and our proposed business.

The mining industry is highly competitive. According to Global Market Insights, as of 2021, there are two major competitors in the borates industry, Rio Tinto Borates and Eti Maden. If we are successful in bringing the Project into production, we would be competing with two large competitors in the borates industry, one global mining conglomerate and one state-owned enterprise, both of which we believe are generally well-funded and established. Additionally, the lithium industry is highly competitive, and according to Woods Mackenzie, as of March 2022, the market was dominated by Albemarle Corporation, Sociedad Quimica y Minera De Chile S.A., Jiangxi Gangfeng Lithium Co. Ltd., Tianqi Lithium Corp., and Livent Corporation, all of which we believe are generally well-funded and established. Competition principally involves sales, supply and labor prices, contractual terms and conditions, attracting and retaining qualified personnel and securing the services and supplies we need for our operations. We cannot guarantee that competition, with these two major competitors for boron and five major competitors for lithium and lithium derivatives as well as with others, will not adversely affect us in the future. For example, lower cost producers of the minerals we mine could be better positioned to manage future volatility through commodity price cycles. Any significant production increases from either of the aforementioned two main borate competitors and major lithium and lithium derivative producers, and others, or the discovery of any additional significant borate or lithium resources could negatively impact prices received for borates or lithium. Furthermore, it is possible that competitors may engage in pricing activities that could result in market price reductions that may materially and adversely impact the economic feasibility of our plans. In addition, mines have limited lives and, as a result, we must periodically seek to replace and expand our mineral resources by acquiring new properties. Significant competition exists to acquire mining concessions, land and related assets.

We expect that our competitors may have well-established relationships with our current and potential suppliers, lenders and customers and have extensive knowledge of our target markets. As a result, these competitors may be able to respond more quickly to evolving industry standards and changing customer requirements than we may be able to. The adoption of more advanced technology could reduce our competitors' production costs or may result in other efficiencies and, if we do not adopt such technologies, our competitors may have a lower cost structure or greater production efficiency, which may adversely affect our ability to compete.

There is limited information on the status of new production capacity expansion projects being developed by the current and potential competitors and, as such, we cannot make accurate projections regarding the capacities of possible new entrants into the market and the dates on which any new projects could become operational but any significant increase in supply could adversely affect market prices for borates, thereby resulting in a material adverse effect on the economic feasibility of extracting our resources.

Industry consolidation may result in increased competition, which could have a material adverse effect on our proposed business.

Some of our competitors have made or may make acquisitions or enter into partnerships or other strategic relationships to achieve competitive advantages. In addition, new entrants not currently considered competitors may enter our market through acquisitions, partnerships or strategic relationships. We expect industry consolidation to continue and/or increase as demand for critical materials increases. Industry consolidation may result in competitors with more compelling product offerings or greater pricing flexibility than we may have, or business practices that make it more difficult for us to compete effectively, including on the basis of price, sales, technology or supply. These competitive pressures could have a material adverse effect on our proposed business.

We are subject to significant environmental and government regulations and compliance with such regulations requires significant expenditures.

Mining activities in the United States are subject to extensive federal, state, local and foreign laws and regulations governing environmental protection, natural resources, prospecting, development, production, post-closure reclamation, taxes, labor standards and occupational health and safety laws and regulations, including mine safety, toxic substances and other matters. The costs associated with compliance with such laws and regulations are substantial. In addition, changes in such laws and regulations, or more restrictive interpretations of current laws and regulations by governmental authorities, could result in unanticipated capital expenditures, expenses or restrictions on or suspensions of our operations and delays in the development of our properties.

As a current holder of interests in U.S. mineral properties, we may be subject to CERCLA. CERCLA, along with analogous statutes in certain states, imposes strict, joint and several liability on owners and operators of facilities which release hazardous substances into the environment. CERCLA imposes similar liability upon generators and transporters of hazardous substances disposed of at an off-site facility from which a release has occurred or is threatened. Under CERCLA's strict joint and several liability provisions, we could potentially be liable for all remedial costs associated with property that we currently or previously owned or operated regardless of whether our activities are the actual cause of the release of hazardous substances. Such liability could include the cost of removal or remediation of the release and damages for injury to the natural resources. Releases from such facilities or from any of our current U.S. properties due to past or current activities could form the basis for liability under CERCLA and its analogs. In addition, off-site disposal of hazardous substances, including hazardous mining wastes, may subject us to CERCLA liability. Our current and prior U.S. properties are not, to our knowledge, currently listed or proposed for listing on the National Priority List and we are not aware of pending or threatened CERCLA litigation which names us as a defendant or concerns any of our current or prior U.S.

properties or operations. However, we have not conducted a Phase 1 or similar environmental site assessment on our properties and cannot be certain that we are aware of all current or historical operations at or affecting our properties that could involve contamination. We cannot predict the potential for future CERCLA liability with respect to our U.S. properties, nor can we predict the potential impact or future direction of CERCLA litigation in the area surrounding our current and prior properties.

Environmental regulations, including climate change related regulations, mandate, among other things, the maintenance of air and water quality standards, land development and land reclamation, and set forth limitations on the generation, transportation, storage and disposal of solid and hazardous waste. Enhanced public and private focus on climate change, greenhouse effects and proposed or contemplated laws and regulations relating to carbon emissions may impact aspects of our development plans or our future production. Environmental legislation is evolving in a manner that may require stricter standards and enforcement, increased fines and
penalties for non-compliance, more stringent environmental assessments of proposed projects, and a heightened degree of responsibility for mining companies and their officers, directors and employees. In connection with our current activities or in connection with our prior operating activities, we may incur environmental costs that could have a material adverse effect on financial condition and results of operations. Any failure to remedy an environmental problem could require us to suspend operations or enter into interim compliance measures pending completion of the required remedy.

We may also incur substantial costs, including fines, damages, criminal or civil sanctions and remediation costs, or experience interruptions in our operations, for violations arising under these laws and regulations or permit requirements. If we violate environmental, health and safety laws or regulations, in addition to being required to correct such violations, we can be held liable in administrative, civil or criminal proceedings for substantial fines and other sanctions could be imposed that could disrupt or limit our operations. Liabilities associated with the investigation and clean-up of hazardous substances, as well as personal injury, property damages or natural resource damages arising from the release of, or exposure to, such hazardous substances, may be imposed without regard to violations of laws or regulations or other fault, and may also be imposed jointly and severally.

We may in the future be subject to claims by third parties or employees relating to exposure to hazardous materials and the associated liabilities may be material.

Any failure to ensure on-going compliance with current and future laws and government regulations, including environment, workplace health and safety, tax and accounting laws, rules and regulations as well as stock exchange listing rules could have a material adverse effect on our future financial condition and prospects.

We may face increased costs and be subject to liability resulting from the generation and disposal of certain wastes, including hazardous wastes, in the course of the Project's development and/or other future operations.

Our business is subject to stringent and complex laws and regulations relating to the generation, use, handling, storage, recycling, disposal and exposure to solid and hazardous wastes. These laws are frequently subject to change. In the course of our operations, we may generate solid or certain hazardous wastes through the disposal of other materials utilized in our development activities or our future operations. In addition, environmental laws can result in the imposition of liability in connection with end-of-life system disposal.

We own and lease real property and may be subject to requirements regarding the storage, use and disposal of hazardous substances, including spill prevention, control and counter-measure requirements. If our owned or leased properties are contaminated, whether during or prior to our ownership or operation, we could be responsible for the costs of investigation and cleanup and for any related liabilities, including claims for damage to property, persons or natural resources. That responsibility may arise even if we were not at fault and did not cause or were not aware of the contamination. The costs of compliance with laws relating to the management and disposal of solid and hazardous wastes or the remediation of any contamination to which we are or may be responsible, and any changes to our operations mandated by new or amended laws, may be significant. Failure to comply with such laws and regulations could result in significant expenses, delays or fines, which in turn could have a material adverse effect on our results of operations and financial position.

Land reclamation requirements may be burdensome on our financial position.

Land reclamation requirements are generally imposed on companies with mining operations or mineral exploration companies in order to minimize long term effects of land disturbance. We are required to mitigate long-term environmental impacts at the Project by stabilizing, contouring, re-sloping, and revegetating various portions of the site after well-field and processing operations are completed. In addition, we are responsible for plugging and abandoning all injection recovery, water monitoring, and exploration drilling holes. In undertaking these reclamation activities, we must meet comprehensive environmental protection and reclamation standards. Any failure to meet such standards may subject us to fines, penalties, or other sanctions. In addition, in order to carry out reclamation obligations imposed on us in connection with exploration, potential development and production activities, we must allocate financial resources that might otherwise be spent on exploration and development programs. We currently have reclamation obligations and have arranged and pledged certificates of deposits for reclamation. If we are required to carry out unanticipated reclamation work, our financial position could be adversely affected.

The physical consequences of climate change could have a material adverse effect on our properties and proposed business activities.

Climate change may increase the frequency or intensity of adverse weather conditions, such as tropical storms, wildfires, droughts, floods, hurricanes, tornadoes, extreme temperatures or ice storms and may have the long-term effect of changing weather patterns in ways that are difficult to anticipate, which may result in damage or destruction to our assets or to third party assets on which we rely, affect the availability of water for our facilities, or otherwise require us to incur costs, or elicit changes in applicable regulations in the jurisdictions in which we operate, which may result in, among other impacts, increased compliance costs, reduced revenues, restrictions on our proposed operations, and difficulties in obtaining or maintaining permits, licenses or authorizations required for our proposed business. Any such disruption may prevent us from continuing to develop the Project and any other of our properties, or, if and when completed, operating in the normal course.

Certain of our operations are dependent on particular meteorological conditions. Climate change may have a long-term and permanent effect on meteorological patterns, including the frequency or intensity of wind, precipitation, or change in temperatures at the Project and any other of our properties. Furthermore, components of our systems could be damaged by severe weather, such as wildfires, hailstorms, tornadoes, hurricanes, flooding, drought, high or low temperatures or other weather conditions. Replacement and spare parts for key components may be difficult or costly to acquire or may be unavailable. Unfavorable weather and atmospheric conditions could impair the effectiveness of our assets or reduce their output beneath their estimated or engineered capacity or require shutdown of key equipment, impeding future operation of our assets.

Increasing concentration of greenhouse gases in the Earth's atmosphere are contributing to climate changes that are having significant physical effects, such as increased frequency and severity of storms, droughts, fires, floods and other climatic events. If any such effects were to occur in the regions in which we explore, develop and operate, they could adversely affect or delay such activities and may otherwise cause us to incur significant costs in preparing for or responding to those effects.

New sustainability and climate-related disclosure obligations, including those resulting from SEC rule amendments and the State of California's Climate Corporate Data Accountability Act and Climate-Related Financial Risk Act, among others, as well as increased expectations regarding management of sustainability matters from various stakeholders, could result in additional costs for compliance, restrictions on our access to capital, and increased litigation and reputational risk.

In March 2024, the SEC adopted final rules that provide a framework for the reporting of climate-related risks and create a wide range of new climate-related disclosure obligations for all registrants, including us. The final rules, to the extent they survive ongoing and possibly additional forthcoming legal challenges, will require us to include certain climate-related information in registration statements and annual reports, including (i) climate-related risks and their actual or likely material impacts on our business, strategy, and outlook; (ii) our governance of climate-related risks and relevant risk management processes; (iii) information on our greenhouse gas emissions; (iv) certain climate-related financial statement metrics and related disclosures in a note to our audited financial statements; and (v) information about our climate-related targets, goals, and transition plans. Separately, the SEC has also announced that it is scrutinizing climate-change related disclosures in public filings, increasing the potential for enforcement if the SEC were to allege that our existing climate disclosures are misleading or deficient.

Additionally, the Governor of California signed the Climate Corporate Data Accountability Act ("CCDAA"), or SB 253, into law in October 2023, alongside the Climate-Related Financial Risk Act ("CRFRA"), or SB 261. The CCDAA requires both public and private U.S. companies that are "doing business in California" and that have a total annual revenue of $1 billion to publicly disclose and verify, on an annual basis, Scope 1, 2 and 3 GHG emissions. The CRFRA requires the disclosure of a climate-related financial risk report (in line with the Task Force on the Climate-related Financial Disclosures recommendations or equivalent disclosure requirements under the International Sustainability Standards Board's climate-related disclosure standards) every other year for public and private companies that are "doing business in California" and have total annual revenue of $500 million. Reporting under both laws would begin in 2026, though the Governor of California has directed further consideration of the implementation deadlines for each of the laws. Both laws have been challenged in federal court.

Australia is also in the process of implementing mandatory sustainability and climate-related reporting obligations, which are expected to apply for reporting periods commencing after January 1, 2025 on a phased basis. Legislation to introduce the sustainability reporting regime is currently before the Australian Parliament. As a registered foreign company under the Corporations Act, the Australian mandatory reporting obligations are currently not expected to apply to us.

Currently, we are still assessing the potential impacts of these laws, as well as other sustainability and climate-related disclosure obligations that we may be subject to. Implementation may result in additional costs to comply with these disclosure requirements as well as increased costs of and restrictions on access to capital if our disclosures are not perceived as meeting applicable third-party verification of GHG emissions and climate-related criteria. Separately, enhanced sustainability and climate-related disclosure requirements could lead to reputational or other harm to our relationships with customers, regulators, investors or other stakeholders. In addition, we may also face increased litigation risks arising from enhanced climate-related disclosure requirements relating to alleged damages resulting from GHG emissions from our operations, statements alleged to have been made by us or others in our industry regarding climate change risks, or in connection with any future disclosures we may make regarding reported emissions,

particularly given the inherent complexity of multiple, overlapping GHG reporting regulations with respect to calculating and reporting GHG emissions.

Further, investors, employees, customers and other stakeholders are increasingly judging companies' performance on a variety of sustainability matters. A variety of organizations measure the performance of companies on sustainability topics, and the results of these assessments are widely publicized. In addition, investment in funds that specialize in companies that perform well in such assessments are increasingly popular, and major institutional investors have publicly emphasized the importance of sustainability measures to their investment decisions with some relying on proprietary or third party sustainability ratings to measure the performance of companies on sustainability topics. Topics taken into account in such assessments include, among others, the company's efforts and impacts, including impacts associated with our suppliers or other partners, on climate change, human rights, land rights, ethics and compliance with law, diversity, equity and inclusion, and the role of the Board in supervising various sustainability issues. In light of various stakeholders' increased focus on sustainability matters, there can be no certainty that we will manage such issues successfully, or that we will successfully meet society's expectations on us with respect to such issues. This could lead to risk of litigation or reputational damage relating to our sustainability policies or performance, or otherwise adversely affect our business and operating results.

We are required to obtain, maintain, and renew governmental permits in order to conduct development and mining operations, a process which is often costly and time-consuming.

We are required to obtain, maintain and renew governmental permits for our development activities and, prior to mining any mineralization, we will be required to modify or obtain new governmental permits for our proposed operations. Certain of our land titles could be subject to lease and royalty payments that are either currently payable or may be payable in the future (subject to negotiation with the State of California). Obtaining, maintaining, and renewing governmental permits is a complex and time-consuming process. The timeliness and success of permitting efforts are contingent upon many variables, not all of which are within our control, including the interpretation of permit approval requirements administered by the applicable permitting authority. We may not be able to obtain, maintain, or renew permits that are necessary to our planned operations or the cost and time required to obtain, maintain, or renew such permits may exceed our expectations. Any unexpected delays or costs associated with the permitting process could delay the development or operation of our properties, which in turn could materially adversely affect our future revenues and profitability. In addition, key permits and approvals may be revoked or suspended or may be changed in a manner that adversely affects our activities.

Private parties, such as environmental activists, frequently attempt to intervene in the permitting process and to persuade regulators to deny necessary permits or seek to overturn permits that have been issued. Obtaining the necessary governmental permits involves numerous jurisdictions, public hearings and possibly costly undertakings. These third-party actions can materially increase the costs and cause delays in the permitting process and could potentially cause us to not proceed with the development or operation of our properties. In addition, our ability to successfully obtain key permits and approvals to explore for, develop, operate and expand operations will likely depend on our ability to undertake such activities in a manner consistent with the creation of social and economic benefits in the surrounding communities, which may or may not be required by law. Our ability to obtain permits and approvals and to successfully operate in particular communities may be adversely affected by real or perceived detrimental events associated with our activities.

Lawsuits may be filed against us or arbitration proceedings may be commenced and an adverse ruling in any such lawsuit or arbitration may adversely affect our business, or financial condition.

In the ordinary course of our business, we may become involved in, named as a party to, or be the subject of, various legal proceedings, including regulatory proceedings, tax proceedings and legal actions, including arbitration proceedings, relating to personal injuries, workers' compensation, employment discrimination, property damage, property taxes, land rights, the environment, damages related to breaches of privacy or data security, and contract disputes. Such proceedings and actions may involve liquidated damages, consequential damages, punitive damages and civil penalties or other losses, or injunctive or declaratory relief. In addition, we may also be subject to class action lawsuits, including those alleging violations of the Fair Labor Standards Act and state and municipal wage and hour laws.

Due to the inherent uncertainties of litigation and other dispute resolution proceedings, the outcome of outstanding, pending or future actions or proceedings may be difficult to assess or quantify, cannot be predicted with certainty and may be determined adversely to us and as a result, could have a material adverse effect on our assets, liabilities, business, financial condition or results of operations. Even if we prevail in any such action or proceeding, they could be costly and time-consuming and may divert the attention of management and key personnel from our business operations, which could adversely affect our financial condition. The ultimate resolution of any litigation or proceeding through settlement, mediation, or a judgment could have a material impact on our reputation and adversely affect our financial performance and financial position.

Moreover, governmental authorities and private parties may bring lawsuits based upon damage to property and injury to persons resulting from the environmental, health and safety impacts of prior and current operations, including operations conducted by other

mining companies many years ago at sites located on properties that we currently own or own in the future. These lawsuits could lead to the imposition of substantial fines, remediation costs, penalties and other civil and criminal sanctions. We cannot assure you that any such law, regulation, enforcement or private claim would not have a material adverse effect on our financial condition, results of operations or cash flows.

We are vulnerable to the risks associated with operating in a single geographic region and concentrating our capital investment in the State of California increases our exposure to that risk.

We expect to focus our operational activities and capital investments at the Project in California and potentially, in the future, in respect of the Salt Wells Projects in Nevada. Should we be able to bring the Project into production, we would then be solely dependent upon a single mining operation for our revenue and profits and all of our operations would be conducted in a single geographic region in the western United States in California. The geographic concentration of our operations may disproportionately expose us to disruptions in our operations if the region experiences severe weather, transportation capacity constraints, constraints on the availability of required equipment, facilities, personnel or services, significant governmental regulation or natural disasters. If any of these factors were to impact the region in which we operate more than other borate producing regions, our business, financial condition, results of operations and cash flows could be adversely affected relative to other mining companies that have a more geographically diversified asset portfolio.

In addition, scientists have warned that increasing concentrations of greenhouse gases in the Earth's atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts and floods and other climatic events. For example, the State of California has experienced several years of increasingly more extreme drought and forest fires throughout the state. If these warnings are correct, and if any such climate-related weather and environmental effects were to detrimentally impact the areas where we or our customers operate, they could have an adverse effect on our business, financial condition and prospects.

The operation or development of our facilities could be adversely affected by local communities and/or other stakeholders.

Relationships with local communities and other stakeholders may impact the development or operations of the Project as well as other future projects. We may become impacted by the interests of local communities and other stakeholders, including in some cases, Indigenous peoples. Certain of these communities or other stakeholders may have or may develop interests or objectives which are different from, or even in conflict with, our objectives, including the use of our project lands and waterways near our facilities. Our relationships with the communities near the Project and other stakeholders are critical to the future success of the Project, as well as at any future development. There is an increasing level of public concern relating to the perceived effect of mining activities on the environment and on communities impacted by such activities. Publicity adverse to the Project, or the mining industry generally, could have an adverse effect on our development plans or future operations and may impact relationships with the communities in which we ultimately operate and other associated stakeholders.

We may in the future, be subject to disputes with local communities, including Indigenous peoples, regarding the use of certain aspects of our assets, facilities and land and may in the future, be required to enter into settlement agreements providing for such use, on terms that include, among others, lump sum payments, royalty payments or restrictions on our business.

In addition, disputes surrounding Indigenous land claims regarding lands on or near our properties could interfere with future operations and/or result in additional operating costs or restrictions, as well as adversely impact the use and enjoyment of our real property rights with respect to our assets.

While we are committed to operating in a socially responsible manner, there can be no assurance that our efforts in this respect will mitigate this potential risk. All the foregoing could have a material adverse effect on our business, financial condition and results of operations, including, but not limited to, as a result of increased costs, reduced revenues, diversion of management attention, reputational harm, disruptions to our operations and other reasons.

We currently plan to continue to invest significant amounts of capital in a variety of exploration activities, which involve many uncertainties and risks that could prevent us from realizing profits or may result in the total or partial loss of our investment.

Our exploration activities may be delayed, more costly than anticipated or unsuccessful for many reasons, including declines in boric acid and its derivatives, lithium carbonate, HCl, SOP and gypsum, misalignment between any associated joint venture participants, cost overruns, unanticipated financial, operational or political events, mechanical and technical difficulties, increases in operating cost structures, equipment and labor shortages, industrial actions or other circumstances which may result in the delay, suspension or termination of our Salt Wells Project and other exploration projects, the total or partial loss of our investment in such projects and activities and a material adverse effect on our results of operations, financial condition and prospects.

Our future success depends on the continuing efforts of our management and key employees and our ability to attract and retain highly-skilled personnel and senior management.

The responsibility of overseeing the day-to-day operations and the strategic management of our business depends substantially on our senior officers and our key personnel. Loss of such personnel may have an adverse effect on our performance. The success of our operations will depend upon numerous factors, many of which are beyond our control, including our ability to attract and retain additional key personnel in sales, marketing, technical support and finance. We currently depend upon a relatively small number of key persons to seek out and form strategic alliances and find and retain additional employees. Certain areas in which we operate are highly competitive regions and competition for qualified personnel is intense. We may be unable to hire suitable field personnel for our technical team or there may be periods of time where a particular position remains vacant while a suitable replacement is identified and appointed.

Our inability to hire and maintain suitable personnel could have a material adverse effect on us and could prevent us from effectively pursuing our business plan, including developing, growing, and operating our business profitably.

We also depend upon third parties, including consultants, engineers, suppliers and others, for their development, construction and operating expertise and expect to remain so for the foreseeable future. Our ability to continue conducting our activities is in large part dependent upon the efforts of third parties. Highly qualified consultants and engineers are expensive and difficult to attract and retain. We may need to engage additional third parties for new development projects, to establish mineral reserves through drilling, to carry out environmental and social impact assessments, to develop processes to extract boron and lithium and other materials, and to continue to develop the Project. If such parties' work is deficient or negligent or is not completed in a timely manner, it could have a material adverse effect on us. As a result, our use of services of consultants could have a material adverse effect on us and could prevent us from effectively pursuing our business plan.

We will need to increase the size of our organization and we may be unable to manage our growth effectively.

Our past growth has provided, and our future growth may create challenges to our organization. Members of our management team possess significant experience and have previously carried out or been exposed to exploration, development and production activities. However, we have limited operating history and our ability to achieve our objectives depends on the ability of our directors, officers and management to implement current plans and respond to any unforeseen circumstances that require changes to those plans. The execution of our business plan will place demands on us and our management. In the future, we expect to hire and train new personnel as we continue to grow and expand our operations. Our ability to recruit, assimilate, and maintain new personnel will be critical to our performance and we will be required to recruit additional personnel to achieve our business objectives. As a public company, we will need to support managerial, operational, financial and other resources. This growth may place significant strain on us. Successful growth is also dependent upon our ability to implement appropriate financial and management controls and systems and procedures. If we are unable to recruit additional personnel and effectively train, motivate, retain, and manage employees, or if we fail to manage these challenges effectively, our financial condition, business, and results of operations could be materially and adversely affected.

Our directors and officers may in the future be in a position of a conflict of interest.

Some of our directors and officers currently also serve as directors and officers of other companies involved in natural resource exploration, development and production, and any of our directors may in the future serve in such positions. As at the date of this report, none of our directors or officers serves as an officer or director of a minerals exploration, development or producing company nor possesses a conflict of interests with our business. However, there exists the possibility that they may in the future be in a position of a conflict of interest.

The transition to a new Chief Executive Officer ("CEO") and new Interim Chief Financial Officer ("CFO") will be critical to our success and our business may be adversely impacted if we do not successfully manage the transition process.

Our success depends, in part, on the effectiveness of our Principal Executive Officer and Principal Financial Officer. Our new CEO and interim CFO are critical to executing on and achieving our vision, strategic direction, culture, products, and technology. If we are unable to execute an orderly transition, our operations and financial conditions may be adversely affected.

Additionally, the departure of our CEO has resulted in a loss of institutional knowledge. This loss of knowledge and experience can be mitigated through a successful transition, but there can be no assurance that we will be successful in such efforts. The ability of the new CEO and interim CFO to quickly adapt to our business, operations, and strategic plans will be critical to the Board and our management's ability to make informed decisions about our strategic direction and operations.

We have experienced significant turnover in our senior management team and across our organization, and our failure to attract and retain qualified personnel, skilled workers and key officers could have an adverse effect on us.

Our business may be adversely affected by recent turnover in our senior management team and board of directors which may create instability within the Company, which could disrupt and impede our day-to-day operations, internal controls and our ability to fully implement our business plan and growth strategy. In addition, management transition inherently causes some loss of institutional knowledge, which can negatively affect strategy and execution, and our results of operations and financial condition could be negatively impacted as a result. Competition for key management personnel is intense. If we fail to successfully attract and appoint permanent replacements with the appropriate expertise, we could experience increased employee turnover and harm to our business, results of operations, cash flow and financial condition. The search for permanent replacements could also result in significant recruiting and relocation costs, as well as increased salary and benefit costs. Like most businesses, our employees are important to our success and we are dependent in part on our ability to retain the services of our key management, operational, compliance, finance and administrative personnel. In order to compete and implement our growth strategy, we must attract, retain, and motivate employees, and turnover of senior management may make it difficult to retain qualified and skilled employees.

We may acquire additional businesses or assets, form joint ventures or make investments in other companies in the future that may be unsuccessful and may harm our operating results and prospects.

As part of our business strategy, we may pursue additional acquisitions of complementary businesses or assets. While we currently expect that any such acquisition would be funded with equity, the type of financing for any such acquisition will depend on circumstances existing at that time, including market conditions and our share price. If we are successful at identifying and making such acquisitions, integration of any acquired businesses or assets nevertheless involves many challenges, including a potential strain on our administrative and operational resources, unanticipated issues, expenses or liabilities, and difficulties in the assimilation of different corporate cultures and business practices. We may also seek to enter into joint ventures, pursue strategic alliances in an effort to leverage our existing operations and industry experience, increase our product offerings, expand our distribution and make investments in other companies. We do not have specific timetables for these potential activities and we cannot guarantee that we will be able to identify and complete suitable acquisitions or investments at reasonable prices, or that we will be successful in realizing any anticipated benefits from any future acquisitions or investments.

The success of any acquisitions, joint ventures, strategic alliances or investments will depend on our ability to identify, negotiate, complete and, in the case of acquisitions, integrate those transactions and, if necessary, obtain satisfactory debt or equity financing to fund those transactions. We may not realize the anticipated benefits of any acquisition, joint venture, strategic alliance or investments. We may not be able to integrate acquisitions successfully into our existing business, maintain the key business relationships of businesses we acquire, or retain key personnel of an acquired business, and we could assume unknown or contingent liabilities or incur unanticipated expenses.

Integration of acquired companies or businesses also may require management resources that otherwise would be available for ongoing development of our existing business. Any acquisitions or investments made by us also could result in significant write-offs or the incurrence of debt and contingent liabilities, any of which could harm our operating results. In addition, if we choose to issue equity as consideration for any acquisition, our shareholders may experience dilution.

Risks related to global economic instability, including global supply chain issues, inflation and fuel and energy costs may affect our business.

The volatile global economic environment, including volatility related to interest rate and inflation outlooks, has created market uncertainty and volatility recently. This global economic uncertainty has negatively affected the mining and minerals sectors in general. Many industries, including the mining industry, are impacted by these market conditions. Global financial conditions remain subject to sudden and rapid destabilization in response to economic shocks. A slowdown in the financial markets or other economic conditions including but not limited to global supply chain issues, inflation, fuel and energy costs, business conditions, lack of available credit, the state of the financial markets, interest rates and tax rates, may adversely affect our growth. Future economic shocks may be precipitated by a number of causes, including a continued rise in the price of oil and other commodities, the volatility of metal prices, geopolitical instability (including events such as the Russian invasion of Ukraine), civil unrest, terrorism, pandemics, the devaluation and volatility of global stock markets and natural disasters. Any sudden or rapid destabilization of global economic conditions could impact our ability to obtain equity or debt financing in the future on terms favorable to us or at all. In such an event, our operations and financial condition could be adversely impacted.

Prices and availability of commodities consumed or used in connection with exploration and development and mining, such as natural gas, diesel, oil and electricity, also fluctuate, and these fluctuations affect the costs of operations. These fluctuations can be unpredictable, can occur over short periods of time and may have a material adverse impact on our operating costs or the timing and costs of various projects.

We could be subject to information technology system failures, network disruptions, and breaches in data security which could negatively affect our business, financial position, results of operations and cash flows.

The efficiency and efficacy of our business and its operations depend heavily on the performance and availability of our computer, telecommunication and information systems, which we use to communicate, control and manage our operations and prepare our financial management and reporting information. As dependence on digital technologies is expanding, cyber incidents, including deliberate attacks and accidental cybersecurity events have been increasing worldwide. We face numerous and evolving cybersecurity risks that threaten the confidentiality, integrity and availability of our information systems and confidential information, including from diverse threat actors, such as state-sponsored organizations, opportunistic hackers and hacktivists, as well as through diverse attack vectors, such as social engineering/phishing, company insiders, suppliers or providers, and as a result of human or technological error, including misconfigurations, bugs, or other vulnerabilities in software and hardware. Computers, telecommunication and information systems are used to conduct our exploration and development activities, will be used to conduct our production activities and have become an integral part of our business. We use these systems to analyze and store financial and operating data, as well as to support our internal communications and interactions with business partners. Cyber-attacks could compromise our computer, telecommunications and information systems and result in additional costs as well as disruptions to our business operations or the loss of our data. Cyberattacks are expected to accelerate on a global basis in frequency and magnitude as threat actors are becoming increasingly sophisticated in using techniques and tools – including artificial intelligence – that circumvent security controls, evade detection and remove forensic evidence. As a result, we may be unable to detect, investigate, remediate or recover from future attacks or incidents, or to avoid a material adverse impact to our information systems, confidential information or business. A cyber-attack involving our information systems and related infrastructure, or those of our business partners, could disrupt our business and negatively impact our operations in a variety of ways. Our information systems and confidential information are vulnerable to a range of cybersecurity risks and threats, including malicious code embedded in open-source software, or misconfigurations, "bugs" or other vulnerabilities in commercial software that is integrated into our (or our suppliers' or service providers') IT systems, products or services. Although we maintain insurance policies, we cannot be certain that any or all of the costs and liabilities incurred in relation any cybersecurity attack or incident will be covered or that applicable insurance will be available to us in the future on economically reasonable terms or at all.

Given the size of our organization, we rely heavily on the use of and services provided by third-parties, including for a significant portion of our key cybersecurity risk management. Because we make extensive use of third party suppliers and service providers, such as cloud services that support our internal and customer-facing operations, successful cyberattacks that disrupt or result in unauthorized access to third party information systems can materially impact our operations and financial results.

Such material risks and threats include, but are not limited to, the following:

•impacts to availability of systems or data, e.g., operational disruption such as ransomware, even if no direct impact to information data is involved. For instance:

- oan attack on the computers or information systems which control our mining operations could cause a temporary interruption of our production;
- oa cyber-attack on our accounting , accounts payable or related information systems could expose us to liability to employees and third parties, or reputational risk, if their sensitive personal information is obtained;
- opossible loss of material information, which in turn could delay productive processes and selling efforts, causing economic losses;
- oa cyber-attack on a service provider or their information systems which we rely could result in supply chain disruptions, which could delay or halt our major development projects.

•Non-malicious (e.g., unintentional) incidents that have an adverse impact on confidentiality, integrity or availability of information or systems resulting from human or system error or malfunction.

•A third party or supply chain incident, e.g., incidents that impact our company due to an impact on a vendor, service provider, supply chain player, partner, or any other third party.

•Further material risks connected to aforementioned cybersecurity incidents include but are not limited to:

- otheft, loss, or unauthorized disclosure of sensitive information,
- ofinancial loss,
- olegal and regulatory penalties or enforcement, and
- odamage to our reputation.

Risks Relating to Our Common Stock and CDIs

The market price and trading volume of our Common Stock and CDIs may be volatile and may be affected by economic conditions beyond our control.

The market price of our Common Stock and CDIs may be highly volatile and subject to wide fluctuations. In addition, the trading volume of our Common Stock may fluctuate and cause significant price variations to occur. If the market price of our Common Stock and CDIs declines, you may be unable to resell your CDIs or Common Stock at a competitive price. We cannot assure you that the market price of our Common Stock and CDIs will not fluctuate or significantly decline in the future. In addition, although our Common Stock is listed on Nasdaq, we cannot assure you that a trading market for our Common Stock will be maintained.

Some specific factors that could negatively affect the price of our Common Stock and CDIs or result in fluctuations in their price and trading volume include:

•actual or expected fluctuations in our prospects or operating results;

•changes in the demand for, or market prices for, borates, lithium, or lithium-ion batteries, and other minerals;

•additions or departures of our key personnel;

•changes or proposed changes in laws, regulations or tax policy;

•sales or perceived potential sales of our Common Stock by us or our directors, senior management or shareholders in the future;

•announcements or expectations concerning additional financing efforts;

•conditions in the U.S. and global financial markets, or in our industry in particular, or changes in general economic conditions; and

•the other factors described in this "Risk Factors" section and elsewhere in this Annual Report.

In recent years, the stock markets generally have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may significantly affect the market price of our Common Stock, regardless of our actual operating performance.

We incur significant costs as a result of being publicly traded in the United States and Australia.

As our Common Stock is publicly traded in both the United States and Australia, we incur significant legal, accounting, insurance and other expenses related to compliance with applicable regulations. Our management and other personnel devote a substantial amount of time to these compliance initiatives, and we may need to continue to add additional personnel and develop our internal compliance infrastructure. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time consuming and costly. Furthermore, if we are unable to satisfy our obligations as a public company in the United States, we could be subject to delisting of our Common Stock, fines, sanctions, and other regulatory action and potentially civil litigation.

Our Common Stock is publicly traded on the ASX in the form of CDIs. As a result, we must comply with the ASX Listing Rules. We have policies and procedures that we believe are designed to provide reasonable assurance of our compliance with the ASX Listing Rules. If, however, we do not follow those procedures and policies, or they are not sufficient to prevent non-compliance, we could be subject to liability, fines and lawsuits. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue generating activities to compliance activities. If, notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

We incur increased costs as a result of operating as a U.S. listed public company, and our management is required to devote substantial time to new compliance initiatives and corporate governance practices.

As a U.S. listed public company we incur, and particularly after we are no longer an "emerging growth company" we expect to incur, significant additional legal, accounting, and other expenses. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), the listing requirements of Nasdaq, and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. We expect that we will need to hire additional accounting, finance, legal, and other personnel in connection with our efforts to comply with the requirements of being, a

public company, and our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements. These requirements increase our legal and financial compliance costs and make some activities more time-consuming and costly. In addition, we expect that the rules and regulations applicable to us as a public company may make it more difficult and more expensive for us to obtain directors' and officers' liability insurance, which could make it more difficult for us to attract and retain qualified members of our board of directors or executive officers.

We will be subject to Section 404 of the Sarbanes-Oxley Act and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Beginning with our 2023 Annual Report on Form 10-K, Section 404 required an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting.

An active trading market for our Common Stock and CDIs may not be sustained and the trading price for our Common Stock and CDIs may fluctuate significantly.

Shares of our Common Stock are able to be traded by the public on Nasdaq. However, a liquid public market for our Common Stock may not develop or be sustained, which means you may experience a decrease in the value or trading price of the shares of our Common Stock and our CDIs (which is based upon the value of our Common Stock) that you received in connection with the Reorganization, regardless of our operating performance. If a liquid public market for our Common Stock does not develop or is not sustained, then the value of our CDIs, which is based upon the value of our Common Stock, is also likely to decrease in value. In the past, following periods of volatility in the market price of a company's securities, shareholders often instituted securities class action litigation against that company. If we were involved in a class action suit, it could divert the attention of directors or senior management and, if adversely determined, could have a material adverse effect on our results of operations and financial condition.

Because we do not anticipate paying dividends on our Common Stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain on our Common Stock.

Our former parent company, ABR, did not declare any dividends during fiscal years 2019, 2020 or 2021, and we have not declared dividends since, and we do not anticipate that we will do so in the foreseeable future. We currently intend to retain future earnings, if any, to finance the development of our proposed business. Dividends, if any, on our outstanding Common Stock and CDIs will be declared by and subject to the discretion of our Board of Directors on the basis of our earnings, financial requirements and other relevant factors, and subject to Delaware and federal law. We cannot assure you that our Common Stock and CDIs will appreciate in value. You may not realize a return on your investment in our Common Stock and CDIs and you may even lose your entire investment in our Common Stock and CDIs.

If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, the market price and trading volume of our Common Stock and CDIs could decline.

The trading market for our Common Stock and CDIs will be influenced by the research and reports that U.S. securities or industry analysts publish about us or our business. Securities and industry analysts may discontinue research on us, to the extent such coverage currently exists, or in other cases, may never publish research on us. If no or few U.S. securities or industry analysts commence coverage of us, the trading price for our Common Stock and CDIs would be negatively affected. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our Common Stock and CDIs Stock or publish adverse or misleading research about our business, the market price of our Common Stock and CDIs would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, demand for our Common Stock and CDIs could decrease, which might cause our price and trading volume to decline. In addition, research and reports that Australian securities or industry analysts may, initiate or may continue to, publish about us, our business or our Common Stock may impact the market price of our Common Stock and CDIs.

We are an "emerging growth company" and "smaller reporting company" and are able to avail ourselves to reduced disclosure requirements applicable to emerging growth companies and small reporting companies, which may make our Common Stock and CDIs less attractive to investors and, as a result, adversely affect the price of our Common Stock and CDIs and result in a less active trading market for our Common Stock and CDIs.

We are an "emerging growth company" as defined in the JOBS Act and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. For example,

we have elected to rely on an exemption from the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act relating to internal control over financial reporting, and we will not provide such an attestation from our auditors.

We may avail ourselves of these disclosure exemptions until we are no longer an "emerging growth company." We cannot predict whether investors will find our Common Stock and CDIs less attractive because of our reliance on some or all of these exemptions. If investors find our Common Stock and CDIs less attractive, it may adversely affect the price of our Common Stock and CDIs and there may be a less active trading market for our Common Stock and CDIs.

We will cease to be an "emerging growth company" upon the earliest of:

•the last day of the fiscal year during which we have total annual gross revenues of US$1,235,000,000 (as such amount is indexed for inflation every five years by the SEC) or more;

•the last day of our fiscal year following the fifth anniversary of the completion of our first sale of common equity securities pursuant to an effective registration statement under the Securities Act;

•the date on which we have, during the previous three-year period, issued more than US$1,000,000,000 in non-convertible debt; or

•the date on which we are deemed to be a "large accelerated filer," as defined in Rule 12b-2 of the Exchange Act, which would occur if the market value of our Common Stock that are held by non-affiliates exceeds US$700,000,000 as of the last day of our most recently completed second fiscal quarter.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard, until such time we are no longer considered to be an emerging growth company. This may make comparison of our financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

We are also a smaller reporting company, and we will remain a smaller reporting company until, as of fiscal year end, we determine that either (1) our annual revenues are at least $100 million and our voting and non-voting common stock held by non-affiliates is at least $250 million measured on the last business day of our most recent second fiscal quarter or (2) our voting and non-voting common stock held by non-affiliates is at least $700 million measured on the last business day of our most recent second fiscal quarter. Similar to emerging growth companies, smaller reporting companies are able to provide simplified executive compensation disclosure, are exempt from the auditor attestation requirements of Section 404, and have certain other reduced disclosure obligations, including, among other things, being required to provide only two years of audited financial statements and not being required to provide selected financial data, supplemental financial information or risk factors.

If we experience any material weaknesses in the future or otherwise fail to develop or maintain an effective system of internal controls in the future, we may not be able to accurately report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our Common Stock.

Effective internal control over financial reporting is necessary for us to provide reliable financial reports, prevent fraud and operate successfully as a public company. If we cannot provide reliable financial reports or prevent fraud, our reputation and operating results would be harmed. As a result of being a public company, we are required, under Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting, which began with our 2023 Annual Report on Form 10-K. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. If we identify one or more material weaknesses in our internal control over financial reporting during the evaluation and testing process, we may be unable to conclude that our internal controls are effective. We have not been, and will not be, audited or subject to an assessment of internal control over financial reporting, as a combined entity following the Reorganization. There can be no assurance that no material weakness or significant deficiency will be identified once such an audit or assessment of internal control over financial reporting is completed.

Additionally, when we cease to be an "emerging growth company" under the federal securities laws, our independent registered public accounting firm may be required to express an opinion on the effectiveness of our internal controls. If we are unable to confirm that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an unqualified opinion on the effectiveness of our internal controls, we could lose investor confidence in the accuracy and completeness of our financial reports, which could cause the price of our Common Stock and CDIs to decline.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

As a public company, we are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to provide reasonable assurance that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

Our Certificate of Incorporation and Bylaws contain anti-takeover provisions that could delay or discourage takeover attempts that shareholders may consider favorable and may prevent attempts by our shareholders to replace or remove our current management.

Our Certificate of Incorporation and Bylaws contain provisions that could delay or prevent a merger, acquisition, or other change in control of our company that shareholders may find favorable, including transactions in which shareholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our Common Stock, thereby depressing the market prices for our Common Stock. In addition, these provisions could also make it difficult for shareholders to elect directors who are not nominated by the current members of our Board of Directors or take other corporate actions, including effecting changes in our management. These provisions include, among other things, that:

- the ability of our Board to issue shares of Preferred Stock and to determine the price and other terms of those shares, including preferences and voting rights, without shareholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- allowing only our Board to fill director vacancies, which prevents shareholders from being able to fill vacancies on our Board;
- a prohibition on shareholders action by written consent, which forces shareholder action to be taken at an annual or special meeting of our shareholders;
- a requirement that special meetings of our shareholders may be called only by (i) our Board or (ii) our secretary, following receipt of one or more written demands to call a special meeting from shareholders of record who own, in the aggregate, at least 25% of the voting power of our outstanding shares then entitled to vote on the matter or matters to be brought before the proposed special meeting that complies with the procedures for calling a special meeting set forth in our Bylaws, which may inhibit the ability of an acquirer to require the convening of a special meeting of our shareholders;
- a requirement for the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the voting stock, voting together as a single class, to amend the certain provisions of our Certificate of Incorporation or our Bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our Board to amend our Bylaws, which may allow our Board to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend the Bylaws to facilitate an unsolicited takeover attempt;
- advance notice procedures with which shareholders must comply to nominate candidates to our Board or to propose matters to be acted upon at a shareholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company; and
- a prohibition of cumulative voting in the election of our Board, which would otherwise allow less than a majority of shareholders to elect director candidates.

We are also subject to Section 203 of the Delaware General Corporation Law (the "DGCL"), which prevents us from engaging in a business combination, such as a merger, with an interested shareholder (i.e., a person or group that acquires at least 15% of our voting stock) for a period of three years from the date such person became an interested shareholder, unless (with certain exceptions) the business combination or the transaction in which the person became an interested shareholder is approved in a prescribed manner.

Raising additional capital could adversely affect the voting power or value of our Common Stock and CDIs.

Until such time, if ever, as we can generate substantial revenue, we may finance our cash needs through a combination of equity offerings or the issuance of debt instruments or other securities convertible into Common Shares. We do not currently have any

committed external source of funds. In addition, we may seek additional capital due to favorable market conditions or strategy considerations, even if we believe that we have sufficient funds for our current or future operating plans.

We cannot predict the size or price of future issuances of Common Shares or the size or terms of future issuances of debt instruments or other securities convertible into Common Shares, or the effect, if any, that future issuances and sales of our securities will have on the market price of the Common Shares. To the extent that we raise additional capital through the sale of equity or convertible debt securities, investors' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common shareholder including voting rights.

Our Certificate of Incorporation authorizes us to issue, without the approval of our shareholders, one or more classes or series of Preferred Stock having such designations, preferences, limitations and relative rights, including preferences over our Common Stock and CDIs respecting dividends and distributions, as our Board of Directors may determine. For example, we might grant holders of Preferred Stock the right to elect some number of our directors in all events or on the happening of specified events or the right to veto specified transactions. The terms of one or more classes or series of Preferred Stock could adversely impact the voting power or value of our Common Stock and CDIs. Similarly, the repurchase or redemption rights or liquidation preferences we might grant to holders of Preferred Stock could affect the residual value of our Common Stock.

Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends.

Nasdaq may de-list our securities from its exchange, which could limit investors' ability to transact in our securities, subject us to additional trading restrictions and substantially increase the number of shares issuable upon conversion of our outstanding convertible notes.

We have listed our Common Stock on Nasdaq. Nasdaq maintains several requirements for continued listing of our Common Stock, one of which is the maintenance of a minimum closing bid price of $1.00. As of the date of this report, our Common Stock has been trading below $1.00 for 26 business days. If our Common Stock continues to trade for below $1.00 for 30 consecutive business days, we could receive written notice from Nasdaq notifying us of a noncompliance with a continued listing requirement. We intend to continue to actively monitor the closing bid price of our common stock and, if we lose compliance with Nasdaq's minimum bid price closing requirements, will consider all available options to regain compliance.

If our Common Stock is delisted from Nasdaq in the future based on any continued listing requirement, it is unlikely that we will be able to re-list our common stock on another national securities exchange and, as a result, we expect our securities would be quoted on an over-the-counter market. If this occurs, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our Common Stock;
- a determination that our Common Stock is a "penny stock" which will require brokers trading in our Common Stock to adhere to more stringent rules, which could result in a reduced level of trading activity in the secondary trading market for our Common Stock;
- more limited news and analyst coverage for us; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

Additionally, a delisting of our common stock from Nasdaq would constitute a Make-Whole Fundamental Change under our Amended and Restated Note Purchase Agreement (each as defined below), thereby substantially increasing the number of shares of Common Stock issuable upon exercise of our outstanding Convertible Notes (as defined below). See "Risks Related to the Convertible Notes—There are risks associated with our Convertible Notes that could adversely affect our business and financial condition" for additional information.

Delisting also could result in, among other things, a loss of investor confidence or interest in strategic transactions or opportunities, us being subject to regulation in each state in which we offer our securities, and difficulty in recruiting and retaining personnel through equity incentive awards.

Sales by our existing shareholders can reduce the market price of our Common Stock and CDIs.

Sales of a substantial number of our Common Stock in the public market could occur at any time. Such sales, or any market perception that substantial holders of our Common Stock intend to sell our Common Stock, could reduce the market price of our Common Stock and CDIs. If this occurs, it could impair our ability to raise additional capital through the sale of securities.

We are a holding company and, as such, we depend on our subsidiaries to generate cash to fund our operations and expenses.

We are a holding company and essentially all of our assets are the capital stock of our subsidiaries. As a result, our investors are subject to the risks attributable to our subsidiaries. As a holding company, we conduct all of our business through our subsidiaries.

Therefore, our ability to fund and conduct our business, service our debt and pay dividends, if any, in the future will principally depend on the ability of our subsidiaries to generate sufficient cash flow to make upstream cash distributions to us. Our subsidiaries are separate legal entities, and although they are wholly-owned and controlled by us, they have no obligation to make any funds available to us, whether in the form of loans, dividends or otherwise. The ability of these entities to pay dividends and other distributions will depend on their operating results and will be subject to applicable laws and regulations which require that solvency and capital standards be maintained by such companies and contractual restrictions contained in the instruments governing any debt obligations. In the event of a bankruptcy, liquidation or reorganization of any of our material subsidiaries, holders of indebtedness and trade creditors may be entitled to payment of their claims from the assets of those subsidiaries before us.

Our Bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our shareholders, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) will, to the fullest extent permitted by applicable law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our shareholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our Certificate of Incorporation or Bylaws or (iv) any action asserting a claim against us that is governed by the internal affairs doctrine, in each such case subject to such Court of Chancery of the State of Delaware having personal jurisdiction over the indispensable parties named as defendants therein. Our Bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will, to the fullest extent permitted by law, be the sole and exclusive forum for the resolutions of any complaint asserting a cause of action arising under the Securities Act. We note that there is uncertainty as to whether a court would enforce the choice of forum provision with respect to claims under the Securities Act, and that investors cannot waive compliance with the Securities Act and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of, and consented to, the provisions of our Bylaws described in the preceding sentence. This forum selection provision is not intended to apply to any actions brought under the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder.

These choice-of-forum provisions may limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and such persons. Alternatively, if a court were to find these provisions of our Bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or operating results.

Risks Related to the Convertible Notes

There are risks associated with our Convertible Notes that could adversely affect our business and financial condition.

We initially issued $60.0 million aggregate principal amount of 4.50% senior secured convertible notes (the "Original Notes") in August 2022 pursuant to a note purchase agreement, which was subsequently amended and restated in January 2024 in connection with our previously announced out-of-court restructuring transactions, and then further amended and restated on May 28, 2024 (the "Amendment No. 2" and, as amended thereby, the "Amended and Restated Note Purchase Agreement") in connection with the sale of the June 2024 Notes (as defined below). On June 11, 2024, pursuant to Amendment No. 2, we issued an additional $6.0 million aggregate principal amount of convertible notes pursuant to the Amended and Restated Note Purchase Agreement (the "June 2024 Notes" and, collectively with the Original Notes, the "Convertible Notes"). The Convertible Notes bear interest at a rate of 4.50% per annum, payable semi-annually, or 10.00% per annum if we elect to pay such interest in kind through the delivery of additional Convertible Notes, and are convertible into up to 72,131,404 shares of our Common Stock at a conversion rate of 650.4065 shares of Common Stock per $1,000 principal amount of Convertible Notes (the "Conversion Rate"), including accrued interest paid-in-kind through maturity. The Convertible Notes are secured by substantially all of the Company's assets and mature on August 15, 2028.

The Amended and Restated Note Purchase Agreement provides for certain adjustments to the Conversion Rate to increase the number of shares of Common Stock issuable upon conversion (the "Additional Shares") following certain corporate events that may occur prior to the maturity date of the Convertible Notes, including a change of control transaction, liquidation of our company or any failure of our Common Stock to be listed on Nasdaq or any other eligible exchange (a "Make-Whole Fundamental Change"). Upon the occurrence of a Make-Whole Fundamental Change, the Conversion Rate will be increased by up to 325.2033 Additional Shares per $1,000 principal amount of Notes, based on the timing of the Make-Whole Fundamental Change and the trading price of the Common Stock at such time or the cash received by holders of the Common Stock in connection with such Make-Whole Fundamental Change, as applicable, as further described in the Amended and Restated Note Purchase Agreement (the "Make-Whole Adjustment").

The Conversion Rate applicable to the June 2024 Notes is subject to further adjustment if, on or prior to December 31, 2024, we sell Common Stock or any other equity-linked securities at an effective price per share that is less than the conversion price then in effect, subject to certain exemptions (a "Degressive Issuance"). In the event of a Degressive Issuance, the Conversion Rate applicable to the June 2024 Notes will be adjusted based on the weighted average issuance price of the securities sold in such Degressive Issuance, as set forth in the Amended and Restated Note Purchase Agreement. Pursuant to the terms of the Amended and Restated Note Purchase Agreement, we will not be permitted to effect any Degressive Issuance that would result in an adjustment to the Conversion Rate that requires the approval of our stockholders pursuant to the listing standards of Nasdaq, unless we have obtained such stockholder approval before such Degressive Issuance.

On August 27, 2024 we completed an offering of securities that constituted a Degressive Issuance and resulted in an adjustment to the conversion rate applicable only to the June 2024 Notes from 650.4065 shares of Common Stock per $1,000 principal amount of June 2024 Notes to 692.7990 shares of Common Stock per $1,000 principal amount of June 2024 Notes (the "Adjusted Conversion Rate"). As a result of the Degressive Issuance and related Adjusted Conversion Rate, the June 2024 Notes are convertible into an additional 382,584 shares of Common Stock, assuming all accrued interest is paid-in-kind through maturity.

The Amended and Restated Note Purchase Agreement provides for customary events of default, such as our insolvency or failure to make timely payments of principal or interest or to comply with financial or other covenants. The Convertible Notes also contain customary affirmative and negative covenants, including limitations on incurring additional indebtedness or the creation of additional liens on our assets. The Amended and Restated Note Purchase Agreement also contains a minimum cash covenant of $7.5 million, beginning on December 31, 2024.

Our ability to remain in compliance with the covenants under the Convertible Notes depends on, among other things, our operating performance, competitive developments, financial market conditions, and stock exchange listing of our Common Stock, all of which are significantly affected by financial, business, economic, and other factors, many of which we are not able to control. Accordingly, our cash flow may not be sufficient to allow us to pay principal and interest on the convertible notes or meet our other obligations under the Amended and Restated Note Purchase Agreement. Our level of indebtedness under the Amended and Restated Note Purchase Agreement could have other important consequences, including the following:

- we may need to use a substantial portion of our cash flow from operations to pay interest and principal on the Convertible Notes, which would reduce funds available to us for other purposes such as working capital, capital expenditures, potential acquisitions, and other general corporate purposes;
- we may be unable to refinance our indebtedness under the Amended and Restated Note Purchase Agreement or to obtain additional financing for working capital, capital expenditures, acquisitions, or general corporate purposes;
- we may be unable to comply with covenants in the Convertible Notes, which could result in an event of default that, if not cured or waived after 30 days, may result in acceleration of the Convertible Notes. An event of default would have an adverse effect on our business and prospects and could force us into bankruptcy or liquidation;
- our ability to pay interest and repay principal in additional notes, if so elected by us, and conversion of the Convertible Notes (at the current Conversion Rate, or any adjusted conversion rate including the Additional Shares) could result in significant dilution to our existing stockholders and cause the market price of our Common Stock to decline; and
- we may be more vulnerable to an economic downturn or recession and adverse developments in our business.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our debt.

Our ability to make scheduled payments on the Convertible Notes depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. If the assumptions underlying our cash flow guidance are incorrect, our business may not generate cash flow from operations in the future sufficient to service our debt, including the Convertible Notes, and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or issuing additional equity, equity-linked or debt instruments on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. If we are unable to engage in any of these activities or engage in these activities on desirable terms, we may be unable to meet our debt obligations under the Convertible Notes, which would materially and adversely impact our business, financial condition and operating results.

Our obligations to the purchaser under the Convertible Notes are secured by a security interest in substantially all of our assets, and if we default on those obligations, the purchaser could foreclose on our assets.

Our obligations under the Convertible Notes and the related transaction documents are secured by a security interest in substantially all of our assets. As a result, if we default on our obligations under the Convertible Notes, the collateral agent on behalf of the purchaser could foreclose on the security interests and liquidate some or all of our assets, which would harm our business, financial condition and results of operations and could require us to reduce or cease operations and investors may lose all or part of their investment.

Conversion of the notes will dilute the ownership interest of our existing stockholders or may otherwise depress the price of our Common Stock.

The conversion of some or all of the notes will dilute the ownership interests of existing stockholders. Any sales in the public market of our Common Stock issuable upon such conversion of the notes could adversely affect prevailing market prices of our Common Stock. In addition, the existence of the notes may encourage short selling by market participants because the conversion of the notes could be used to satisfy short positions, or anticipated conversion of the notes into shares of our Common Stock could depress the price of our Common Stock.

We may require additional financing to sustain or grow our operations and such additional capital may not be available to us, or only available to us on unfavorable terms.

To the extent that revenues generated by our ongoing operations are insufficient to fund future requirements, we may need to raise additional funds through debt or equity financings or curtail our growth. The Convertible Notes contain limitations on our ability to raise money through equity offerings and to incur additional indebtedness. We cannot be sure that we will be able to raise equity or debt financing on terms favorable to us and our stockholders in the amounts that we require, or at all. Our inability in the future to obtain additional equity or debt capital on acceptable terms, or at all, could adversely impact our ability to execute our business strategy, which could adversely affect our growth prospects and future stockholder returns.

Risks Relating to our Reorganization

We may be unable to achieve some or all of the benefits that we expect to achieve from the Reorganization, which could materially adversely affect our business, financial condition and results of operations.

We have historically operated as a subsidiary of ABR. We may not be able to achieve the full strategic and financial benefits expected to result from the Reorganization, or such benefits may be delayed or not occur at all. The ABR Board of Director's formed the view that the U.S. market would more fully appreciate and understand the Project and that the Project is aligned with broader investment themes that are well received in the U.S. market regarding onshoring strategic commodities and decarbonizing the economy. We may not achieve these and other anticipated benefits for a variety of reasons, including, among others, because we may experience unanticipated competitive developments, including changes in the conditions of industry and the markets in which we operate, including fluctuations in the prices of borates and other minerals that could negate some or all of the expected benefits from the Reorganization.

If we do not realize some or all of the benefits expected to result from the Reorganization, or if such benefits are delayed, our business, expected future financial and operating results and our prospects could be adversely affected.

Item 1B. ***Unresolved Staff Comments***

Not applicable.

Item 1C. Cybersecurity

Description of Processes for Assessing, Identifying, and Managing Cybersecurity Risks

Cybersecurity is integrated within the Company's Enterprise Risk Management process, which is the Company's systematic approach to identifying, managing and assessing major risk and safeguards, including cybersecurity. We have developed and implemented a cybersecurity risk management program intended to protect the confidentiality, integrity, and availability of our critical systems and information.

Our cybersecurity risk management program is integrated into our overall risk management program, and shares common methodologies, reporting channels and governance processes that apply across the risk management program to other legal, compliance, strategic, operational, and financial risk areas. Despite our efforts we put into maintaining a high level of cybersecurity, there can be no assurance that our cybersecurity risk management program and processes, including our policies, controls or

procedures, will be fully implemented, complied with or effective in protecting our systems and information.

Key elements of our cybersecurity risk management program include but are not limited to the following:

Risk Assessment

We periodically conduct assessments of cybersecurity risks to identify potential vulnerabilities and threats to our systems and data. These risk assessments are designed to help identify material risks from cybersecurity threats to our critical systems and information.

Security Team

We have established a security team which is principally responsible for managing (i) our cybersecurity risk assessment processes, (ii) our security controls, and (iii) our response to cybersecurity incidents.

Protection Measures

We implement and maintain cybersecurity controls, including firewalls, access controls, and intrusion detection systems, to safeguard our systems and data from unauthorized access, use, or disclosure. Furthermore, we use external service providers, where appropriate, to assess, test or otherwise assist with aspects of our security processes.

Incident Detection and Response

We have established a cybersecurity incident response plan that includes procedures for responding to relevant cybersecurity incidents. These protocols include incident response plans and escalation procedures to minimize the impact of potential breaches.

Cybersecurity Training and Awareness

All new hires receive cybersecurity awareness training. All employees, including incident response personnel and senior management, receive periodic training and are periodically subject to evaluations to confirm their cybersecurity knowledge and awareness.

Third-Party Risk Management

We have implemented a third-party risk management process for key service providers based on our assessment of their criticality to our operations and respective risk profile.

Material Cybersecurity Incidents

We have not identified risks from known cybersecurity threats, including as a result of any prior cybersecurity incidents, that have materially affected us, including our operations, business strategy, results of operations, or financial condition. We face risks from cybersecurity threats that, if realized, are reasonably likely to materially affect us, including our operations, business strategy, results of operations, or financial condition. See “Risk Factors” within this report when evaluating our business and related risk.

Cybersecurity Governance

The Board of Directors is responsible for overseeing cybersecurity, information security, and information technology risks, as well as management’s actions to identify, assess, mitigate, and remediate those risks. As part of its program of regular risk oversight, the Audit Committee assists the Board of Directors in exercising oversight of the Company’s cybersecurity, information security, and information technology risks. On an annual basis, the Audit Committee reviews and discusses with the Chief Financial Officer, who leads our cybersecurity program, the Company’s policies, procedures, and practices with respect to cybersecurity, information security and information and operational technology, including related risks.

Recognizing the importance of cybersecurity to the success and resilience of our business, the Board of Directors considers cybersecurity to be an important aspect of corporate governance. To facilitate effective oversight, our Chief Financial Officer holds discussions on cybersecurity risks and the effectiveness of cybersecurity measures as necessitated by emerging material cyber risks.

Our management team, including the Chief Financial Officer, is responsible for assessing and managing our material risks from cybersecurity threats. The team has primary responsibility for our overall cybersecurity risk management program and supervises both our internal cybersecurity personnel and our retained external cybersecurity consultants.

Given the size of the Company, we do not employ individuals with significant experience and relevant backgrounds in information security, cyber risk management, and cyber incident response. However, we contract with third-party vendors who have these backgrounds. These backgrounds include relevant degrees, certifications, and relevant work experience, including in roles responsible for cybersecurity oversight in entities similar to us, and our Chief Financial Officer relies on the expertise provided by these third-parties in carrying out his cybersecurity responsibilities.

Our management team takes steps to stay informed about and monitor efforts to prevent, detect, mitigate, and remediate cybersecurity risks and incidents through various means, which may include threat intelligence and other information obtained from governmental, public or private sources, including external consultants engaged by us; and alerts and reports produced by security tools deployed in our IT environment.

Item 3. Legal Proceedings

Except as disclosed in Note 13 – Commitments and Contingencies in the consolidated financial statements of this Form 10-K, as of the date of this filing, we are not a party to any material pending legal proceedings, nor are we aware of any material civil proceeding or government authority contemplating any legal proceeding, and to our knowledge, no such proceedings by or against us have been threatened. We anticipate that we and our subsidiaries may from time to time become subject to various claims, legal proceedings, governmental inspections, audits, or investigations arising in the ordinary course of business. It is not feasible to predict the outcome of any such proceedings, and we cannot assure that their ultimate disposition will not have a material adverse effect on our business, financial condition, cash flows or results of operations.

Item 4. Mine Safety Disclosures

Not applicable as we do not currently operate any mines subject to the U.S. Federal Mine Safety and Health Act of 1977.

PART II

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

Market for Common Stock

Our Common Stock is currently listed on Nasdaq under the symbol "FEAM."

The closing price of our Common Stock on September 6, 2024 was $0.65 per share. As of that date, there were 16 holders of record of our Common Stock according to Computershare Trust Company, N.A. The actual number of stockholders is greater than these numbers and includes holders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. These numbers of active holders of record also do not include holders whose shares may be held in trust by other entities.

Dividend Policy

We have not paid any cash dividends on our Common Stock to date. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and general financial condition. The payment of any cash dividends will be subject to the discretion of the Board of Directors.

Unregistered Sale of Equity Securities

Except as previously disclosed on Current Reports on Form 8-K filed with the SEC on December 6, 2023, January 19, 2024, January 30, 2024, May 28, 2024, and June 11, 2024, there were no unregistered sales of equity securities for the year ended June 30, 2024.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Our purchases of our equity securities during the fourth fiscal quarter of 2024 were as follows:

Fiscal Period	Total number of shares purchased[1]	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum number (or approximate dollar value) of shares that may yet be purchased under the plans or programs
April 1, 2024 through April 30, 2024	—	$ —	—	$ —
May 1, 2024 through May 31, 2024	13,672	1.16	—	$ —
June 1, 2024 through June 30, 2024	17,928	1.23	—	$ —
Total	31,600	$ 1.20	—	$ —

(1) Pursuant to the terms of our 2022 Equity Compensation Plan, we withheld 31,600 shares of our Common Stock from certain employees and directors to satisfy minimum tax withholding obligations relating to the vesting of their restricted stock units.

Item 6. [Reserved]

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") summarizes the significant factors affecting the operating results, financial condition, liquidity and capital resources, and cash flows of our Company for the years ended June 30, 2024 and 2023. This MD&A should be read in conjunction with, and is qualified in its entirety by, our consolidated financial statements, the accompanying notes to consolidated financial statements and other financial information included in this Annual Report on Form 10-K (the "Annual Report"). Except for historical information, the matters discussed in this MD&A contain various forward-looking statements that involve risks, uncertainties and assumptions and other important factors and are based upon judgments concerning various factors beyond our control. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under "Item 1A - Risk Factors" and elsewhere in this Annual Report, any of which could cause the Company's actual results, performance or achievements, or industry results, to differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements. All forward-looking statements speak only as of the date on which they are made. We undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they are made. Additionally, you should refer to the "Cautionary Note Regarding Forward-Looking Statements." References within this MD&A to the "Company," "we," "our," and "us," refer to 5E Advanced Materials, Inc. and its subsidiaries.

Overview

5E Advanced Materials, Inc. is focused on becoming a vertically integrated global leader and supplier of specialty boron and advanced boron derivative materials whose mission is to enable decarbonization, increase food security, and ensure domestic supply of critical materials. We hold 100% of the rights through ownership in the Project through our wholly owned subsidiary 5E Boron Americas LLC. Our Project is underpinned by a mineral resource that includes boron and lithium, with the boron being contained in a conventional boron mineral known as colemanite. In 2022, our facility was designated as Critical Infrastructure by the U.S. Department of Homeland Security's Cybersecurity and Infrastructure Security Agency. Our vision is to safely process boric acid and lithium carbonate through sustainable best practices to enable decarbonization, food security and domestic supply surety.

Recent Developments

Leadership Changes

Officer Transitions

On June 3, 2024, Susan Brennan resigned as President and Chief Executive Officer of the Company and as a director of the Board, effective as of June 3, 2024 (the "Effective Date"). Also on June 3, 2024, the Board appointed Paul Weibel, the Company's Chief Financial Officer, as the Company's Chief Executive Officer and principal executive officer, effective as of the Effective Date.

The Board also appointed Joshua Malm, the Company's Interim Chief Accounting Officer, as the Company's Interim Chief Financial Officer and principal financial officer and principal accounting officer, effective as of the Effective Date.

Director Changes

On June 24, 2024, Barry Dick was elected at our 2023 Annual General Meeting to serve on the Company's Board. On June 30, 2024, Stephen Hunt resigned from the Board, and effective July 1, 2024, Bryn Jones was appointed to the Board.

2024 Highlights and Future Considerations

Operational Highlights

Commencement of Mining Operations, First Production of Boric Acid and Commencement of Customer Qualification Program

The Company believes that the commencement of commercial operations, first production of boric acid and commencement of customer qualification represents a significant strategic step forward in the Company's development and mission.

On January 1, 2024, we began well-field injection under our Underground Injection Control permit to begin extracting valuable minerals from the Project. As anticipated, the wellfield took approximately one month for initial conditioning to take place, and in late January, utilizing all four of our production wells, we sent Pregnant Leach Solution ("PLS") to a Louisiana based lab whereby the lab produced commercial grade boric acid. During March 2024, an independent third-party inductively coupled plasma mass spectrometry analysis confirmed the commercial grade boric acid produced in the Louisiana lab. During the first three months of mining operations,

over 50,000 gallons of PLS were accumulated and we achieved an average head grade of 5.5% and the Small-Scale Facility ("SSF") commenced production in April 2024 after final electrical work and commissioning was completed in March 2024.

With the first production batch of boric acid from the SSF complete, we continued to refine operating processes such as filtering, drying and bagging parameters for boric acid. During July 2024, we shipped samples of boric acid to multiple potential customers for them to begin customer qualification against their customer established qualification criteria. To meet specification, boric acid requires little to no moisture or impurities, as well as a specific particle size. With delivery of samples to certain customers complete, we continue to refine the production process to meet customer specification for larger amounts of product. Customers currently in the qualification program include leading global materials science, consumer electronics, fiber optics, defense and specialty pharmaceutical glass companies which have a growing need to procure boric acid supply for their applications. This key advancement is expected to facilitate further commercial discussion and form the foundation for off-take and supply agreements. Upon successful feedback from customers that the product meets their specifications, we then plan to deliver larger volumes of boric acid from the SSF, to the customer production facilities for product validation in a live manufacturing environment. We are currently targeting delivering up to 100 tons of boric acid to potential customers for testing during the fall of 2024.

The SSF is designed to initially produce up to 2,000 short tons of boric acid annually and targets initial production of lithium carbonate, with optionality built in to scale up to a run rate of 9,000 short tons and commensurate increased lithium production with an incremental capital investment. Our operations team is currently working towards our next production target of three short tons of boric acid per day while we optimize product quality and production rates.

The initial high-quality run-of-mine head grade of boric acid provides validation of our initial operational assumptions which we hope will facilitate discussions with stakeholders around funding options for Phase 1 of the proposed commercial facility and securing commercial contracts for our future products.

Commercial Facility and Wellfield Design Optimization

Our current technical report summary calls for a mine plan with 841 vertical wells. Initial recovery data and mine planning indicates that utilizing horizontal wells can increase solution flow rates, resource contact, and reduce the quantity of wells by a factor of up to ten, which could meaningfully reduce our anticipated capital expenditures. As it relates to the operation of the SSF, head grade equates to the quantity of boron in solution that is fed into the processing facility for crystallization. Based on historical reports from operations in the 1980s, our predecessor parent company, American Pacific Borates, estimated head grade of 3.7%. Through the first six months of operation, actual head grade has consistently ranged between 5.5% and 6.0%, with an average of 9,822ppm boron. The outperformance of head grade is attributed to our process change to inject the mining solution into the deposit at 140 degrees Fahrenheit where higher temperature drives a better head grade.

Our current technical report summary assumes a head grade of 7.0% and we remain on track to achieve this level or better. After processing boric acid, the remaining solution includes deleterious elements, calcium, water, and 1.5% hydrochloric acid. Through recirculation of the remaining solution, the 7.0% head grade or higher is expected to be achieved. As head grade increases, the process requires less energy for crystallization which would reduce operating costs. We are assessing the impact and feasibility of increasing the temperature above 140 degrees such that operating costs are further reduced with less energy consumption.

Colemanite is a calcium-based deposit, and as boron is extracted, the process results in a calcium biproduct. Our current technical report summary anticipates a gypsum biproduct which is not expected to add meaningful value. Other value-added biproducts such as calcium chloride and magnesium hydroxide are currently being assessed, in addition to the anticipated lithium stream. Magnesium is classified as a critical mineral according to the United States Geological Survey and production of magnesium hydroxide could be accretive to cash costs and further reduce operating costs. With production rates expected to ramp, line of sight on the next phase of customer qualification, and the optimization work currently in process near completion, the Company will prioritize its FEL-2 engineering program with targeted completion in early 2025. Included in the scope of the FEL-2 program is a capital estimate of plus or minus 25% for the 90,000 short ton per annum facility, which will drive an updated technical report summary and PFS.

Fluor Corporation Selected as EPC for FEL-2

We selected Fluor Corporation ("Fluor") as our EPC services provider. The initial scope of Fluor will be to lead FEL-2 which will directly feed into the upgrading of the Company's current S-K 1300 technical document into a PFS upon completion.

We believe the selection of Fluor, a world-class EPC firm with an extensive track record, will serve to be invaluable to us throughout our next phase of execution. We expect the work being conducted by Fluor will play an important role in ultimately getting our 5E Boron Americas Complex to the planned PFS-level study.

Financing Highlights

Out-of-Court Restructuring

Beginning in fiscal year 2023, we worked to identify appropriate funding solutions to address the Company's liquidity profile. With the EPA approval still an open item, public market capital providers were reluctant to invest. As time progressed, even with cost saving measures implemented, the Company approached the then in force $10 million liquidity covenant (as discussed within Note 7 to the consolidated financial statements) and management therefore began discussions with its lender. The combination of the EPA status, and the approaching liquidity floor required a commercial resolution. On November 9, 2023, we entered into a standstill agreement (the "Standstill Agreement") with Bluescape Special Situations IV ("Bluescape"), Alter Domus (US) LLC (the "Collateral Agent"), Ascend Global Investment Fund SPC for and on behalf of Strategic SP ("Ascend"), and Mayfair Ventures Pte Ltd in connection with our 4.50% senior secured convertible notes issued on August 26, 2022 (the "Original Notes"). Pursuant to the Standstill Agreement, Bluescape and the Collateral Agent agreed to not exercise their respective rights, remedies, powers, privileges, and defenses under the Note Purchase Agreement, dated August 11, 2022 (the "Note Purchase Agreement") with respect to the occurrence of any default or event of default, and all parties to the Standstill Agreement agreed to forbear from instituting or pursuing legal action with respect to the Original Notes. The Standstill Agreement also temporarily allowed us to go below the then in force cash covenant of $10 million (as discussed in Note 7 to the consolidated financial statements).

On December 1, 2023, we extended the effectiveness of the Standstill Agreement from December 1, 2023 to December 5, 2023 at which point we entered into a Restructuring Support Agreement (the "Restructuring Support Agreement") with Bluescape, the Collateral Agent, and Ascend in connection with certain restructuring transactions with respect to our capital structure, including our Original Notes. Pursuant to the Restructuring Support Agreement, the parties agreed to implement the restructuring transactions either as an out-of-court restructuring (the "Out-of-Court Restructuring") or an in-court restructuring under voluntary pre-packaged cases under chapter 11 of title 11 of the United States Code in a U.S. Bankruptcy Court.

On January 12, 2024, we held a special meeting of stockholders where our stockholders approved the Out-of-Court Restructuring, including (i) an amendment to our certificate of incorporation to increase the number of authorized shares of the Company's common stock, par value $0.01 (the "Common Stock") from 180,000,000 to 360,000,000, (ii) the issuance of up to $35 million of Common Stock at a price of $1.025 per share (the "Securities Offering") to Ascend and Bluescape, if Bluescape decided to exercise its option to participate in the Securities Offering, and (iii) the issuance of additional shares of the Company's Common Stock upon conversion of the Original Notes in connection with an amendment to the Note Purchase Agreement.

On January 18, 2024, pursuant to a subscription agreement with Ascend, dated December 5, 2023 and an amended and restated subscription agreement with 5ECAP LLC ("5ECAP"), dated January 18, 2024 (the "5ECAP Subscription Agreement"), we issued (i) 5,365,854 shares of Common Stock to Ascend at a price of $1.025 per share, which shares included the placement fee to Ascend in shares of Common Stock and (ii) 5,365,854 shares of Common Stock to 5ECAP at a price of $1.025 per share, which shares included the placement fee to 5ECAP in shares of Common Stock.

On January 18, 2024, in connection with the Out-of-Court Restructuring, we entered into an amended and restated note purchase agreement (the "January 2024 Amended and Restated Note Purchase Agreement") with Bluescape, Ascend, and Meridian Investments Corporation ("Meridian") related to the Original Notes. Pursuant to such agreement, beginning on January 18, 2024, the Original Notes bear interest at a rate of 4.50% per annum, payable semi-annually, or 10.00% per annum if we elect to pay such interest through the delivery of additional Original Notes and are convertible into a maximum of 66,261,621 shares of Common Stock at a conversion rate of 650.4065 shares of Common Stock per $1,000 principal amount of Original Notes (the "Conversion Rate"), which includes accrued interest paid-in-kind through maturity. The Original Notes are secured by substantially all of our assets and mature on August 15, 2028.

As part of the January 2024 Amended and Restated Note Purchase agreement, the minimum cash condition was waived through June 28, 2024, with a reduction in the covenant thereafter from $10 million to $7.5 million. On April 28, 2024, as part of Amendment No. 1 to the January 2024 Amended and Restated Note Purchase Agreement, the waiver of the minimum cash condition was further extended through December 31, 2024 (as discussed in Note 7 to the consolidated financial statements).

On January 29, 2024, pursuant to the 5ECAP Subscription Agreement, and also in connection with the Out-of-Court Restructuring, the Company issued an additional 8,317,074 shares of Common Stock to 5ECAP at a price of $1.025 per share.

June 2024 Senior Secured Convertible Notes

On June 11, 2024, pursuant to an amended and restated note purchase agreement (the "May 2024 Amended and Restated Note Purchase Agreement," and, collectively with the Note Purchase Agreement and January 2024 Amended and Restated Note Purchase Agreement, the "Amended and Restated Note Purchase Agreement"), we issued and sold new senior secured convertible notes in an aggregate principal amount of $6.0 million (the "June 2024 Notes" and, collectively with the Original Notes, the "Notes"), comprised of $3.0 million of June 2024 Notes to each of Bluescape and Ascend. Following the issuance and sale, Ascend assigned $1.5 million of its June 2024 Notes to Meridian.

The June 2024 Notes, which were issued in substantially the same form as the Original Notes, were initially convertible at a rate of 650.4065 shares of Common Stock per $1,000 principal amount of Notes (the "Conversion Rate"), subject to adjustment in accordance with the terms of the Amended and Restated Note Purchase Agreement as defined below. The June 2024 Notes are secured by substantially all of our assets and mature on August 15, 2028.

The Amended and Restated Note Purchase Agreement provides that the Conversion Rate applicable to the June 2024 Notes is subject to adjustment if, on or prior to December 31, 2024, we sell Common Stock or any other equity-linked securities at an effective price per share that is less than the conversion price then in effect, subject to certain exemptions (a "Degressive Issuance"). In the event of a Degressive Issuance, the Conversion Rate applicable to the June 2024 Notes will be adjusted based on the weighted average issuance price of the securities sold in such Degressive Issuance, as set forth in the Amended and Restated Note Purchase Agreement. Pursuant to the terms of the Amended and Restated Note Purchase Agreement, we will not be permitted to effect any further Degressive Issuance that would result in an adjustment to the Adjusted Conversion Rate that requires the approval of our stockholders pursuant to the listing standards of Nasdaq, unless we have obtained such stockholder approval before such Degressive Issuance.

As further discussed below, on August 27, 2024 we completed an offering of securities that constituted a Degressive Issuance and resulted in an adjustment to the conversion rate applicable only to the June 2024 Notes from 650.4065 shares of Common Stock per $1,000 principal amount of June 2024 Notes to 692.7990 shares of Common Stock per $1,000 principal amount of June 2024 Notes (the "Adjusted Conversion Rate"). As a result of the Adjusted Conversion Rate, the June 2024 Notes are convertible into an aggregate of up to 6,252,366 shares of Common Stock, assuming all accrued interest is paid-in-kind through maturity.

The Amended and Restated Note Purchase Agreement also modifies an existing provision applicable to the Original Notes, and subsequently applies to the June 2024 Notes, that provides for certain adjustments to the Conversion Rate and Adjusted Conversion Rate, as applicable, to increase the number of shares of Common Stock issuable upon conversion of the Notes (the "Additional Shares") in the event of certain change of control transactions or other events specified in the Amended and Restated Note Purchase Agreement (a "Make-Whole Fundamental Change").

Pursuant to the Amended and Restated Note Purchase Agreement, the Conversion Rate and Adjusted Conversion Rate, as applicable, will be increased by up to 325.2033 Additional Shares per $1,000 principal amount of Notes, based on the timing of the Make-Whole Fundamental Change and the trading price of the Common Stock at such time or the cash received by holders of the Common Stock in connection with such Make-Whole Fundamental Change, as applicable, as further described in the Amended and Restated Note Purchase Agreement (the "Make-Whole Adjustment"). The Make-Whole Adjustment may result in the issuance of a maximum of 36,065,709 Additional Shares if a Make-Whole Fundamental Change were to occur.

August 2024 Debt Commitment and Equity Offering

On August 25, 2024, we entered into commitment letters (the "Debt Commitment Letters") with Bluescape and Ascend (together, the "Commitment Parties"), pursuant to which each of the Commitment Parties has agreed to purchase $3.0 million aggregate principal amount of the Company's secured convertible promissory notes (the "September 2024 Notes") in a private placement, subject to certain terms and conditions (the "Debt Financing"). The funding of the Debt Financing pursuant to the Debt Commitment Letters is contingent on the satisfaction of certain conditions and the amendment of the Company's existing Amended and Restated Note Purchase Agreement. The September 2024 Notes are expected to be substantially identical to the Company's outstanding Notes, and the conversion price applicable to the September 2024 Notes is expected to be $0.9375. The Debt Commitment Letters will terminate on September 17, 2024 if the Debt Financing has not been consummated before such date.

On August 27, 2024, we completed an offering (the "August 2024 Offering") of (i) 5,333,333 shares (the "Shares") of our Common Stock, (ii) Series A warrants to purchase up to an aggregate of up to 5,333,333 shares of Common Stock (the "Series A Warrants") and (iii) Series B warrants to purchase an aggregate of 5,333,333 shares of Common Stock (the "Series B Warrants", and collectively with the Series A Warrants, the "Warrants"). The Shares and Warrants were offered and sold on a combined basis for consideration equating to $0.75 for one Share and two Warrants. The exercise price for each of the Warrants is $0.7981 per share.

The Series A Warrants and the Series B Warrants are initially exercisable on February 27, 2025. The Series A Warrants will expire on February 27, 2030 and the Series B Warrants will expire on February 27, 2027. The Warrants contain standard adjustments to the exercise price including for stock splits, stock dividends, rights offerings and pro rata distributions. The Warrants also include certain rights upon the occurrence of a "fundamental transaction" (as described in the Warrants), including the right of the holder thereof to receive from the Company or a successor entity the same type or form of consideration (and in the same proportion) that is being offered and paid to the holders of Common Stock in such fundamental transaction in the amount of the Black Scholes value (as described in the Warrants) of the unexercised portion of the Warrant on the date of the consummation of such fundamental transaction. The Warrants include cashless exercise rights to the extent the resale of the shares of Common Stock underlying the Warrants is not registered under the Securities Act.

Additionally, in connection with the August 2024 Offering, we agreed not to issue any shares of Common Stock (or securities exercisable or exchangeable for Common Stock) for a period of 90 days following the closing of the offering, or to enter into any "variable rate transactions" for one year following the closing of the offering.

The gross proceeds to us for the August 2024 Offering is approximately $4.0 million before deducting the placement agent's fees and other offering expenses payable by us.

Financing Transactions — Liquidity Considerations

Although the equity offerings associated with our Out-of-Court Restructuring and issuance of June 2024 Notes improved our cash position by providing $21.3 million of net proceeds after issuance costs and fees to the Company, and the August 2024 Offering and anticipated September 2024 Notes will further improve our cash position by providing approximately $10 million of gross proceeds on a combined basis before deducting issuance costs and fees to the Company, and we continue to operate under a business plan that includes reductions in certain spending, we will need additional financing in order to continue as a going concern and maintain a cash balance in excess of the $7.5 million minimum cash covenant of the Amended and Restated Note Purchase Agreement (as discussed in Note 7 to the consolidated financial statements). An event of default under the Amended and Restated Note Purchase Agreement would cause the Notes balance outstanding to become immediately due and payable, for which we would not have the resources to repay without additional financing. The receipt of potential funding cannot be considered probable at this time because these plans are not entirely within management's control as of the date of the consolidated financial statements. Therefore, there exists substantial doubt regarding our ability to continue as a going concern for a period of one year after the date that this Annual Report is issued. Even if additional financing is successfully consummated, including the September 2024 Notes, available liquidity may still not be sufficient to eliminate the aforementioned substantial doubt regarding our ability to continue as a going concern. Refer to the "Going Concern" discussion within Note 1 of the consolidated financial statements and "Liquidity and Capital Resources" below for more information.

Funding Opportunities

During March 2024, we submitted a request for proposal response to the U.S. Department of Energy for a grant to fund research to enhance our lithium extraction work. Should we receive an award from this submission, funding is aimed towards increasing the amount of lithium carbonate that we are able to extract, potentially increasing lithium yields to improve project economics. Additionally, we continue to progress boron awareness with multiple federal agencies on the back of the National Defense Authorization Act for fiscal year 2024, requesting a study into boron supply chains.

Results of Operations

The following table summarizes our results of operations for the periods presented.

	Year Ended June 30,		Change	
	2024	2023	$	%
	(in thousands)			
COSTS AND EXPENSES				
Project expenses	$ 6,631	$ 9,988	$ (3,357)	-34%
General and administrative	24,014	25,365	(1,351)	-5%
Research and development	45	262	(217)	-83%
Impairment	—	908	(908)	-100%
Depreciation and amortization expense	5,170	184	4,986	*
Total costs and expenses	35,860	36,707	(847)	-2%
LOSS FROM OPERATIONS	(35,860)	(36,707)	847	-2%
NON-OPERATING INCOME (EXPENSE)				
Interest income	252	1,147	(895)	-78%
Other income	7	62	(55)	-89%
Loss on extinguishment of debt	(20,953)	—	(20,953)	N/A
Derivative gain (loss)	749	11,743	(10,994)	-94%
Interest expense	(6,199)	(6,854)	655	-10%
Other expense	(9)	(15)	6	-40%
Total non-operating income (expense)	(26,153)	6,083	(32,236)	*
NET INCOME (LOSS)	$ (62,013)	$ (30,624)	$ (31,389)	102%

* Represents a percentage change of greater than +/- 300%

Project expenses

Project expenses include drilling, plug and abandonment, site-preparation, engineering, consumables, testing and sampling, hydrology, permits, surveys, and other expenses associated with further progressing our Project. For the year ended June 30, 2024, Project expenses decreased $3.4 million, or 34%, versus the prior year. The decrease was primarily due to (i) a reduction in expenses incurred relating to our plug and abandonment program ($5.0 million) which occurred primarily during the first half of fiscal year 2023 and was related to closing historic wells required by our permits ahead of operating the SSF, (ii) reduced expenses incurred for engineering and technical reports that were not eligible for capitalization as construction in progress ($0.3 million), and (iii) reduced site-related costs ($0.1 million). These decreases were partially offset by increased well-field development costs ($1.4 million), and EPA compliance costs ($0.7 million).

General and administrative expenses

General and administrative expenses include professional fees, costs associated with marketing, on-going SEC and public company costs, public relations, rent, salaries, share-based compensation and other expenses. Currently, all salaries and benefits for the entire organization are reported in general and administrative expenses. For the year ended June 30, 2024, general and administrative expenses decreased $1.4 million, or 5%, versus the prior year. The decrease was primarily due to (i) a decrease in share-based compensation costs ($1.5 million), (ii) a decrease in costs related to marketing activities ($0.9 million), and (iii) a decrease in travel costs ($0.4 million). These decreases were partially offset by increases in costs associated with (i) increased cash bonus incentives ($1.0 million) which primarily relate to an employee retention program implemented as part of the December 2023 Restructuring Support Agreement, and (ii) increased state licensing and filing fees ($0.4 million).

Research and development

Research and development expense includes costs incurred under research agreements with Georgetown University and Boston College that aim to enhance the performance of permanent magnets through increased use of boron. Both engagements were completed during the second fiscal quarter of 2024. For the year ended June 30, 2024, research and development expenses decreased $217 thousand, or 83%, versus the prior year. The decrease was attributable to the completion of the engagements during the second fiscal quarter of 2024.

Impairment

During the year ended June 30, 2023, we elected not to renew our mineral lease with Elementis Specialties, Inc., which expired on March 31, 2023, resulting in the recognition of approximately $0.9 million of related impairment expense. There was no comparable impairment expense in the year ended June 30, 2024.

Depreciation and amortization expense

Depreciation and amortization relates to use of our SSF, injection and recovery wells, owned or leased vehicles, buildings and equipment and the amortization of our asset retirement obligations. For the year ended June 30, 2024, depreciation and amortization expense increased $5.0 million versus the year ended 2023. This increase was primarily due to placing the SSF and its related injection and recovery wells, facilities and equipment into service as of April 1, 2024 corresponding with the commencement of commercial operations.

Interest income

Interest income is derived from the investment of our excess cash and cash equivalents in short-term (original maturities of three months or less) investments of highly liquid treasury bills and certificates of deposit beginning in the first fiscal quarter of 2023 and corresponding with the issuance of the Original Notes. For the year ended June 30, 2024, interest income decreased $895 thousand or 78% versus the year ended 2023. Such decrease corresponds to a decrease in our average cash and cash equivalent balance between the periods.

Other income

Other income is derived from the third-party use of our hydrology wells and the sale of scrap and other materials at the Project. For the year ended June 30, 2024, other income decreased $55 thousand, or 89% versus the prior year. The decrease primarily relates to reduced third-party use of our hydrology wells compared to the prior year.

Loss on extinguishment of debt

The loss on extinguishment of debt incurred for the year ended June 30, 2024 resulted from the modification of the terms of our Original Notes contained in the January 2024 Amended and Restated Note Purchase Agreement. The modified terms of the Original Notes (as discussed within Note 7 to the consolidated financial statements) were evaluated and determined to be representative of an in-substance extinguishment of the Original Notes and establishment of new debt, for accounting purposes, primarily due to the significance of the changes to the terms of the conversion features. As a result, we wrote-off the remaining principal, accrued interest and unamortized discount and debt issuance costs associated with the prior debt with an aggregate value of $44.2 million, and recognized the modified debt at its fair value of $65.2 million upon execution of the January 2024 Amended and Restated Note Purchase Agreement. The difference in value between the prior debt and the modified debt resulted in a loss on extinguishment of debt of $21.0 million.

Derivative gain

Derivative gain (loss) results from changes in the fair value of the embedded conversion features relating to degressive issuance provisions contained in the Note Purchase Agreement and Amended and Restated Note Purchase Agreement that are required to be bifurcated and accounted for separately as stand-alone derivative instruments (as discussed within Note 7 and Note 8 to the consolidated financial statements). The unrealized gain during the year ended June 30, 2023, was primarily due to the decrease in our stock price to $11.63 on November 26, 2022, the date the conversion feature expired and derivative accounting was terminated for our Original Notes, from $15.83 on August 26, 2022, the inception date of the Original Notes and the date derivative accounting commenced. The expiration of the conversion feature associated with the Original Notes resulted in the transfer of the fair value of the convertible note derivative at expiration to additional paid-in capital.

The unrealized derivative gain (loss) during the year ended June 30, 2024, was primarily due to the decrease in our stock price to $1.21 on June 30, 2024, the end of the reporting period, from $1.44 on June 11, 2024, the inception date for the June 2024 Notes and the date derivative accounting commenced with respect to the Degressive Issuance feature related to the June 2024 Notes. Future changes in the fair value of the embedded conversion feature prior to its expiration will affect future net income, but will not have any effect on cash flows. On December 31, 2024, the conversion feature associated with the June 2024 Notes that results in separate accounting will expire and the fair value of such derivative, if any, will be transferred to additional paid-in capital on such date.

Interest expense

Interest expense primarily relates to interest expense incurred on the Notes, as amended, and is net of amounts capitalized to construction-in-progress. Prior to the execution of the January 2024 Amended and Restated Note Purchase Agreement, the Original Notes accrued interest at a rate of 6% when interest was paid-in-kind through the issuance of additional notes. Subsequent to the January 2024 Amended and Restated Note Purchase Agreement, the Original Notes accrue interest at a rate of 10% when interest is paid-in-kind through the issuance of additional notes, with such rate also applying to the June 2024 Notes issued on June 11, 2024. We also recognize interest expense for the amortization of debt issuance costs and the amortization of debt discounts on the Notes. For the year ended June 30, 2024, interest expense decreased $655 thousand or 10% versus the comparable period in fiscal year 2023. This decrease was due to (i) the write-off of the remaining unamortized debt discount (established August 26, 2022) and corresponding

elimination of the amortization of such discount in connection with the accounting for the January 2024 Amended and Restated Note Purchase Agreement, which results in a shorter period of amortization expense in the current period compared to the prior period ($1.4 million reduction in interest expense), and (ii) additional interest being capitalized between periods due to the combined effect of a higher interest rate associated with our modified debt, an increase in our average construction-in-progress balance between periods and a longer period of capitalization in the current period versus the comparative period ($1.2 million reduction in interest expense). These decreases in interest expense were offset to a lesser extent by the effects of (i) interest accruing at 10% under the terms of our January 2024 Amended and Restated Note Purchase Agreement compared to 6% under our prior agreement, (ii) accruing additional interest on $1.8 million and $2.1 million of interest that was paid-in-kind during August of 2023 and February of 2024, respectively, and (iii) interest expense accruing on the $6 million of June 2024 Notes issued on June 11, 2024 (for a combined impact of $2.0 million increase in interest expense).

Other expense

Other expense relates to losses on foreign currency transactions and certain non-income related taxes. For the year ended June 30, 2024, other expense decreased $6 thousand, or 40%, versus the prior year. The decrease primarily relates to reduced foreign currency transaction losses compared to the prior year.

Income tax expense

We did not have any income tax expense or benefit for the years ended June 30, 2024 and 2023, as we have recorded a full valuation allowance against our net deferred tax asset.

Liquidity and Capital Resources

Overview

As of June 30, 2024, we had cash and cash equivalents of $4.9 million and a working capital deficit of $2.9 million compared to $20.3 million of cash and cash equivalents and a working capital surplus of $13.3 million as of June 30, 2023. Our predominant source of cash has been generated through equity financing from issuances of our common stock and equity-linked securities, including our Notes. Since inception, we have not generated revenues, and as such, have relied on equity financing and equity-linked instruments to fund our operating and investing activities. We maintain the majority of our cash and cash equivalents in accounts with major U.S. and multi-national financial institutions, and our deposits at certain of these institutions may exceed insured limits. Market conditions can impact the viability of these institutions.

In August 2022, we executed a $60 million private placement of senior secured convertible notes to complete construction and commissioning of our SSF, fund operation of our SSF, and general corporate purposes. In January 2024, as part of the Out-of-Court Restructuring, we completed two closings of a private placement of our Common Stock which resulted in approximately $15.8 million of proceeds to the Company, after recognition of the related costs and fees, to strengthen our balance sheet and to help fund mining and SSF operations. Also in January 2024, and also as part of our Out-of-Court Restructuring, we executed the January 2024 Amended and Restated Note Purchase Agreement which modified certain terms of our Original Notes (refer to the Out-of-Court Restructuring discussion under the heading of 2024 Highlights and Future Considerations above). The January 2024 Amended and Restated Note Purchase Agreement did not provide incremental capital to the Company and resulted in us incurring $2.6 million of related legal and accounting fees. In May 2024, we executed the May 2024 Amended and Restated Note Purchase Agreement which resulted in the issuance of an additional $6 million of senior secured convertible notes which resulted in approximately $5.5 million of net proceeds to the Company during June 2024, after recognition of the related costs and fees (refer to the June 2024 Senior Secured Convertible Notes discussion under the heading of 2024 Highlights and Future Considerations above). During August 2024, we entered into Debt Commitment Letters with Commitment Parties, pursuant to which the Commitment Parties agreed to purchase $6.0 million aggregate principal amount of our secured convertible promissory notes in a private placement that is anticipated to close before September 17, 2024. Also during August 2024, we completed the August 2024 Offering of shares of Common Stock and Warrants that resulted in gross proceeds to us of approximately $4.0 million, before the recognition of the related costs and fees. The proceeds anticipated from the Debt Commitment Letters and August 2024 Offering will be used by us to advance our FEL-2 engineering program towards completion while providing working capital to continue to operate our SSF and progressing our customer qualification program. For additional details on each of these August 2024 transactions, refer to the August 2024 Debt Commitment and Equity Offering discussion under the heading of 2024 Highlights and Future Considerations above.

A summary of our cash flows for the years ended June 30 follows.

	For the year ended June 30,		Change	
	2024	2023	$	%
	($ in thousands)			
Net cash used in operating activities	$ (26,872)	$ (30,695)	$ 3,823	-12%
Net cash used in investing activities	(7,187)	(39,307)	32,120	-82%
Net cash provided by financing activities	18,632	59,268	(40,636)	-69%
Net increase (decrease) in cash and cash equivalents	$ (15,427)	$ (10,734)	$ (4,693)	44%

Cash Flows Used For Operating Activities

Net cash used in operating activities for each of the above periods was primarily the result of general and administrative costs, costs incurred in furthering the Project, preparing us for the operation of the SSF, and operating costs of the SSF after commercial operations commenced on April 1, 2024. During the year ended June 30, 2024, we used $26.9 million of cash for operating activities, a decrease of $3.8 million or 12% compared to the previous year. The decrease in cash used in operations during the current period primarily results from decreases in Project expenses in 2024 versus the prior year (refer to the discussion of year-over-year changes in Project expenses above for additional details).

Cash Flows Used For Investing Activities

Our cash flows used for investing activities primarily relate to equipment purchases, engineering, and the construction of our SSF. During the year ended June 30, 2024, we used $7.2 million of cash for investing activities, a decrease of $32.1 million or 82% compared to the previous year. During fiscal year 2023, a significant portion of the SSF was constructed while these construction activities were reduced in fiscal year 2024 as the SSF approach final commissioning and placement into operation. Net cash used in investing activities for the fiscal year ended June 30, 2023 also included the redemption of $776 thousand of reclamation bonds required by the EPA in exchange for putting surety bonds in place.

Cash Flows From Financing Activities

Our cash flows from financing activities primarily relate to equity and equity-linked financing transactions to fund our business and operations. Cash flows provided by financing activities for the year ended June 30, 2024 were the result of (i) $15.8 million of proceeds received from two closings of a private placement of our Common Stock in January of 2024, after recognition of the related costs and fees, where we issued an aggregate of 19,048,782 shares of our Common Stock, and (ii) $5.5 million of proceeds received from the issuance of June 2024 Notes, after recognition of the related costs and fees. These cash inflows from financing activities were offset by $2.6 million of cash used to pay legal and accounting fees associated with the January 2024 Amended and Restated Note Purchase Agreement that modified certain terms of our Original Notes but did not result in any financing cash inflows for the Company.

Cash flows provided by financing activities during the year ended 2023 were primarily the result of $55.8 million received from the issuance of the Original Notes in August 2022, net of debt issuance costs, and proceeds received from the exercise of stock options.

Future Capital Requirements

Over the next 12 months we have the following plans that will require additional capital:

- Operate the SSF;
- Progress FEL-2, FEL-3, and detail engineering and procure long lead item equipment, specifically our crystallization units;
- Optimize well-field design in an effort to reduce future mining capital and operational expenditure through various drilling techniques such as directional, horizontal and radial drilling;
- Pursue and optimize infrastructure capital expenditures for our larger-scale facility which could include expansion of non-potable water resources, upgrading shore power, connection to a natural gas network, and constructing new access roads into and out of the location for our larger-scale facility; and
- Further define our advanced materials strategy with consideration to engineering and repurposing our SSF to produce boron advanced materials once sufficient data has been obtained for flow sheet optimization and the production of product for customer qualification.

Although the Out-of-Court Restructuring transaction, the issuance of June 2024 Notes, and August 2024 Offering, each discussed above, improved our cash position, and we continue to operate under a business plan that includes reductions in certain spending, we will need additional financing in order to continue as a going concern and maintain a cash balance in excess of the $7.5 million

minimum cash covenant contained in the Amended and Restated Note Purchase Agreement. Absent additional financing as outlined above, we may no longer be able to meet our ongoing obligations, continue operations or achieve the milestones outlined above. If we are not able to secure additional financing cash flows and our cash balance falls below $7.5 million after December 31, 2024, an event of default under the Amended and Restated Note Purchase Agreement would occur if not cured after 30 days. An event of default would cause our Notes balance outstanding to become immediately due and payable, for which we would not have the resources to repay without additional financing.

We intend to explore different potential financing strategies to help support the growth of our business and execution of our business plan, including equity or debt financing, government funding or grants, private capital, royalty agreements or customer prepayments, or other strategic alliances with third parties. However, there is no assurance that we will be able to secure additional financing on adequate terms, in a timely manner, or at all.

The receipt of potential funding, including those subject of the Debt Commitment Letters discussed above, cannot be considered probable at this time because these plans are not entirely within management's control as of the date of the consolidated financial statements. Therefore, there exists substantial doubt regarding our ability to continue as a going concern for a period of one year after the date that these financial statements are issued. Even if additional financing is successfully consummated, available liquidity may still not be sufficient to eliminate the aforementioned substantial doubt regarding our ability to continue as a going concern. Refer to the “Going Concern” discussion within Note 1 of the consolidated financial statements for more information.

2024 Equity Distribution Agreement

On March 28, 2024, we entered into an equity distribution agreement (the “Equity Distribution Agreement”) with Canaccord Genuity LLC and D.A. Davidson & Co. (the “Agents”) pursuant to which we may offer and sell up to $15.0 million of shares of our Common Stock from time to time through the Agents, acting as our sales agents, or directly to one or more of the Agents, acting as principal (the “ATM Program”).

Neither of the Agents is required to sell any specific number or dollar amount of shares of our Common Stock, but each has agreed, subject to the terms and conditions of the Equity Distribution Agreement, to use its commercially reasonable efforts, consistent with its normal trading and sales practices, to sell the shares of Common Stock on the terms agreed upon by such Agent and the Company.

We did not sell any shares of common stock nor receive any proceeds under the Equity Distribution Agreement during the year ended June 30, 2024. As a result of the August 2024 Offering, we are precluded from utilizing the ATM program for one year following the closing of the offering.

Material Cash Requirements

Our material short-term cash requirements include general and administrative expenses including recurring payroll and benefit obligations for our employees, operating costs for the Small-Scale Facility, project related costs including funds necessary to further FEL-2 engineering, payments under certain lease agreements and working capital needs. Our long-term material cash requirements from currently known obligations include repayment of outstanding borrowings and interest payment obligations under our Notes (which may be avoided to the extent the Notes are converted to shares of our common stock and/or interest is paid-in-kind) and future obligations to reclaim, remediate, or otherwise restore properties to a condition that existed prior to our operations, and our performance under $4.2 million for purchase order commitments for engineering services, raw materials for the operation of the SSF, equipment, software and drilling. Refer to the “Asset Retirement Obligations,” “Accounts Payable and Accrued Liabilities,” “Long-term Debt” and “Commitments and Contingencies” footnotes in the consolidated financial statements in Item 8 of this Annual Report for more information on certain of these expenditures and obligations.

Critical Accounting Policies and Estimates

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of expenses during the reporting periods. Actual results could differ materially from those estimates. Our significant estimates and assumptions may include the estimated useful lives and valuation of properties, plant and equipment, mineral rights and properties, deferred tax assets, reclamation liabilities and share-based compensation. See Note 1, “Description of Company and Summary of Significant Accounting Policies,” to our consolidated financial statements in Item 8 of this report for a full description of the critical accounting policies and estimates below, as well as other accounting policies and estimates we make. Below are the most significant policies we apply in preparing our financial statements, which also describes the most significant estimates and assumptions we make in applying these policies.

Asset Retirement Obligations

Our mining and exploration activities are subject to various laws and regulations, including legal and contractual obligations to reclaim, remediate, or otherwise restore properties at the time the property is removed from service. We estimate these costs based upon internally generated information and information obtained from outside sources. These estimates are then inflated and discounted based on when the expenditures are expected to be incurred and recorded at fair value as an asset and corresponding liability on our consolidated balance sheet. Because these costs typically extend many years into the future, estimation is difficult and requires judgments that are subject to revisions based upon numerous factors, including inflation, changing technology and the political and regulatory environment in which we operate. Changes in cost estimates, discount rates, timing of abandonment activities or inflation, among others, could have a significant impact on our future results of operations or liquidity. We review our assumptions and estimates of future development and abandonment costs annually, or more frequently if circumstances change. See Note 5, "Asset Retirement Obligations" to our consolidated financial statements in Item 8 of this Annual Report.

Derivative Financial Instruments

We record derivative instruments on our consolidated balance sheet at fair value as either an asset or a liability with changes in fair value recognized currently in earnings. The related cash flow impact of our derivative activities, if any, is reflected as cash flows from operating activities unless the derivatives are determined to have a significant financing element at inception, in which case they are classified within financing activities. During the years ended June 30, 2024 and 2023, we recognized two separate derivative instruments, each related to beneficial conversion features associated with our Notes. The valuation methodology used as the basis of determining the amount allocated to the derivative instruments and the related derivative gains was a with-and-without methodology utilizing a binomial lattice model (Level 3). This model required the use of assumptions that were subjective, and had different assumptions been used, the resulting derivative gains and amount reflected as a discount to the Notes could have been materially different. See Note 8, "Convertible Notes Derivatives" to our consolidated financial statements in Item 8 of this Annual Report.

Properties, Plant and Equipment

We record properties, plant and equipment at historical cost. Depreciation and amortization expense is provided in amounts sufficient to match the cost of depreciable assets to operations over their estimated service lives or productive value, whichever is shorter. There is inherent judgment applied in determining an assets useful life, particularly related to the useful life we have assigned to the SSF and its related injection and recovery wells since we do not have a historical basis of comparison for similar assets, and there are limited comparable projects to utilize in benchmarking. If different useful lives had been used, the resulting depreciation expense recognized may be materially different. We review our assumptions and estimates for the assigned useful lives annually, or more frequently if circumstances change. Expenditures for improvements that significantly extend the useful life of an asset are capitalized. Expenditures for maintenance and repairs are charged to expense when incurred. See Note 4, "Properties, Plant and Equipment, Net" to our consolidated financial statements in Item 8 of this Annual Report.

Share-Based Compensation

We apply a fair value-based method of accounting for stock-based compensation, which requires recognition in the financial statements of the cost of services received in exchange for equity awards. Compensation expense is based on the fair value on the grant or modification date and is recognized in our financial statements over the vesting period with a corresponding increase in additional paid-in capital. We utilize the Black-Scholes option-pricing model to measure the fair value of stock options and a Monte Carlo lattice-based model for our market-based restricted stock units. See Note 10, "Share Based Compensation," to our consolidated financial statements in Item 8 of this Annual Report for a full discussion of our stock-based compensation.

New Accounting Pronouncements and Requirements

See Note 1, "Description of Company and Summary of Significant Accounting Policies," and specifically the discussion under the heading "Recently Issued and Adopted Accounting Pronouncements" to our consolidated financial statements in Item 8 of this Annual Report for a discussion of new accounting requirements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not required.

Item 8. Financial Statements

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of 5E Advanced Materials, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of 5E Advanced Materials, Inc. and its subsidiaries (the "Company") as of June 30, 2024 and 2023, and the related consolidated statements of operations, of changes in stockholders' equity and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of June 30, 2024 and 2023, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt About the Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 and 7 to the consolidated financial statements, pursuant to a financial covenant in the May 2024 Amended and Restated Convertible Note Purchase Agreement, the Company is required to maintain a cash balance of at least $7.5 million after December 31, 2024. The Company will need to secure additional financing to maintain a cash balance of $7.5 million after the aforementioned date which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Denver, Colorado
September 9, 2024

We have served as the Company's auditor since 2022.

5E ADVANCED MATERIALS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except per share data)

	June 30, 2024	June 30, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,896	$ 20,323
Prepaid expenses and other current assets	1,913	1,808
Total current assets	6,809	22,131
Mineral rights and properties, net	7,616	7,637
Construction in progress	608	67,553
Properties, plant and equipment, net	73,872	3,056
Reclamation bond deposit	311	309
Right of use asset	282	207
Other assets	6	6
Total assets	$ 89,504	$ 100,899
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 9,567	$ 8,728
Lease liabilities, current	141	136
Total current liabilities	9,708	8,864
Long-term debt, net	64,831	37,671
Convertible note derivative liability	3,315	—
Lease liabilities	149	74
Asset retirement obligations	795	724
Total liabilities	78,798	47,333
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Common stock, $0.01 par value; 360,000 shares authorized; 63,318 and 44,187 shares outstanding June 30, 2024 and 2023, respectively	633	441
Additional paid-in capital	210,074	191,113
Retained earnings (accumulated deficit)	(200,001)	(137,988)
Total stockholders' equity	10,706	53,566
Total liabilities and stockholders' equity	$ 89,504	$ 100,899

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

5E ADVANCED MATERIALS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)

	Year ended June 30,	
	2024	**2023**
Operating expenses:		
Project expenses	$ 6,631	$ 9,988
General and administrative	24,014	25,365
Research and development	45	262
Impairment	—	908
Depreciation and amortization expense	5,170	184
Total operating expenses	35,860	36,707
Income (loss) from operations	(35,860)	(36,707)
Non-operating income (expense):		
Interest income	252	1,147
Other income	7	62
Loss on extinguishment of debt	(20,953)	—
Derivative gain (loss)	749	11,743
Interest expense	(6,199)	(6,854)
Other expense	(9)	(15)
Total non-operating income (expense)	(26,153)	6,083
Income (loss) before income taxes	(62,013)	(30,624)
Income tax provision (benefit)	—	—
Net income (loss)	$ (62,013)	$ (30,624)
Net income (loss) per common share — basic and diluted	$ (1.18)	$ (0.70)
Weighted average common shares outstanding — basic and diluted	52,523	43,842

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

5E ADVANCED MATERIALS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year ended June 30,	
	2024	**2023**
Cash Flows From Operating Activities:		
Net income (loss)	$ (62,013)	$ (30,624)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	5,170	184
Share based compensation	3,490	4,953
Loss on extinguishment of debt	20,953	—
Unrealized (gain) loss on convertible note derivative	(749)	(11,743)
Impairment	—	908
Accretion of asset retirement obligations	71	37
Amortization of debt issuance costs and discount — convertible note	3,481	4,907
Amortization of right of use asset	159	164
Interest earned on reclamation bond	(2)	—
Change in:		
Prepaid expenses and other current assets	(105)	(302)
Accounts payable and accrued liabilities	2,673	821
Net cash used in operating activities	(26,872)	(30,695)
Cash Flows From Investing Activities:		
Construction in progress	(7,099)	(39,731)
Properties, plant and equipment additions	(88)	(352)
Reclamation bonds	—	776
Net cash used in investing activities	(7,187)	(39,307)
Cash Flows From Financing Activities:		
Proceeds from issuance of common stock, net of offering costs	15,794	—
Proceeds from issuance of convertible notes	6,000	60,000
Debt issuance costs	(3,122)	(4,160)
Payments on note payable	(40)	(38)
Proceeds from exercise of stock options	—	3,466
Net cash provided by financing activities	18,632	59,268
Net increase (decrease) in cash and cash equivalents	(15,427)	(10,734)
Cash and cash equivalents at beginning of period	20,323	31,057
Cash and cash equivalents at end of period	$ 4,896	$ 20,323
Supplemental Disclosure of Cash Flow Information:		
Cash paid for interest	$ 23	$ 7
Noncash Investing and Financing Activities:		
Construction in progress transferred to properties, plant and equipment (Note 4)	$ 75,877	$ —
Accounts payable and accrued liabilities change related to construction in progress	1,833	2,197
Recognition of operating lease liability and right of use asset	234	—
Increase in asset retirement costs	—	198
Increase in net long-term debt resulting from modification (Note 7)	20,953	—
Interest paid through issuance of additional convertible notes (Note 7)	3,961	1,710

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

5E ADVANCED MATERIALS, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(In thousands)

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance at June 30, 2022	43,305	$ 433	$ 169,593	$ (107,364)	$ 62,662
Shares issued for:					
Exercise of stock options	835	8	3,458	—	3,466
Vesting of restricted share units	47	—	(44)	—	(44)
Share based compensation	—	—	4,953	—	4,953
Convertible note derivative liability reclassification	—	—	13,153	—	13,153
Net income (loss)	—	—	—	(30,624)	(30,624)
Balance at June 30, 2023	44,187	$ 441	$ 191,113	$ (137,988)	$ 53,566
Shares issued for:					
Cash, net of offering costs	19,049	191	15,603	—	15,794
Vesting of restricted share units	82	1	(132)	—	(131)
Share based compensation	—	—	3,490	—	3,490
Net income (loss)	—	—	—	(62,013)	(62,013)
Balance at June 30, 2024	63,318	$ 633	$ 210,074	$ (200,001)	$ 10,706

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

5E ADVANCED MATERIALS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Company and Summary of Significant Accounting Policies

Nature of Business

5E Advanced Materials, Inc. ("5E," "we," "our," or "us" or the "Company") is an exploration stage company focused on becoming a vertically integrated global leader and supplier of specialty boron and advanced boron derivative materials whose mission is to enable decarbonization, increase food security, and ensure domestic supply of critical materials. The Company is currently operating a small-scale facility at its 5E Boron Americas (Forty Cady) Complex (the "Project") located in southern California, which provides data and information necessary for the Company to ultimately establish a commercial-scale facility at the Project.

Reorganization

5E Advanced Materials, Inc. acquired all of the issued and outstanding shares of American Pacific Borates Limited ("ABR"), the Company's Australian predecessor and wholly owned subsidiary, pursuant to a Scheme of Arrangement ("Scheme") under Australian law, which was approved by ABR's shareholders on December 2, 2021, and the Supreme Court of Western Australia on February 24, 2022. As part of the Scheme, 5E became the parent company of ABR and changed its place of domicile from Australia to the State of Delaware in the United States, effective on March 8, 2022.

In accordance with the Scheme, all ordinary shares of ABR have been transferred to 5E and pursuant to the Scheme, the Company issued to the shareholders of ABR, either one share of its common stock for every ten ordinary shares of ABR or one CHESS Depositary Interest ("CDI") of its common stock for every one ordinary share of ABR, in each case, as held on the Scheme record date. The Company maintains an Australian Stock Exchange ("ASX") listing for its CDIs, with each CDI representing $1/10^{th}$ of a share of common stock. Holders of CDIs are able to trade their CDIs on the ASX under the symbol "5EA" and holders of shares of the Company's common stock are able to trade their shares on Nasdaq under the symbol "FEAM." All share and per share data presented in the consolidated financial statements is presented on the basis of the Company's common stock.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). The financial statements are presented in U.S. dollars.

Basis of Consolidation

The consolidated financial statements comprise the financial statements of 5E and its wholly owned subsidiaries, ABR, and 5E Boron Americas, LLC (formerly Fort Cady (California) Corporation ("5EBA")). The Company holds 100% of the rights through ownership in the Project, through its ownership of 5EBA. In preparing the consolidated financial statements, all intercompany balances and transactions, income and expenses and profit and losses resulting from intra-company transactions have been eliminated.

Out-of-Court Restructuring

In fiscal year 2023, the Company increased efforts to identify appropriate funding solutions to address the Company's liquidity profile. With the U.S. Environmental Protection Agency (the "EPA") approval still an open item at the time, public markets capital providers were reluctant to invest. As time progressed, even with cost saving measures implemented, the Company approached the $10 million liquidity covenant (as discussed within Note 7—Debt) and therefore began discussions with its lender. The combination of the EPA status, and the approaching liquidity floor required a commercial resolution. On November 9, 2023, the Company entered into a standstill agreement (the "Standstill Agreement") with Bluescape Special Situations IV ("Bluescape"), Alter Domus (US) LLC (the "Collateral Agent"), Ascend Global Investment Fund SPC for and on behalf of Strategic SP ("Ascend"), and Mayfair Ventures Pte Ltd in connection with the Company's 4.50% senior secured convertible notes (the "Original Convertible Notes"). Pursuant to the Standstill Agreement, Bluescape and the Collateral Agent agreed to not exercise their respective rights, remedies, powers, privileges, and defenses under the Note Purchase Agreement, dated August 11, 2022 (the "Note Purchase Agreement") with respect to the occurrence of any default or event of default, and all parties to the Standstill Agreement agreed to forbear from instituting or pursuing legal action with respect to the Original Convertible Notes. The Standstill Agreement also temporarily allowed the Company to go below its then enforce cash covenant of $10 million.

On December 1, 2023, the effectiveness of the Standstill Agreement was extended from December 1, 2023 to December 5, 2023 at which point the Company entered into a Restructuring Support Agreement (the "Restructuring Support Agreement") with Bluescape, the Collateral Agent, and Ascend in connection with certain restructuring transactions with respect to the Company's capital structure, including the Company's Original Convertible Notes. Pursuant to the Restructuring Support Agreement, the parties agreed to implement the restructuring transactions either as an out-of-court restructuring (the "Out-of-Court Restructuring")

or an in-court restructuring under voluntary pre-packaged cases under chapter 11 of title 11 of the United States Code in a U.S. Bankruptcy Court.

On January 12, 2024, the Company held a special meeting of stockholders (the "Special Meeting") where the Company's stockholders approved the Out-of-Court Restructuring, including (i) an amendment to the Company's certificate of incorporation to increase the number of authorized shares of the Company's common stock, par value $0.01 (the "Common Stock") from 180,000,000 to 360,000,000, (ii) the issuance of up to $35 million of Common Stock at a price of $1.025 per share (the "Securities Offering") to Ascend and Bluescape, if Bluescape decided to exercise its option to participate in the Securities Offering, and (iii) the issuance of additional shares of the Company's Common Stock upon conversion of the Original Convertible Notes in connection with an amendment to the Note Purchase Agreement.

In accordance with the results from the Special Meeting, during January 2024, the Company issued Common Stock in two separate transactions that resulted in net proceeds to the Company of approximately $15.8 million (as further described in Note 9—Equity) and entered into an amended and restated note purchase agreement (the "January 2024 Amended and Restated Note Purchase Agreement," as further described in Note 7—Debt), which completed the Out-of-Court Restructuring.

Going Concern

Management evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that these consolidated financial statements are issued. When substantial doubt exists, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the consolidated financial statements are issued. In performing this analysis, management concluded there continues to exist substantial doubt regarding the Company's ability to continue as a going concern.

Although the Out-of-Court Restructuring, issuance of $6.0 million of additional senior secured convertible notes in June 2024 (the "June 2024 Notes," and together with the Original Convertible Notes, the "Convertible Notes," each as further described in Note 7—Debt), and August 2024 Offering (as further described and defined in Note 15—Subsequent Events) improved the Company's cash position, and the Company continues to operate under a business plan that includes reductions in certain spending, management anticipates the need for additional financing within the next twelve months to maintain a cash balance in excess of the $7.5 million minimum cash covenant which goes into effect December 31, 2024 (as discussed in Note 7—Debt). If the Company is not able to secure additional financing and the Company's cash balance falls below $7.5 million after such date, an event of default under the May 2024 Amended and Restated Note Purchase Agreement (as defined in Note 7—Debt) would occur if not cured after 30 days. An event of default would cause the Convertible Notes balance outstanding to become immediately due and payable, for which the Company would not have the resources to repay without additional financing. The receipt of potential funding, including the financing contemplated by the Debt Commitment Letters (as further described and defined in Note 15—Subsequent Events) cannot be considered probable at this time because these plans are not entirely within management's control as of the date of these consolidated financial statements. Therefore, there exists substantial doubt regarding the Company's ability to continue as a going concern for a period of one year after the date that these financial statements are issued. Even if additional financing is successfully consummated, available liquidity may still not be sufficient to eliminate the aforementioned substantial doubt regarding the Company's ability to continue as a going concern.

These financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business and do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

Concentrations of Risk

The Company maintains cash deposits at several major banks, which at times may exceed amounts covered by insurance provided by the United States Federal Deposit Insurance Corporation. Management monitors the financial health of the banks and believes the Company is not exposed to any significant credit risk, and the Company has not experienced any such losses.

The Company's operations are predominately focused on the Project, which results in the Company being dependent upon a single mining operation in a single geographic region in the western United States in California. The geographic concentration of the Company's operations may disproportionately expose it to disruptions if the region experiences severe weather, transportation capacity constraints, constraints on the availability of required equipment, facilities, personnel or services, significant governmental regulation or natural disasters.

Risks and Uncertainties

The Company is subject to a number of risks that its management believes are similar to those of other companies of similar size and industry, including but not limited to, the success of its exploration activities, need for significant additional capital (or financing) to fund operating losses, competition from substitute products and services from larger companies, protection of proprietary technology, patent litigation, and dependence on key individuals. The Company currently generates no revenues from operations and will need to rely on raising additional capital or financing to sustain operations in the long-term. There can be no assurance that management will be successful in its efforts to raise additional capital on terms favorable to the Company, or at all, or in management's ability to adequately reduce expenses, if necessary, to maintain sufficient liquidity or capital resources. Refer to the Going Concern discussion above for additional details.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates, assumptions, and allocations that affect amounts reported in the consolidated financial statements and related notes. Items that are subject to such estimates and assumptions include, but are not limited to, estimated useful lives and valuation of properties, plant and equipment, mineral rights and properties, deferred tax assets, estimation of future costs, useful life, and discount rates used to calculate the asset retirement obligations ("ARO"), assumptions used to value the embedded conversion option of the Convertible Notes, and fair value of stock-based compensation. Actual results could differ due to the uncertainty inherent in the nature of these estimates.

Significant Accounting Policies

Convertible Debt

Upon the issuance of convertible debt, the Company evaluates the embedded conversion features to determine whether the embedded conversion feature(s) should be bifurcated from the host instrument and accounted for separately as a derivative. If the conversion feature does not require derivative treatment, the instrument is evaluated for consideration of any beneficial conversion features. If a conversion feature is deemed to be beneficial, the intrinsic value of the conversion feature is recorded as additional paid in capital.

Derivative Financial Instruments

The Company records derivative instruments on the consolidated balance sheet at fair value as either an asset or a liability with changes in fair value recognized currently in earnings. Derivative financial instruments are classified as either current or non-current based upon the related classification of the host contract.

Debt Issue Costs

Costs incurred in connection with the issuance of debt are recorded as a reduction of the related debt and are amortized to interest expense over the life of the debt. If a conversion of the underlying debt occurs, a proportionate share of the unamortized amount is expensed in the period of conversion.

Capitalized Interest

The Company capitalizes a portion of its interest expense incurred on its Convertible Notes. The amount capitalized is determined by multiplying the amount of interest expense incurred during the reporting period by the ratio of amounts capitalized to construction in progress with respect to the principal amount of Convertible Notes outstanding, and is limited to actual interest costs incurred during the period. The accumulated construction in progress balances included in the capitalized interest calculation begin when the costs are incurred and end when the asset is either placed into service or written off. Capitalized interest costs are then depreciated over the life of the related asset.

Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The authoritative guidance requires disclosure of the framework for measuring fair value and requires that fair value measurements be classified and disclosed in one of the following categories:

Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities. The Company considers active markets as those in which transactions for the assets or liabilities occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 - Quoted prices in markets that are not active, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability. This category includes those derivative instruments that can be valued using observable market data. Substantially all of the inputs are observable in the marketplace throughout the full term of the derivative

instrument, can be derived from observable data, or are supported by observable levels at which transactions are executed in the marketplace.

Level 3 - Measured based on prices or valuation models that require inputs that are both significant to the fair value measurement and less observable from objective sources (i.e., supported by little or no market activity).

Financial assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of the fair value of assets and liabilities and their placement within the fair value hierarchy. The Company periodically reviews its inputs to ensure the fair value level classification is appropriate. When transfers between levels occur, it is the Company's policy to assume that the transfer occurred at the end of the period in which the change in circumstances that caused the transfer occurred.

The Company uses a Black-Scholes option valuation model to determine the grant date fair value of employee stock options which uses Level 2 inputs. See Note 10—Share Based Compensation for a description of the inputs used. The Company uses a binomial lattice model to determine the fair value of its Convertible Notes and related Convertible Note Derivative, which uses Level 2 and Level 3 inputs, respectively. See Note 7—Debt and Note 8—Convertible Notes Derivatives, respectively, for a description of the inputs used.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and liquid investments with an original maturity when acquired of three months or less. As of June 30, 2024 and 2023, cash and cash equivalents consisted of $4.9 million and $20.3 million, respectively, of funds held in bank accounts with financial institutions in the United States.

Mineral Rights and Properties and Exploration and Evaluation Costs

Mineral property acquisition costs, including indirectly related acquisition costs, are capitalized when incurred. Acquisition costs include cash consideration.

Exploration and evaluation costs are classified as project expenses and expensed as incurred. When it is determined that a mining deposit can be economically and legally extracted or produced, development costs related to such reserves and incurred after such determination will be considered for capitalization. The establishment of proven and probable reserves is based on results of feasibility studies. Upon commencement of commercial production from the proposed commercial facility, capitalized costs will be amortized over their estimated useful lives or units of production, whichever is a more reliable measure. Capitalized amounts relating to a property that is abandoned or otherwise considered uneconomic for the foreseeable future will be written off.

Drilling, development and related costs are either classified as project expenses and charged to operations as incurred, or capitalized, based on the following criteria:

- whether the drilling or development costs relate to a project that has been determined to be economically feasible, and a decision has been made to put the project into production; and
- whether, at the time the cost is incurred: (a) the expenditure embodies a probable future benefit that involves a capacity, singly or in combination with other assets, to contribute directly or indirectly to future net cash inflows, (b) the Company can obtain the benefit and control others' access to it, and (c) the transaction or event giving rise to the right to or control of the benefit has already occurred.

Impairment of Long-Lived Assets

The carrying amount of long-lived assets is reviewed for impairment when events and circumstances indicate that such assets might be impaired. An asset is considered impaired when estimated future undiscounted cash flows are less than the carrying amount of the asset. In the event the carrying amount of such asset is not considered recoverable, the asset is adjusted to its fair value. Fair value is generally determined based on discounted future cash flows.

Properties, Plant and Equipment

Properties, plant and equipment are recorded at historical cost. Depreciation and amortization are provided in amounts sufficient to match the cost of depreciable assets to operations over their estimated service lives or productive value, whichever is shorter. Expenditures for improvements that significantly extend the useful life of an asset are capitalized. Expenditures for maintenance and repairs are charged to expense when incurred.

Assets under construction ("Construction in progress") include engineering costs related to the proposed commercial-scale facility, and will be depreciated in accordance with the Company's depreciation policy once placed in service.

Asset Retirement Obligations

The Company's mining, construction and exploration activities are subject to various laws and regulations, including legal and contractual obligations to reclaim, remediate, or otherwise restore properties at the time the related asset is removed from service. If a reasonable estimate of the fair value of an obligation to perform site reclamation, dismantle facilities or plug and abandon wells can be made, the Company records a liability (an ARO) on its consolidated balance sheet and capitalizes the present value of the asset retirement cost in mineral rights and properties.

In general, the amount of the initial recorded ARO and the costs capitalized will equal the estimated future costs to satisfy the abandonment obligation assuming normal operation of the asset, using current prices that are escalated by an assumed inflation factor up to the estimated settlement date, which is then discounted back to the date that the abandonment obligation was incurred using the Company's credit adjusted risk-free rate. After recording these amounts, the ARO is accreted to its future estimated value and the original capitalized costs are amortized using the straight line method over the estimated life of the related asset. Accretion of the liability is included in project expenses in the statement of operations and the amortization of the original capitalized costs are included in depreciation and amortization expense in the Company's statement of operations (See Note 2—Mineral Rights and Properties, Net and Note 5—Asset Retirement Obligations).

For activities that do not qualify for asset capitalization, the costs associated with the obligation are charged to expense. Environmental compliance costs related to maintaining the existing permits are expensed in the period incurred.

Certain asset retirement obligations are secured by either certificate of deposits or surety bonds held for the benefit of the state of California in amounts determined by applicable federal and state regulatory agencies. Reclamation bond deposits as of June 30, 2024 and 2023 were $311 thousand and $309 thousand, respectively.

Leases

The Company determines if a contractual arrangement is, or contains, a lease at the inception date. Right-of-use ("ROU") assets and liabilities related to operating leases are separately reported in the consolidated balance sheet. The Company has made an accounting policy election to exclude short-term leases (leases with a term of 12 months or less and which do not include a purchase option that the Company is reasonably certain to exercise) from the balance sheet presentation.

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 the lease commencement date based on the present value of the future lease payments over the lease term. When the rate implicit to the lease cannot be readily determined, the Company utilizes the Company's incremental borrowing rate in determining the present value of the future lease payments. The incremental borrowing rate is derived from information available at the lease commencement date and represents the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. The ROU asset includes any lease payments made and lease incentives received prior to the commencement date. Operating lease ROU assets could also include any cumulative prepaid or accrued rent when the lease payments are uneven throughout the lease term. The ROU assets and lease liabilities may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option.

Lease liabilities are increased by interest and reduced by payments each period, and the ROU asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the ROU asset result in straight-line rent expense over the lease term. Variable lease expenses are recorded when incurred.

Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, the Convertible Notes, vehicle notes, and accounts payable and accrued liabilities. Management believes the Company is not exposed to significant interest, currency or credit risks arising from these financial instruments. The fair values of these instruments, due to their short-term nature, with the exception of the Convertible Notes and vehicle notes, approximate their carrying value. See Note 8—Convertible Notes Derivatives for fair value information related to the Convertible Notes.

Share Based Compensation

The fair value of share based compensation awards is measured at the date of grant and amortized over the requisite service period, which is generally the vesting period, with a corresponding increase in additional paid-in capital. The Company does not estimate the potential for forfeiture of share based compensation awards when determining the fair value of awards on the grant date. In the case of a share based compensation award that is either canceled or forfeited prior to vesting, the amortized expense associated with the unvested award is reversed.

Loss per Common Share

Basic net loss per common share is computed by dividing net loss, by the weighted average number of common shares outstanding. Diluted loss per share includes any additional dilution from common stock equivalents.

Income Taxes

The Company uses the liability method of accounting for income taxes. Under this method, deferred income taxes are recorded to reflect the tax consequences in future years of differences between the tax basis of assets and liabilities and their financial reporting amounts at each year-end.

In evaluating the Company's ability to recover its deferred tax assets, management considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations. In projecting future taxable income, the Company develops assumptions including the amount of future state and federal pretax operating income, the reversal of temporary differences, and the implementation of feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and the assumptions are consistent with the plans and estimates that the Company uses to manage the underlying business. A valuation allowance is recorded against deferred tax assets if the Company believes it is more likely than not the related tax benefits will not be realized.

The Company evaluates uncertain tax positions in a two-step process, whereby (i) it is determined whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement with the related tax authority would be recognized.

Contingencies

Certain conditions may exist as of the date the Company's consolidated financial statements are issued that may result in a loss to the Company, but which will only be resolved when one or more future events occur or fail to occur. The Company's management, with input from legal counsel, assesses such contingent liabilities, and such assessment inherently involves judgment. In assessing loss contingencies related to legal proceedings that are pending against the Company or unasserted claims that may result in proceedings, the Company's management, with input from legal counsel, evaluates the perceived merits of any legal proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought therein.

If the assessment of a contingency indicates that it is probable that a loss has been incurred and the amount of liability can be estimated, then the estimated undiscounted liability is accrued in the Company's consolidated financial statements. If the assessment indicates that a potentially material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, is disclosed. Actual results could vary from these estimates and judgments.

Loss contingencies considered remote are generally not disclosed unless they involve guarantees, in which case the guarantees would be disclosed.

Reclassifications

Certain reclassifications have been made to prior years' reported amounts in order to conform to the current year presentation. These reclassifications did not impact our previously reported net income (loss), stockholders' equity or cash flows.

Recently Issued and Adopted Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") that are adopted by the Company as of the specified effective date. Unless otherwise discussed, management believes that the impact of recently issued standards did not or will not have a material impact on the Company's consolidated financial statements upon adoption.

In December 2023, the FASB issued ASU No. 2023-09, Improvements to Income Tax Disclosures ("ASU 2023-09"). ASU 2023-09 is intended to improve income tax disclosures primarily through enhanced disclosure of income tax rate reconciliation items, and disaggregation of income (loss) from continuing operations, income tax expense (benefit) and income taxes paid, net disclosures by federal, state and foreign jurisdictions, among others. ASU 2023-09 is effective for annual reporting periods beginning after December 15, 2024, and early adoption is permitted. The Company is evaluating the impact that ASC 2023-09 will have on the consolidated financial statements and its plan for adoption, including the adoption date and transition method.

2. Mineral Rights and Properties, Net

The Company owns surface properties and the associated mineral rights for the Project. The Company has capitalized the cost of drilling water supply wells, which provide water for the Project. For the years ended June 30, 2024 and 2023, the Company recognized hydrology income of $2 thousand and $62 thousand, respectively.

The Company had a net royalty lease agreement with Elementis Specialties, Inc. ("Elementis") to explore, develop and mine boron and lithium on claims held by Elementis which expired on March 31, 2023 when the Company elected not to renew the agreement. As a result, the Company recognized approximately $908 thousand of related impairment expense related to the book value of the lease during the year ended June 30, 2023.

Mineral rights and properties, net consisted of the following at the end of each period presented.

	June 30, 2024	June 30, 2023
	(in thousands)	
Mineral properties	$ 6,733	$ 6,733
Hydrology wells	547	547
Asset retirement cost, net of accumulated amortization of $44 and $23 at June 30, 2024 and 2023, respectively [1]	336	357
Mineral rights and properties, net	$ 7,616	$ 7,637

[1] Represents the carrying value of capitalized costs associated with asset retirement obligations, as discussed in Note 5—Asset Retirement Obligations.

3. Construction in Progress

Construction in progress represents the equipment which has been acquired and is not in use, payments for design, engineering, and construction services in relation to the development of the Project, and any amounts of interest that have been capitalized related to such balances. During the fourth fiscal quarter of 2024, the Company placed the Small-Scale Facility ("SSF") and its related injection and recovery wells, equipment and facilities into full commercial operation and therefore transferred approximately $75.9 million previously recorded as construction in progress to property plant and equipment. As of June 30, 2024, the amounts that continue to be reported as construction in progress relate to costs incurred in connection with the proposed commercial facility.

Construction in progress consisted of the following at the end of each period presented.

	June 30, 2024	June 30, 2023
	(in thousands)	
Engineering services	$ 608	$ 9,122
Equipment	—	31,692
Construction	—	21,579
Injection and recovery wells	—	4,002
Capitalized interest	—	1,158
Total construction in progress	$ 608	$ 67,553

4. Properties, Plant and Equipment, Net

During the fourth fiscal quarter of 2024, the Company placed the SSF and its related injection and recovery wells, equipment and facilities into full commercial operation and therefore transferred approximately $75.9 million previously recorded as construction in progress to property plant and equipment. This amount represents the engineering services, equipment and construction costs related to the SSF and its related facilities, including any amounts of interest that were capitalized thereon. This amount was categorized into small-scale facility, injection and recovery wells, buildings and other plant and equipment, as appropriate. The Company intends to operate the SSF until the proposed commercial facility is placed into operation, and therefore assigned a corresponding useful life. The useful life of the injection and recovery wells was based on their estimated productive life and anticipated usage in the proposed commercial facility until the end of their productive lives. The other assets placed into service will be depreciated in accordance with the Company's established estimated useful life policy.

Properties, plant and equipment, net consisted of the following at the end of each period presented.

Asset category	Depreciation method	Estimated useful life (in years)	June 30, 2024	June 30, 2023
			(in thousands)	
Land	N/A	—	$ 1,533	$ 1,533
Small-scale facility — Plant	Straight-line	3.75	69,619	—
Injection and recovery wells	Straight-line	5	6,134	—
Buildings	Straight-line	7-15	979	873
Vehicles	Straight-line	3-5	345	345
Other plant and equipment	Straight-line	5-10	729	623
			79,339	3,374
Less accumulated depreciation			(5,467)	(318)
Properties, plant and equipment, net			$ 73,872	$ 3,056

The Company recognized depreciation expense of $5.2 million and $184 thousand for the years ended June 30, 2024 and 2023, respectively. Included in depreciation expense was amortization related to asset retirement costs (refer to Note 2—Mineral Rights and Properties, Net) of $21 thousand and $17 thousand for the years ended June 30, 2024 and 2023, respectively.

5. Asset Retirement Obligations

The Company's asset retirement obligations represent the present value of estimated future costs associated with the plugging and abandonment of water monitoring, injection and recovery wells, and surface reclamation. The following table provides a reconciliation of the Company's asset retirement obligations for the period presented.

	Year ended June 30, 2024
	(in thousands)
Asset retirement obligation — beginning of period	$ 724
Obligation incurred during the period	—
Revisions to previous estimates	—
Accretion	71
Asset retirement obligation — end of period	$ 795

6. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consisted of the following at the end of each period presented.

	June 30, 2024	June 30, 2023
	(in thousands)	
Accounts payable - trade [1]	$ 854	$ 1,492
Accrued expenses	603	1,350
Accrued capital expenditures	3,309	3,386
Accrued payroll	2,263	1,072
Accrued interest	2,496	1,388
Current portion of debt	42	40
Accounts payable and accrued liabilities	$ 9,567	$ 8,728

[1] Includes $235 thousand and $699 thousand related to construction in progress or property, plant and equipment as of June 30, 2024 and 2023, respectively.

7. Debt

Long Term Debt

Long-term debt consisted of the following at the end of each period presented.

	June 30, 2024	June 30, 2023
	(in thousands)	
Convertible Notes	$ 71,671	$ 61,710
Vehicle notes payable	108	148
Total debt	71,779	61,858
Current portion of debt	42	40
Long-term debt	71,737	61,818
Unamortized convertible note discount	(4,035)	(20,691)
Unamortized debt issuance costs — Convertible Notes	(2,871)	(3,456)
Long-term debt, net	$ 64,831	$ 37,671

As further discussed below, on June 11, 2024, the Company issued an additional $6.0 million principal amount of June 2024 Notes. Additionally, on August 15, 2023 and February 15, 2024, the Company elected to issue additional notes as payment for $1.8 million and $2.1 million of interest accrued on the Convertible Notes during the period from February 16, 2023 through August 15, 2023, and August 16, 2023 through February 15, 2024, respectively.

Interest Expense

Interest expense consisted of the following for each period presented.

	Year ended June 30,	
	2024	2023
	(in thousands)	
Convertible Notes interest	$ 5,068	$ 3,098
Vehicle notes payable interest	5	7
Amortization of debt issuance costs and discount — Convertible Notes	3,481	4,907
Other interest	19	—
Gross interest expense	8,573	8,012
Less: amount capitalized to construction in progress	2,374	1,158
Interest expense, net of amounts capitalized	$ 6,199	$ 6,854
Effective interest rate — Convertible Notes [(1)]	17.9%	25.3%

[(1)] The effective interest rate represents a weighted-average interest rate applicable for the respective period. Interest expense utilized in the calculation is based upon the gross interest expense in the table above, and the principal balance utilized in the calculation is based on the ending net long-term debt applicable to each interest period inclusive of unamortized debt issuance costs and discount, changes in the principal balance resulting from the issuance of the June 2024 Notes, interest paid-in-kind and any adjustments resulting from the January 2024 Amended and Restated Note Purchase Agreement.

Convertible Notes

On August 11, 2022, the Company executed a $60 million private placement of the Original Convertible Notes with Bluescape, which is secured by a security interest in substantially all of the Company's assets, which closed on August 26, 2022 (the "Original Closing Date"). As discussed within Note 1, on January 12, 2024, at the Special Meeting, the Company's shareholders approved certain proposals that allowed for an Out-of-Court Restructuring, and on January 18, 2024 (the "Modification Date"), the January 2024 Amended and Restated Note Purchase Agreement was executed in accordance with the Out-of-Court Restructuring which modified certain terms of the Original Convertible Notes. In connection with the execution of the January 2024 Amended and Restated Note Purchase Agreement, the maturity date of the Original Convertible Notes was extended one year to August 15, 2028, and fifty percent (50%) of the outstanding Convertible Notes were acquired by Ascend and Meridian Investments Corporation from Bluescape. On May 28, 2024, the Company entered into a second amendment ("Amendment No. 2") to the January 2024 Amended and Restated Note Purchase Agreement and agreed, among other things, to (i) issue and sell new senior secured convertible notes in substantially the same form and under the same terms as the Original Convertible Notes, as amended, in an aggregate principal amount of $6.0 million (the "June 2024 Notes" and, together with the Original Convertible Notes, the "Convertible Notes") to Bluescape and Ascend, and (ii) amend and restate the January 2024 Amended and Restated Note Purchase Agreement in the form attached as Annex A to Amendment No. 2 (the "May 2024 Amended and Restated Note Purchase Agreement"). As part of the January 2024 and May 2024 Amended and Restated Note Purchase Agreements, the Company incurred approximately $2.6 million and $541 thousand of debt issuance costs.

At the Company's election, the Convertible Notes bear interest at an annual rate of 4.50% if paid in cash, and 10.00% if paid

through the issuance of additional notes. Interest is paid semi-annually on February 15 and August 15 of each year. The Original Convertible Notes contained a financial covenant requiring the Company to maintain a cash balance of at least $10 million which was waived during the effective periods of both the Standstill Agreement and Restructuring Support Agreement. As part of the January 2024 Amended and Restated Note Purchase Agreement, the minimum cash covenant was waived through June 28, 2024 and was reduced thereafter to $7.5 million, and then as part of Amendment No. 2 waived through December 31, 2024.

As discussed in Note 15—Subsequent Events, on August 25, 2024, the Company entered into commitment letters (the "Debt Commitment Letters") with Bluescape and Ascend (together, the "Commitment Parties"), pursuant to which each of the Commitment Parties has agreed to purchase $3.0 million aggregate principal amount of the Company's secured convertible promissory notes (the "September 2024 Notes") in a private placement, subject to certain terms and conditions (the "Debt Financing"). The funding of the Debt Financing pursuant to the Debt Commitment Letters is contingent on the satisfaction of certain conditions and the amendment of the Company's existing Amended and Restated Note Purchase Agreement, which is anticipated to occur before September 17, 2024. The September 2024 Notes will be substantially identical to the Company's outstanding Convertible Notes, and the conversion price applicable to the September 2024 Notes will be $0.9375.

Convertible Notes – Conversion Terms

The Convertible Notes, including accrued interest paid-in-kind, may be converted into shares of the Company's Common Stock at any time before the Convertible Notes mature based upon a conversion rate of 650.4065 shares of Common Stock per $1,000 principal amount of Convertible Notes (the "Conversion Rate"), representing a conversion price of approximately $1.5375 per share. The May 2024 Amended and Restated Note Purchase Agreement modified an existing provision applicable to the Convertible Notes that provides for certain adjustments to the Conversion Rate to increase the number of shares of Common Stock issuable upon conversion of the Convertible Notes (the "Additional Shares") in the event of certain change of control transactions or other events specified in the January 2024 Amended and Restated Note Purchase Agreement (a "Make-Whole Fundamental Change"). Accordingly, the Conversion Rate will increase by up to 325.2033 Additional Shares per $1,000 principal amount of Convertible Notes, based on the timing of a Make-Whole Fundamental Change and the trading price of the Common Stock at such time or the cash received by holders of the Common Stock in connection with such Make-Whole Fundamental Change.

The Conversion Rate applicable to the June 2024 Notes is subject to adjustment if, on or prior to December 31, 2024, the Company sells Common Stock or any other equity-linked securities in one or more transactions at an effective price per share that is less than the conversion price then in effect, subject to certain exemptions (a "Degressive Issuance"). In the event of a Degressive Issuance, the Conversion Rate applicable to the June 2024 Notes will be adjusted based on the weighted average issuance price of the securities sold in such Degressive Issuance, as set forth in the May 2024 Amended and Restated Note Purchase Agreement. Pursuant to the terms of the May 2024 Amended and Restated Note Purchase Agreement, the Company will not be permitted to effect any Degressive Issuance that would result in an adjustment to the Conversion Rate that requires the approval of the Company's stockholders pursuant to the listing standards of The Nasdaq Global Select Market, unless the Company has obtained such stockholder approval before such Degressive Issuance.

As part of the August 2024 Offering (as further described and defined in Note 15—Subsequent Events), the Degressive Issuance provision applicable to the June 2024 Notes resulted in an adjustment to the conversion rate from 650.4065 shares of Common Stock per $1,000 principal amount of June 2024 Notes to 692.7990 shares of Common Stock per $1,000 principal amount of June 2024 Notes (the "Adjusted Conversion Rate"). As a result of the Adjusted Conversion Rate, the June 2024 Notes are convertible into an aggregate of up to 6,252,366 shares of Common Stock, assuming all accrued interest is paid-in-kind through maturity.

Prior to entering into the January 2024 Amended and Restated Note Purchase Agreement, the Company had the right to convert the Convertible Notes into shares of the Company's Common Stock based upon the Company's Common Stock trading above certain threshold prices at certain dates. However, in connection with the January 2024 Amended and Restated Note Purchase Agreement, the Company's ability to convert the Convertible Notes and force conversion into Common Stock was eliminated.

Amendment No. 2 also requires the Company to maintain the effectiveness of registration statements filed with the SEC relating to shares of the Company's Common Stock which may be received by the holders of the Convertible Notes if such Convertible Notes are converted into Common Stock. If the Company fails to maintain the effectiveness of such registration statements through the period in which the Convertible Notes may be converted, the interest rate applicable to the Convertible Notes may be increased by 0.5% per annum for each 90-day period where such registration statements are not effective, up to a maximum of 2.0% per annum.

Convertible Notes – Derivatives

The terms of the Original Convertible Notes permitted a change in the then applicable 56.82 shares of Common Stock per $1,000 principal amount conversion rate upon a digressive issuance by the Company within three months of the Original Closing Date, as specified in the Note Purchase Agreement. As a result, this conversion feature was deemed to be an embedded derivative requiring bifurcation and separate accounting as a stand-alone derivative instrument (the "Original Convertible Note Derivative"). The Original Convertible Notes were initially recorded at their face amount of $60 million less debt issuance costs of $4.2 million and the fair value of the Original Convertible Note Derivative, which was determined to be $24.9 million. The provision that resulted in

separate accounting for the Original Convertible Note Derivative expired November 26, 2022, and accordingly, the fair value of the Original Convertible Note Derivative at expiration of the provision was transferred to additional paid-in capital.

As part of the May 2024 Amended and Restated Note Purchase Agreement, the Conversion Rate applicable to the June 2024 Notes is permitted to change upon a Digressive Issuance by the Company on or before December 31, 2024. As a result, this conversion feature was deemed to be an embedded derivative requiring bifurcation and separate accounting as a stand-alone derivative instrument (the "June 2024 Convertible Note Derivative"). The June 2024 Notes were initially recorded at their face amount of $6 million less debt issuance costs of $541 thousand and the fair value of the June 2024 Convertible Note Derivative, which was determined to be $4.1 million. The provision that results in separate accounting for the June 2024 Convertible Note Derivative will expire on December 31, 2024, and accordingly, the fair value of the June 2024 Convertible Note Derivative, if any, on such date will be transferred to additional paid-in capital. Refer to Note 8—Convertible Notes Derivatives and the discussion immediately below for additional details regarding the fair values of the Original Convertible Note Derivative and the June 2024 Convertible Note Derivative.

Convertible Notes – Fair Value

Fair value and carrying value information for the Convertible Notes at each period end follows.

	Principal Amount	Unamortized Debt Discount and Issuance Costs	Net Liability Carrying Amount	Fair Value Amount	Fair Value Leveling
		(in thousands)			
As of June 30, 2024					
Convertible Notes due August 15, 2028	$ 71,671	$ (6,906)	$ 64,765	$ 65,231	Level 2
As of June 30, 2023					
Convertible Notes due August 15, 2027	$ 61,710	$ (24,147)	$ 37,563	$ 40,316	Level 2

The valuation model for the Convertible Notes and related Original Convertible Note Derivative and June 2024 Convertible Note Derivative requires the input of subjective assumptions including expected share price volatility, risk-free interest rate and debt rate. Changes in the input assumptions as well as the Company's underlying share price can materially affect the fair value estimates. Additionally, the modification of the conversion features associated with the January 2024 Amended and Restated Note Purchase Agreement resulted in a significant increase in the fair value of the Original Convertible Notes outstanding on such date, and a related loss on extinguishment of debt. Other changes in the reported fair value of the Convertible Notes between periods are not recognized in net income and therefore have no effect on reported net income (loss).

The significant assumptions used in the fair value model for the Convertible Notes and related Original Convertible Note Derivative and June 2024 Convertible Note Derivative include the following, with changes in volatility, debt rate and stock price having the most significant impact on the related fair values.

	June 30, 2024	June 11, 2024 (June 2024 Notes)	January 18, 2024 (Modification)	June 30, 2023	November 26, 2022 (Termination)	August 26, 2022 (Original Notes)
Risk-free interest rate	4.5%	4.5%	4.1%	4.4%	3.9%	3.2%
Volatility	50.0%	55.0%	55.0%	50.0%	40.0%	40.0%
Debt rate	28.7% - 36.7% [1]	36.3%	25.3%	17.5%	17.7%	17.3%
Stock price per share	$1.21	$1.44	$1.21	$3.28	$11.63	$15.83

[1] A debt rate of 36.7% was utilized in the valuation of the June 2024 Notes, while a rate of 28.7% was utilized for the Original Convertible Notes.

Convertible Notes – Loss on Extinguishment

For accounting purposes, the modification of the terms of the Convertible Notes in connection with the January 2024 Amended and Restated Note Purchase Agreement was evaluated and determined to be representative of an in-substance extinguishment of the Convertible Notes outstanding at that date, and establishment of new debt, primarily due to the significance of the changes to the terms of the conversion features. As a result, the Company wrote-off the remaining principal, accrued interest, unamortized discount and debt issuance costs associated with the prior debt on the Modification Date and recognized the modified debt on the balance sheet at its fair value of $65.2 million. The fair value of the modified debt was determined utilizing a binomial lattice model, and the significant inputs to such model are described in more detail in the preceding table. The difference in value between the prior debt and the modified debt resulted in a loss on extinguishment of debt of $21.0 million, the calculation of which is summarized in the following table.

	Year ended June 30, 2024 (in thousands)
Modified Convertible Notes, at fair value	
Principal	$ 63,561
Accrued interest	1,621
Net long-term debt recognized	$ 65,182
Convertible Notes on Modification Date	
Principal	$ 63,561
Accrued interest	1,621
Unamortized Convertible Notes discount	(17,953)
Unamortized debt issuance costs	(3,000)
Net long-term debt written-off	$ 44,229
Loss on extinguishment of debt	$ 20,953

8. Convertible Notes Derivatives

The Original Convertible Note Derivative and June 2024 Convertible Note Derivative, each which related to the Convertible Notes described above in Note 7—Debt, were valued upon initial recognition and at each reporting period at fair value using a with-and-without methodology utilizing a binomial lattice model (a model which utilizes Level 3 fair value inputs). Refer to *Convertible Notes – Fair Value* in Note 7—Debt for a table of certain inputs utilized in the valuation of the Convertible Notes and related convertible notes derivatives on certain dates. Changes in the fair value were recognized in Derivative gain (loss) in the statement of operations, but had no related impact on the Company's cash position or cash flows. The provision that resulted in separate accounting for the Original Convertible Note Derivative began on August 26, 2022 in connection with the issuance of the Original Convertible Notes and expired November 26, 2022, and accordingly, the fair value of the Original Convertible Note Derivative at expiration of the provision was transferred to additional paid-in capital. The provision that results in separate accounting for the June 2024 Convertible Note Derivative began June 11, 2024 in connection with the issuance of the June 2024 Notes and will expire on December 31, 2024, and accordingly, the fair value of the June 2024 Convertible Note Derivative, if any, will be transferred to additional paid-in capital at that time.

The components of changes to the fair value of each of the convertible note derivatives for the periods presented are summarized below.

	Derivative (Asset)/Liability (in thousands)
Convertible note derivative (asset) liability — June 30, 2022	**$ —**
Additions, at fair value, August 26, 2022	24,896
Fair value adjustment (gain) loss	(11,743)
Reclassified to additional paid-in capital, at fair value, November 26, 2022	(13,153)
Convertible note derivative (asset) liability — June 30, 2023	**—**
Additions, at fair value, June 11, 2024	4,064
Fair value adjustment (gain) loss	(749)
Convertible note derivative (asset) liability — June 30, 2024	**$ 3,315**

9. Equity

The Company is authorized to issue up to 360,000,000 shares of common stock, par value $0.01 per share, and 20,000,000 shares of preferred stock, par value, $0.01 per share. The Company has no outstanding shares of preferred stock.

On January 18, 2024, as part of the Out-of-Court Restructuring, and pursuant to a subscription agreement with Ascend, dated December 5, 2023 and an amended and restated subscription agreement with 5ECAP LLC ("5ECAP"), dated January 18, 2024 (the "5ECAP Subscription Agreement"), the Company issued (i) 5,365,854 shares of Common Stock to Ascend at a price of $1.025 per share, which shares included the placement fee to Ascend in shares of Common Stock and (ii) 5,365,854 shares of Common Stock to 5ECAP at a price of $1.025 per share, which shares included the placement fee to 5ECAP in shares of Common Stock. Then, on January 29, 2024, also as part of the Out-of-Court Restructuring and pursuant to the 5ECAP Subscription Agreement, the Company issued an additional 8,317,074 shares of Common Stock to 5ECAP at a price of $1.025 per share. These transactions resulted in net proceeds to the Company of $15.8 million. In addition to these share issuances, during the year ended June 30, 2024, 82 thousand shares of Common Stock were issued upon the vesting of certain equity awards, which did not result in any net cash proceeds to the Company.

As discussed in Note 15—Subsequent Events, on August 27, 2024, the Company issued (i) 5,333,333 shares (the "Shares") of Common Stock, (ii) Series A warrants to purchase up to an aggregate of up to 5,333,333 shares of Common Stock (the "Series A Warrants") and (iii) Series B warrants to purchase an aggregate of 5,333,333 shares of Common Stock (the "Series B Warrants", and collectively with the Series A Warrants, the "Warrants"). The Shares and Warrants were offered and sold on a combined basis for consideration equating to $0.75 for one Share and two Warrants. The exercise price for each of the Warrants is $0.7981 per share. This transactions resulted in gross proceeds to the Company of approximately $4.0 million before deducting the placement agent's fees and other offering expenses.

During the year ended June 30, 2023, the Company issued 882 thousand shares of its Common Stock for net cash proceeds of $3.4 million upon the exercise of stock options and vesting of equity awards.

2024 Equity Distribution Agreement

On March 28, 2024, the Company entered into an equity distribution agreement (the "Equity Distribution Agreement") with Canaccord Genuity LLC and D.A. Davidson & Co. (the "Agents") pursuant to which the Company may offer and sell up to $15.0 million of shares of Common Stock from time to time through the Agents, acting as the Company's sales agents, or directly to one or more of the Agents, acting as principal (the "ATM Program").

Neither of the Agents is required to sell any specific number or dollar amount of shares of the Company's Common Stock, but each has agreed, subject to the terms and conditions of the Equity Distribution Agreement, to use its commercially reasonable efforts, consistent with its normal trading and sales practices, to sell the shares of Common Stock on the terms agreed upon by such Agent and the Company.

The Company did not sell any shares of Common Stock nor receive any proceeds under the Equity Distribution Agreement during the year ended June 30, 2024. As a result of the August 2024 Offering (as defined in Note 15—Subsequent Events) we are precluded from utilizing the ATM program for one year following the closing of the offering.

10. Share Based Compensation

2022 Equity Compensation Plan

In March 2022, the Company's Board of Directors adopted the 5E Advanced Materials, Inc. 2022 Equity Compensation Plan (the "Incentive Plan"). A total of 2.5 million shares of common stock are reserved for issuance under the Incentive Plan. The Incentive Plan authorizes the grant of stock options, restricted share units ("RSUs"), performance share units ("PSUs"), director restricted share units ("DSUs"), performance cash units and other equity-based awards. The Company's Compensation Committee determines the exercise price for stock options and other equity-based awards, which may not be less than the fair market value of the Company's common stock on the date of grant. As of June 30, 2024, approximately 1.2 million shares of common stock remain available for issuance under the Incentive Plan. It is the Company's policy to issue new shares of Common Stock to satisfy stock option exercises.

Share Based Compensation Expense

Share based compensation expense is included in general and administrative expense and represents costs associated with RSUs, DSUs, PSUs and options activity. Share based compensation expense consisted of the following for the periods presented.

	Year Ended June 30,	
	2024	2023
	(in thousands)	
Share based compensation expense — service based		
Employee share option plan	$ 397	$ 3,064
2022 Equity Compensation Plan — Options	1,443	934
2022 Equity Compensation Plan — PSUs	18	101
2022 Equity Compensation Plan — RSU and DSUs	1,632	854
Total share based compensation expense	$ 3,490	$ 4,953

As of June 30, 2024, the Company had approximately $1.8 million of total unrecognized stock-based compensation expense related to unvested stock-based compensation awards that is expected to be recognized over a weighted average period of 1.2 years.

Stock Options

All stock options outstanding prior to the three-month period ended September 30, 2022 were granted under the predecessor parent company's employee share option plan (the "ABR Employee Share Option Plan"). New option grants are made under the Incentive Plan and vest ratably over the vesting period, which is generally three years or less. The fair value of stock option awards granted to directors, officers, employees and/or consultants is estimated on the grant date using the Black-Scholes option valuation model and

the closing price of the Company's common shares on the grant date. Volatility is determined using the Company's historical stock price information. The significant assumptions used to estimate the fair value of stock option awards granted during the years ended June 30, 2024 and 2023, respectively, using the Black-Scholes option valuation model are as follows.

	Year ended June 30,	
	2024	2023
Exercise price	$1.27 - $7.73	$7.73 - $25.62
Share price	$1.15 - $2.46	$4.24 - $18.03
Volatility	99%	79% - 105%
Expected term in years	3 - 10	5 - 10
Risk-free interest rate	4.30% - 4.72%	2.91% - 3.56%
Dividend rate	Nil	Nil

The following table summarizes stock option activity for each of the periods presented.

	Year ended June 30,			
	2024		2023	
	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
	(In thousands, except per share data)			
Outstanding at beginning of the period	4,187	$ 10.91	4,874	$ 9.67
Granted	575	4.64	800	16.67
Exercised	—	—	(835)	4.15
Expired/forfeited	(761)	14.47	(652)	17.42
Outstanding at end of the period	4,001	9.33	4,187	10.91
Vested at the end of the period	3,660	9.80	3,349	9.82
Unvested at the end of the period	341	$ 4.23	838	$ 15.23

The weighted average remaining life of vested options as of June 30, 2024 and 2023 was approximately 1.4 years in each case. As of June 30, 2024 and June 30, 2023, the maximum expiration date for vested options was approximately 8.8 and 2.3 years, respectively.

As of June 30, 2024, there was $355 thousand of unrecognized compensation cost related to 341 thousand unvested stock options. This cost is expected to be recognized over a weighted-average remaining period of approximately 1.4 years. As of June 30, 2024 and June 30, 2023, the maximum expiration date for unvested options was approximately 3.1 and 9.8 years, respectively.

During the year ended June 30, 2024, 275,000 options with a remaining term of approximately 1.9 years and an exercise price of $25.62, granted to one grantee, were cancelled and concurrently replaced with 50,000 RSUs that vest over two years. The modification did not result in any incremental compensation expense.

The following table summarizes the activity for unvested options for each of the periods presented.

	Year ended June 30,			
	2024		2023	
	Number of Options	Weighted Average Grant Date Fair Value per share	Number of Options	Weighted Average Grant Date Fair Value per share
	(In thousands, except per share data)			
Unvested at beginning of the period	838	$ 6.42	1,507	$ 6.05
Granted	575	1.44	800	7.11
Vested	(490)	9.24	(1,177)	5.88
Expired/forfeited	(582)	6.12	(292)	8.26
Unvested at end of the period	341	$ 1.79	838	$ 6.42

As of June 30, 2024 and 2023, all outstanding stock options and vested stock options had no intrinsic value as the exercise prices of the respective options exceeded the Company's stock price on such dates. There were no options exercised during the year ended June 30, 2024. The intrinsic value of stock options exercised during the year ended June 30, 2023 was $6.2 million.

Full Value Awards (Restricted Share Units, Performance Share Units and Director Share Units)

The following table summarizes RSU, DSU and PSU activity under the Incentive Plan for each of the periods presented.

	Serviced-Based Shares	Weighted Average Grant Date Fair Value per Share	Performance- Based Shares	Weighted Average Grant Date Fair Value per Unit	Total Shares
	(In thousands, except per share data)				
Non-vested shares/units outstanding at June 30, 2022	48.8	$ 18.03	19.2	—	68.0
Granted	322.5	8.97	181.4 [2]	7.93	503.9
Vested	(61.1)	12.66	—	—	(61.1)
Forfeited	(100.4)	15.70	(61.5)	10.92	(161.9)
Non-vested shares/units outstanding at June 30, 2023	209.8	$ 6.78	139.1	$ 7.20	348.9
Granted	459.8	1.94	121.6 [1]	2.46	581.4
Vested	(164.8)	4.56	—	—	(164.8)
Forfeited	(137.0)	4.51	(166.3)	4.57	(303.3)
Non-vested shares/units outstanding at June 30, 2024	367.8	$ 2.56	94.4	$ 5.73	462.2

[1] During the year ended June 30, 2024, approximately 121.6 thousand PSUs were granted, which based on the achievement of certain financial and operational targets, could vest within a range of 0% to 100%. The targets are 1) construction of a large-scale commercial facility commencing prior to September 1, 2026; 2) the budget for the large-scale commercial facility remaining within a range of $342-418 million; and 3) an approved final investment decision in the large-scale commercial facility at a modeled internal rate of return of 20%. The determination of the percentage of shares that ultimately vest will be made at the three-year anniversary of the grant date based upon achievement of the performance targets over the applicable performance period.

[2] During the year ended June 30, 2023, approximately 181.4 thousand PSUs were granted, which based on the achievement of certain operational targets, could vest within a range of 0% to 100%. The targets are 1) commissioning and operation of the Small-Scale Facility; 2) obtaining formation flow, head grade and impurity profile data from the Small-Scale Facility; and 3) generating product data to ensure process design for detailed engineering. The determination of the percentage of shares that ultimately vest will be made at the three-year anniversary of the grant date based upon achievement of the performance targets over the applicable performance period.

11. Earnings (Loss) Per Common Share

Basic loss per share is computed by dividing net loss available to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted loss per share reflects the potential dilution that could occur if DSUs, RSUs, PSUs, stock options and convertible securities such as the Convertible Notes (excluding any Additional Shares since the probability of a Make-Whole Fundamental Change cannot be predicted) were exercised or converted into the Company's Common Stock at the end of the respective period. Diluted loss per share equals basic loss per share for the years ended June 30, 2024 and 2023, as the effect of including dilutive securities in the calculation would be antidilutive.

For the years ended June 30, 2024 and 2023, the following effects are excluded from the computation of dilutive loss per share as such effects would have an anti-dilutive effect.

	Year Ended June 30, 2024	2023
	(in thousands)	
Interest expense on Convertible Notes	$ 8,573	$ 8,012
Derivative gain (loss) — Convertible Notes Derivatives	$ 749	$ 11,743
Additional shares assuming conversion of Convertible Notes	46,615	3,506
Stock options and unvested restricted stock units and performance share units	4,601	4,724

As discussed in Note 15—Subsequent Events, on August 27, 2024 the Company completed an offering that resulted in the issuance of approximately 5.3 million shares of Common Stock and approximately 10.7 million warrants. This offering also resulted in an adjustment to the conversion rate applicable to the June 2024 Notes. If the Adjusted Conversion Rate were in effect as of June 30, 2024, it would have resulted in approximately 254 thousand additional shares being issued, assuming the conversion of all Convertible Notes. The impacts of these subsequent events are not reflected in the computation of earnings per share, as it would have served to reduce the net loss per share.

12. Defined Contribution Plan

The Company sponsors a defined contribution plan under Section 401(k) of the Internal Revenue Code. This plan covers all of the Company's employees that have attained the age of 21 and have completed three months service. The Company matches employee deferrals 100% up to 4% and 50% up to 6% of an employee's eligible earnings, subject to limitations imposed by the Internal Revenue Service. The Company's contributions to this plan were $183 thousand and $206 thousand for the years ended June 30, 2024 and 2023, respectively.

13. Commitments and Contingencies

Purchase Obligations

As of June 30, 2024, the Company had purchase order commitments of $4.2 million for engineering services, raw materials for the operation of the SSF, equipment, software and drilling.

Litigation

On July 17, 2023, the Company filed a complaint (the "Complaint") against a previous construction contractor in the United States District Court for the Central District of California, Eastern Division, alleging, among other things, numerous breaches by the contractor of its contractual obligations to 5EBA under the Procurement and Construction Contract, effective April 26, 2022, by and between 5EBA and the contractor, relating to the construction of the Small-Scale Facility in California (the "Contract"). On August 10, 2023, the contractor filed an answer to the Complaint as well as a counterclaim for, among other things, alleged breaches by 5EBA of its contractual obligations to the contractor under the Contract and has requested relief in the approximate amount of $5.5 million. The Company plans on filing a response disputing the counterclaims asserted by the contractor and reaffirming the grounds for recovery raised in the Complaint. Discovery has begun and is ongoing. An estimate of reasonably possible losses, if any, cannot be made at this time.

14. Income Taxes

The Company did not record a U.S. federal or state income tax benefit for losses incurred during the years ended June 30, 2024 and 2023. The Company has concluded that it is more likely than not that its deferred tax assets will not be realized which resulted in the recording of a full valuation allowance during those periods.

Domestic and foreign components of loss before income taxes for the years ended June 30 are as follows.

	2024	2023
	(in thousands)	
United States	$ 62,013	$ 30,624
Australia	—	—
Total net loss	$ 62,013	$ 30,624

The following table presents a reconciliation of the United States statutory income tax rate to the Company's effective income tax rate for the periods presented.

	Year ended June 30,	
	2024	2023
	($ in thousands)	
Loss before income taxes	$ 62,013	$ 30,624
Statutory income tax rate	21%	21%
Income tax benefit at statutory tax rates	$ 13,023	$ 6,431
State income tax benefit	2,691	1,755
Tax return true up	12	(1,769)
Share based compensation	(423)	(185)
Nondeductible interest on convertible note	(438)	(649)
Impact of change in functional currency	—	(743)
Other	(103)	(256)
Foreign rate differential	—	—
Disallowed exploration costs	—	—
Change in valuation allowance	(14,762)	(4,584)
Income tax benefit	$ —	$ —

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The significant components of the Company's deferred taxes as of each date presented below are as follows.

	June 30, 2024	June 30, 2023
Deferred tax assets:	($ in thousands)	
Net operating loss carryforward	$ 25,924	$ 18,781
Amortization of exploration expenditures	8,948	8,437
Share based compensation	3,168	2,796
Depreciation	226	—
Interest Limitation 163(j)	737	2
Derivative	885	—
Other deferred tax assets	914	738
Total deferred tax assets	40,802	30,754
Less: valuation allowance	(39,403)	(24,791)
Deferred tax assets, net of valuation allowance to offset	1,399	5,963
Deferred tax liabilities:		
Debt	(1,077)	(5,773)
Depreciation	-	(33)
Other deferred tax liabilities	(322)	(157)
Net deferred tax assets	$ —	$ —

As of June 30, 2024, the Company had U.S. federal, state, and Australian net operating loss ("NOL") carryforwards of $85.3 million, $74.0 million and $9.4 million, respectively. As of June 30, 2023, the Company had U.S. federal, state, and Australian NOL carryforwards of $59.0 million, $52.0 million and $9.2 million, respectively. U.S. net operating loss carryforwards for the periods arising before December 31, 2018 have a 20 year carryforward, the earliest of which could expire in 2037. The amount of the post-tax reform U.S. federal NOL generated after tax year 2017 of approximately $85.3 million, can be carried forward indefinitely. California net operating losses have a 20-year carryforward, the earliest of which could expire beginning in 2037. Australia net operating losses can be carryforward indefinitely.

The utilization of the Company's net operating loss or tax attributes may be subject to annual limitations provided by the Internal Revenue Code and similar state provisions to the extent certain ownership changes are deemed to occur. Such an annual limitation could result in the expiration of the attributes before utilization. The tax attributes reflected above have not been reduced by any limitations. To the extent it is determined upon completion of the analysis that such limitations apply, the Company will adjust the tax attributes accordingly. The Company faces the risk that its ability to use its tax attributes will be substantially restricted if it undergoes an "ownership change" as defined in Section 382 of the U.S. Internal Revenue Code.

The Company evaluates both the positive and negative evidence available to determine the realizability of its deferred tax assets. As of June 30, 2024 and 2023, the Company had a valuation allowance of $39.4 million and $24.8 million, respectively, of which both primarily relate to net operating losses and exploration costs.

Changes in the balance of the Company's deferred tax asset valuation allowance for the periods presented are as follows:

	Year ended June 30, 2024	2023
	($ in thousands)	
Valuation allowance	$ 14,612	$ 1,120

The Company had no unrecognized tax benefits as of June 30, 2024 or 2023. The Company recognizes interest accrued related to unrecognized tax benefits and penalties in its income tax provision, if applicable. The Company has not recognized any interest or penalties in the periods presented in these financial statements. The Company is subject to income tax in the U.S. federal jurisdiction, California and Australia. Tax years 2020 and forward remain subject to examination but there are currently no ongoing exams in any taxing jurisdictions.

15. Subsequent Events

Interest Paid-In-Kind

On August 15, 2024, the Company elected to issue additional Convertible Notes as payment for $3.4 million of interest accrued during the period from February 16, 2024 through August 15, 2024.

August 2024 Debt Commitment and Equity Offering

On August 25, 2024, the Company entered into Debt Commitment Letters with the Commitment Parties, pursuant to which the Commitment Parties have agreed to purchase $6.0 million aggregate principal amount of September 2024 Notes in a private placement, subject to certain terms and conditions. The funding of the Debt Financing pursuant to the Debt Commitment Letters is contingent on the satisfaction of certain conditions and the amendment of the Company's existing Amended and Restated Note Purchase Agreement, which is anticipated to occur before September 17, 2024. The September 2024 Notes will be substantially identical to the Company's outstanding Convertible Notes, and the conversion price applicable to the September 2024 Notes will be $0.9375.

On August 27, 2024, the Company completed an offering (the "August 2024 Offering") of (i) 5,333,333 shares of our Common Stock, (ii) Series A Warrants to purchase up to an aggregate of up to 5,333,333 shares of Common Stock and (iii) Series B Warrants to purchase an aggregate of 5,333,333 shares of Common Stock. The Shares and Warrants were offered and sold on a combined basis for consideration equating to $0.75 for one Share and two Warrants. The exercise price for each of the Warrants is $0.7981 per share.

The Series A Warrants and the Series B Warrants are initially exercisable on February 27, 2025. The Series A Warrants will expire on February 27, 2030 and the Series B Warrants will expire on February 27, 2027. The Warrants contain standard adjustments to the exercise price including for stock splits, stock dividends, rights offerings and pro rata distributions. The Warrants also include certain rights upon the occurrence of a "fundamental transaction" (as described in the Warrants), including the right of the holder thereof to receive from the Company or a successor entity the same type or form of consideration (and in the same proportion) that is being offered and paid to the holders of Common Stock in such fundamental transaction in the amount of the Black Scholes value (as described in the Warrants) of the unexercised portion of the Warrant on the date of the consummation of such fundamental transaction. The Warrants include cashless exercise rights to the extent the resale of the shares of Common Stock underlying the Warrants is not registered under the Securities Act.

The gross proceeds to us for the August 2024 Offering is approximately $4.0 million before deducting the placement agent's fees and other offering expenses payable by us.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company's management, with the participation of the Company's Chief Executive Officer and Interim Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures as of June 30, 2024 (the "Evaluation Date"). Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, the Company's Chief Executive Officer and Interim Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective at the reasonable assurance level as of the Evaluation Date.

Management's Annual Report on Internal Control Over Financial Reporting

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

Our internal control over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP"), and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting, as of the Evaluation Date, based on the framework set forth in Internal Control-Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its evaluation under this framework, management concluded that our internal control over financial reporting was effective as of the Evaluation Date.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting due to an exemption established by the JOBS Act for "emerging growth companies."

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

a) Disclosure in lieu of reporting on a Current Report on Form 8-K.

On September 9, 2024, we entered into an independent contractor agreement with our Interim Chief Financial Officer and principal accounting officer, Joshua Malm (the "Consulting Agreement"). The Consulting Agreement entitles Mr. Malm to cash compensation of $40,000 per month for his service as our Interim Chief Financial Officer. Pursuant to the Consulting Agreement, Mr. Malm is not entitled to any other salary, bonus, retirement, equity compensation or severance benefits. Pursuant to the Consulting Agreement, the Company will reimburse Mr. Malm for all reasonable business costs and expenses incurred in connection with his performance of services.

The foregoing summary of the Consulting Agreement is not complete and is qualified in its entirety by reference to the full text of the Consulting Agreement, a copy of which is attached as Exhibit 10.28.

b) Insider Trading Arrangements and Policies.

During the three months ended June 30, 2024, no director or officer of the Company adopted, modified or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Management

Information about our Executive Officers

The following table sets forth, as of September 6, 2024, the names and ages of our executive officers, including all offices and positions held by each officer for at least the past five years. There are no family relationships between our executive officers or between any of our directors and any of our executive officers.

Name	Age	Position
Paul Weibel, CPA	40	Chief Executive Officer, Treasurer and Corporate Secretary
Joshua Malm, CPA	42	Interim Chief Financial Officer

Paul Weibel was appointed Chief Executive Officer in June 2024, is an active Certified Public Accountant, and was appointed Corporate Secretary in June 2023. Mr. Weibel was appointed as the Manager of 5E Boron Americas, LLC in July 2022 when Fort Cady (California) Corporation converted to a Delaware LLC. Previously, Mr. Weibel was appointed Chief Financial Officer and Treasurer of 5E Advanced Materials, Inc. in November 2021, Chief Financial Officer of Fort Cady (California) Corporation in May 2021 where he oversaw the accounting and financial reporting departments, and director of Fort Cady (California) Corporation in April 2022. Mr. Weibel served as Corporate Secretary of Fort Cady (California) Corporation from August 2021 to April 2022 and Treasurer from April 2022 to June 2022. Previously, Mr. Weibel was the Financial Controller of Genlith, Inc. from January 2017 to May 2021 and Finance Director of the Schooner Investment Group LLC from July 2014 to December 2017. Mr. Weibel holds a Bachelor of Science in Finance and Accounting from Lehigh University College of Business.

Joshua Malm was appointed Interim Chief Financial Officer, on a contract basis, in June 2024. Previously, Mr. Malm served as our Interim Chief Accounting Officer, on an independent contract basis since September 2023. Mr. Malm has served as the Managing Member of Malm Consulting LLC, a public accounting firm that advises companies in the energy, mining and chemical industries since July 2023. Prior to that, Mr. Malm served as the Senior Manager of Technical Accounting from March of 2019, was promoted to Director of Financial Reporting in February 2020, and promoted and served as Financial Controller from September of 2021 until February of 2023 at Chord Energy Corporation (Nasdaq: CHRD), where he joined the company through its acquisition of Whiting Petroleum Corporation (NYSE: WLL) in July of 2022. Prior to Chord Energy Corporation, Mr. Malm was with PricewaterhouseCoopers LLP in Denver, Colorado, where he held various positions in their oil and gas audit practice since 2008. He has over 16 years of accounting experience and is an active Certified Public Accountant. Mr. Malm holds a Bachelor of Science in Business Administration and a Master of Science in Accountancy from the University of Colorado at Boulder.

Information about our Board of Directors and Board Committees

Board of Directors

Our Board of Directors oversees our management and business and affairs and serves as our ultimate decision-making body, except for those matters reserved to our shareholders. The Board of Directors oversees our management team, to whom it has delegated responsibility for our day-to-day operations. While the Board's oversight role is broad and may concentrate on different areas from time to time, its primary areas of focus are strategy, oversight, governance and compliance, as well as assessing management.

Our Board of Directors currently consists of six members, as set forth in the table below. Each of our directors is subject to election each year at our annual meeting of shareholders. Our Certificate of Incorporation and Bylaws do not limit the number of terms a member may be re-elected as a director.

The following table sets forth, as of September 6, 2024, the names and ages of the members our Board of Directors. Biographies of each director are included below the table.

Name	Age	Current Position
David Jay Salisbury	73	Chairman of the Board
Barry Dick	61	Director
H. Keith Jennings	54	Director
Bryn Jones	46	Director
Sen Ming Lim	51	Director
Graham van't Hoff	62	Director

Board Skills Matrix

	David Jay Salisbury	Barry Dick	H. Keith Jennings	Bryn Jones	Sen Ming (Jimmy) Lim	Graham van't Hoff	Total
Executive Leadership	✓	✓	✓	✓	✓	✓	6
Mining/Rare Earth Minerals/Specialty Chemicals Industry Experience	✓	✓	✓	✓		✓	5
Business Operations	✓		✓			✓	3
Strategic Development/Planning	✓	✓	✓	✓	✓	✓	6
Corporate Governance		✓	✓		✓	✓	4
Financial Expert			✓		✓		2
Business to Business Sales and Marketing	✓			✓		✓	3
Capital Markets		✓	✓		✓		3
ESG Leadership	✓		✓	✓		✓	4
M&A Experience		✓	✓	✓	✓	✓	5
International Experience	✓	✓	✓	✓	✓	✓	6

Board Diversity Matrix (as of September 6, 2024)

Total Number of Directors: 6

Part I: Gender Identity	**Female**	**Male**	**Did Not Disclose Gender**	**Nonbinary**
Directors	–	6	–	–
Part II: Demographic Background	–	–	–	–
African American or Black	–	1	–	–
Alaskan Native or Native American	–	–	–	–
Asian	–	1	–	–
Hispanic or Latinx	–	–	–	–
Native Hawaiian or Pacific Islander	–	–	–	–
White	–	4	–	–
Two or More Races or Ethnicities	–	–	–	–
LGBTQ+	–	–	–	–
Did Not Disclose Demographic Background	–	–	–	–

We acknowledge and support the general principles behind the diversity objectives set forth in Rule 5605(f)(2)(B) of the Nasdaq Listing Rules. We believe that achieving Nasdaq's diversity objectives by June 30, 2025 is feasible. While we believe that the current composition of our Board is suitable for the current scale of and goals for our business and operations, we are committed to achieving Board diversity within the next fiscal year as we grow our business. The current members of our Board are familiar with our Company's history and business operations and provide us with a variety of personal, professional and industry backgrounds, with appropriate experience and skill sets.

More detailed biographical descriptions of the Directors are set forth in the text below. These descriptions include the experience, qualifications, qualities, and skills that led to the conclusion that each director should serve as a member of our Board at this time.

David J. Salisbury was appointed as Chairman of the Board in January 2022. Mr. Salisbury has served as Chairman of ABR since August 1, 2020, and served as Executive Chairman of ABR from May 2021 to August 2021. Mr. Salisbury has also served as Chairman of Fort Cady (California) Corporation, a subsidiary of ABR, since August 2020 and served as the President and CEO of Fort Cady (California) Corporation from May 2021 to August 2021. Since 2011, Mr. Salisbury has also been the owner of DJ Solutions, LLC, a consulting company that specializes in mining operation improvement solutions. Mr. Salisbury's business experience spans a period of over 40 years with significant involvement in underground and surface coal, open-pit gold, uranium mining, and copper mine development. Over that period, he has held senior executive positions at The Coteau Properties Company, Energy Resources Company, Al Hamilton Contracting Company, Cordero Mining Company, Kennecott Ridgeway Mining Company Inc., Rössing Uranium Limited, Kennecott Minerals Company, Resolution Copper Mining, LLC (Rio Tinto), and PetroDome Energy LLC. While working for Rio Tinto, Mr. Salisbury was President and CEO of Resolution Copper Company LLC, President and CEO of Kennecott Minerals Company, and Managing Director and CEO of Rössing Uranium Limited. In addition, he was a Leader for Rio Tinto's global improvement program, Improving Performance Together, focused on the development of common improvement processes related to ore and mineral processing across global operations. Over his career, Mr. Salisbury has been responsible for operating and capital-budget development, operating-cost control, product quality, profit/loss, engineering, safety, field operations and maintenance, strategic planning, environmental compliance, market development, merger and acquisition analysis, employee relations, community, public relations, and government relations at both

the state and federal levels. He was also directly responsible for the development, construction, and operations of four mines. Mr. Salisbury holds a Bachelor of Science, Electrical Engineering, from Utah State University and an MBA from the University of South Carolina.

Barry Dick was appointed as a Director in May 2024. Mr. Dick has over 25 years of marketing and investment banking experience in Asia and has built leading sales and origination organizations at Merrill Lynch, StormHarbour, and Opvs Group. He has served as Co-Founder, Partner, and Director of Gold Quay Capital PTE. Ltd. since June 2013 and is responsible for sourcing private transactions and marketing investment opportunities to long term investor relationships that have been developed over the last 20 years in southeast Asia. Prior to that, he served as Principal and Managing Director at StormHarbour Securities (Singapore) Pte. Ltd. from August 2013 to May 2015, where he was focused on sourcing and distributing private transactions throughout southeast Asia. Previously, Mr. Dick was Managing Director, Head of Fixed Income Sales at Merrill Lynch (Asia Pacific) Limited, where he was responsible for building Merrill Lynch's Asian FICC sales organization. Following his career at Merrill Lynch, Mr. Dick co-founded Opvs Group, a hybrid hedge fund and boutique investment bank where he built a fund raising organization and was responsible for sourcing private transactions for both the firm and third parties. Mr. Dick holds a Bachelor of Science in Business Administration from Northeastern University and a Master's in Business Administration from Duke University.

H. Keith Jennings was appointed as a Director in October 2022. Mr. Jennings has over 30 years' experience as a global business leader with a focus on finance across the pharmaceuticals, genomics, chemicals, fuels and energy sectors. Mr. Jennings most recently acted as Executive Vice President and Chief Financial Officer of Weatherford International (NASDAQ: WFRD) from September 2020 to July 2022. Prior to this, he served as Executive Vice President and Chief Financial Officer of Calumet Specialty Products Partners (NASDAQ: CLMT), the Vice President, Finance and Vice President & Treasurer of Eastman Chemical Company (NYSE: EMN). He has also served as the Vice President & Treasurer of Cameron International (NYSE:CAM). Mr. Jennings currently serves on the board of directors for Noble Corporation plc (NYSE: NE) and VM Financial Group. Mr. Jennings holds a Bachelor of Commerce from the University of Toronto and an MBA from Columbia University and is a Chartered Professional Accountant.

Bryn Jones was appointed as a Director in July 2024. Mr. Jones is an Industrial Chemist with over 20 years of extensive development and operational experience in the minerals industry across various commodities, including in-situ mining of uranium. Mr. Jones currently is the Managing Director for entX Limited, a technology incubator that generates ideas, builds development partnerships, and commercializes breakthrough clean energy and nuclear medicine technologies, a position he has held since August 2023. Mr. Jones is also a non-executive director of Australian Rare Earths (ASX: AR3), Technical Director of Boss Energy Ltd (ASX: BOE), and a non-executive director of DevEx Resources Ltd (ASX: DEV). Prior to assuming the above directorships, Mr. Jones served as the Chief Operating Officer of Laramide Resources Ltd (ASX: LAM).

Sen Ming (Jimmy) Lim was appointed as a Director in January 2022. Mr. Lim has also served as a Director of ABR since February 2021. Mr. Lim has served as the Managing Director and Founder of Virtova Capital Management Limited, a natural resources industry advisory firm providing corporate advisory services encompassing M&A and structured financings in relation to assets in the sector since 2018. In this role, he advises several ASX-listed mining companies with respect to mergers, acquisitions, and structured finance. Mr. Lim has worked for global investment banks in Australia (JPMorgan) and Hong Kong (Morgan Stanley and Goldman Sachs). Mr. Lim currently serves on the board of directors for Virtova Capital Management Limited, Stanmore Resources Limited (ASX: SMR), and Grant Samuel (Hong Kong) Limited.

Mr. Graham van't Hoff was appointed as Director in October 2022. Mr. van't Hoff is a global business executive with a 35-year career focused on business restructuring and growth with a track record of scaling business and driving growth through business disruption, restructures, technology integration and tight project management disciplines. Most recently, Mr. van't Hoff served as the Executive Vice President of Global Chemicals at Royal Dutch Shell PLC where he was responsible for the company's $25 billion global chemicals business over a seven year period of record profitability. Prior to this role, he held the positions of Chairman, Shell UK, Executive Vice President, Alternative Energies and CO2 and Vice President, Base Chemicals. Mr. van't Hoff currently serves on the board of directors for Metals Acquisition Limited (NYSE: MTAL) and Verde Clean Fuels, Inc. (Nasdaq: VGAS). Mr. van't Hoff holds a Bachelor of Arts and Master of Arts in Chemistry from Oxford University, UK and a Master of Business Management with distinction from Alliance Manchester Business School, UK.

Our directors bring a range of skills and experience in relevant areas, including finance, exploration and production, environment, international business and leadership, as well as specialty chemicals. We believe this cross-section of capabilities enables our Board of Directors to help guide our objectives and leading corporate governance practices.

Audit Committee

We have a separately-designated standing audit committee ("Audit Committee") that consists of Messrs. Jennings, Lim and Salisbury, and which is chaired by Mr. Jennings. Our board of directors has determined that each member of the audit committee is "independent" for audit committee purposes as that term is defined in the applicable SEC and Nasdaq rules, and each audit committee member has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated Mr. Jennings as an "audit committee financial expert," as defined under the applicable rules of the SEC.

Director Nominations by Stockholders

Nominations of persons for election to the Board may be made by any stockholder of the Company who is a stockholder of record and complies with the notice procedures set forth in the Bylaws, and such nominations must be accompanied by a written consent from the proposed nominee to be named as a nominee and to serve as a director if elected. Stockholders may submit recommendations for director nominees to the Nominating and Corporate Governance Committee by sending a notice that includes the components set out in Section 2.12(b) of our Bylaws to our Corporate Secretary at 5E Advanced Materials, Inc., 9329 Mariposa Road, Suite 210, Hesperia, California, who will forward all recommendations to the Nominating and Corporate Governance Committee. All candidates, regardless of the source of their recommendation, are evaluated in the same manner as nominees identified by the Nominating and Corporate Governance Committee.

Corporate Governance Guidelines and Code of Business Conduct

We have adopted Corporate Governance Guidelines and a written Code of Business Conduct (the "Code of Conduct"), which are available on our website at https://5eadvancedmaterials.com/investors/corporate-governance/. The information in or accessible through our website is not incorporated into, and is not considered part of, this Annual Report on Form 10-K.

Our Corporate Governance Guidelines provide the framework for our corporate governance along with our Charter, Bylaws, committee charters and other key governance practices and policies. Our Corporate Governance Guidelines cover a wide range of subjects, including the conduct of Board meetings, independence and selection of directors, Board membership criteria, and Board committee composition.

Our Code of Conduct applies to our directors, executive officers and employees. The Code of Conduct codifies the business and ethical principles that govern all aspects of the Company's business. Any waiver of this Code of Conduct for any individual director or officer of our Company must be approved, if at all, by our Board. Any such waivers granted, as well as substantive amendments to this Code of Conduct, will be publicly disclosed by appropriate means in compliance with applicable listing standards and SEC rules.

Prohibition on Hedging and Pledging of Company Securities

We have adopted an Insider Trading and Securities Dealing Policy, which, among other things, prohibits officers, directors, and employees from engaging in hedging transactions, such as the purchase or sale of puts or calls, or the use of any other derivative instruments. Officers, directors, and employees of the Company are also subject to certain pre-clearance procedures with respect to holding Company securities in a margin account or pledging Company securities as collateral for a loan.

Section 16(a) Beneficial Ownership Reporting Compliance

The rules of the SEC require that the Company disclose late filings of reports of stock ownership (and changes in stock ownership) by its directors, executive officers, and beneficial owners of more than ten percent of the Company's stock. The Company has undertaken responsibility for preparing and filing the stock ownership forms required under Section 16(a) of the Exchange Act, as amended, on behalf of its officers and directors. Based upon a review of forms filed and information provided by the Company's officers and directors, we believe that all Section 16(a) reporting requirements were met during fiscal year 2024, except each member of the Board was not timely in filing a Form 4 with respect to grants received on June 30, 2023 and certain vesting events that occurred on July 3, 2023. These late filings are not due to the fault of any of the members of the Board.

Australian Corporate Governance Statement

The Board is committed to complying with the highest standards of corporate governance to ensure that all of its business activities are conducted fairly, honestly and with integrity in compliance with all applicable laws. The Board considers that the Company's corporate governance framework is generally consistent with the 4th Edition of the Corporate Governance Principles and Recommendations of the ASX Corporate Governance Council ("ASX Principles and Recommendations").

The Company has prepared a Corporate Governance Statement to explain how it complies with the ASX Principles and Recommendations on an "if not, why not" basis. Where the Company's practices depart from a recommendation, the Company discloses the departure along with the reasons for adopting an alternate practice.

The Corporate Governance Statement is available on our website at https://5eadvancedmaterials.com/investors/corporate-governance/. The information in or accessible through our website is not incorporated into, and is not considered part of, this Annual Report on Form 10-K.

Item 11. Executive Compensation

Introduction and Named Executive Officers

This section discusses the material components of the executive compensation program for our executive officers who are named in the "Summary Compensation Table" below. During fiscal year 2024, our named executive officers or "NEOs" were:

Name	Age	Position
Paul Weibel, CPA[1]	40	Chief Executive Officer, Treasurer and Corporate Secretary
Joshua Malm, CPA[2]	42	Interim Chief Financial Officer
Susan Brennan[3]	62	Former President, Chief Executive Officer and Director

(1)On June 3, 2024, the Board appointed Paul Weibel as Chief Executive Officer. Prior to June 3, 2024, Mr. Weibel served as our Chief Financial Officer, Treasurer and Corporate Secretary.
(2)On June 3, 2024, the Board appointed Joshua Malm as Interim Chief Financial Officer.
(3)On June 3, 2024, the Board accepted the resignation of Susan Brennan as President, Chief Executive Officer and as a member of the Board, effective June 3, 2024.

Summary Compensation Table

The following table presents summary information regarding compensation earned with respect to the fiscal years ended June 30, 2023 and June 30, 2024, as applicable, by our NEOs.

	Fiscal Year Ended June 30,	Salary ($)	Bonus ($)	Stock Awards[1] ($)	Option Awards ($)	All Other Compensation ($)	Total ($)
Paul Weibel	2024	300,000	437,500 [2]	180,004	—	26,781 [3]	944,285
	2023	297,033	—	221,993	—	77,510	596,536
Joshua Malm	2024	344,015 [4]	—	—	—	—	344,015
Susan Brennan	2024	482,692	412,500 [5]	—	—	1,458,740 [6]	2,353,932
	2023	96,154	—	1,000,000	1,480,000	—	2,576,154

(1)The amounts reported in this column represent the aggregate grant-date fair value of stock awards granted in the relevant year calculated in accordance with FASB Topic 718, excluding forfeiture estimates. Stock Awards are comprised of Restricted Stock Units ("RSUs") and Performance Stock Units ("PSUs"). The grant date value relating to time-vested RSUs granted to Mr. Weibel in 2024 is $90,002. The PSUs are subject to performance conditions and the amount in the table represents the grant date fair value based on the probable outcome of results, which is the target value, of $90,002, which amount also reflects the maximum value. The assumptions used in calculating the grant date fair value of the awards reported in this column are set forth in our financial statements in this Annual Report. The amounts reported in this column reflect the accounting cost for the stock awards and do not reflect the actual economic value that will be realized by the individual upon the vesting of the stock awards or the sale of the common stock underlying such awards. For additional details regarding Stock Awards, see "—Narrative to Summary Compensation Table-—Equity-Based Incentive Awards" and "—Outstanding Equity Awards at Fiscal Year End" below.
(2)Amount is comprised of (i) a fiscal year 2024 bonus in the amount of $50,000, (ii) a retention bonus of $287,500, paid pursuant to a retention agreement entered into on December 5, 2023 in connection with the Company executing a Restructuring Support Agreement, as disclosed in the Company's Current Report on Form 8-K filed with the SEC on December 6, 2023, and (iii) a $100,000 relocation bonus.
(3)Amount represents employer match contributions under the Company's 401(k) plan.
(4)Amount reflects amounts paid to Mr. Malm as compensation for performing the functions of the Company's Interim Chief Accounting Officer from September 2023 through May 2024 and Interim Chief Financial Officer during June 2024.
(5)Amount is comprised of a retention bonus of $412,500, paid pursuant to a retention agreement entered into on December 5, 2023 in connection with the Company executing a Restructuring Support Agreement, as disclosed in the Company's Current Report on Form 8-K filed with the SEC on December 6, 2023.
(6)Amount is comprised of (i) $7,191 as reimbursement for relocation costs, (ii) $20,704 in employer match contributions under the Company's 401(k) plan, (iii) an accrued vacation payout of $34,446 in connection with Ms. Brennan's resignation from the Company effective June 3, 2024, and (iv) $1,396,399 paid to Ms. Brennan pursuant to her Separation Agreement (as defined and further described below).

Narrative to Summary Compensation Table

Annual Base Salary

The compensation of our NEOs is generally determined and approved by our Board. The fiscal year 2024 base salaries of each of our NEOs are described under the subsection titled "—Employment Agreements" below.

Annual Bonus

In addition to base salaries, our NEOs are eligible to receive annual performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve annual corporate goals and to reward our executives for individual achievement towards these goals. The annual performance-based bonus each NEO is eligible to receive is based on the extent to which we achieve the corporate goals that our Board establishes each fiscal year. At the end of the fiscal year, our Board reviews our performance against each corporate goal and determines the extent to which we achieved each of our corporate goals.

For fiscal year 2024, Mr. Weibel and Ms. Brennan were each eligible to earn a target annual bonus equal to 40% and 80%, respectively, of their respective annual base salaries. Mr. Malm was not eligible for an annual performance-based cash bonus.

The corporate goals the Board established for fiscal year 2024 related to operational progress, liquidity and organizational health and culture goals. Bonuses are typically determined and paid in the third calendar quarter of the year following our June 30 fiscal year end. For fiscal year 2024, the bonuses for our NEOs paid in the third quarter of 2024 are reflected in the Summary Compensation Table above.

Equity-Based Incentive Awards

Our equity-based incentive awards are designed to align our interests and those of our stockholders with those of our employees, including our executive officers. The Board or an authorized committee thereof is responsible for approving equity grants. We grant equity awards under our Incentive Plan.

In September 2023, Mr. Weibel was awarded 36,586 RSUs under our Incentive Plan. The RSUs will vest over a three-year period with one-third of the total number of RSUs granted vesting on each of the first three anniversaries of the grant date, subject to Mr. Weibel's continued employment through the applicable vesting date. In addition, in September 2023, Mr. Weibel was awarded 36,586 PSUs (at target) under our Incentive Plan. The PSUs may be earned between 0% to 100% of the target number of PSUs granted upon the achievement of certain financial and operational targets, including (i) construction of a large-scale commercial facility commencing prior to September 1, 2026; (ii) the budget for the large-scale commercial facility remaining within a range of $342-418 million; and (iii) an approved final investment decision in the large-scale commercial facility at a modeled internal rate of return of 20%, over a three-year performance period, commencing September 2023, subject to Mr. Weibel's continued employment through the applicable vesting date.

For a description of the accelerated vesting applicable to our NEOs' stock awards, see "Employment Agreements" below.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth the outstanding equity awards held by our NEOs as of June 30, 2024.

		Option Awards				Stock Awards			
Named	Grant Date	Number of Common Stock Underlying Unexercised Options (#) Exercisable	Number of Common Stock Underling Unexercised Options (#) Un-exercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units That Have Not Vested (#)	Market Value of Shares of Units of Stock That Have Not Vested ($)[1]	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested[2]	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights that Have Not Vested ($)[1]
Executive Officers:									
Paul Weibel	May 18, 2021	50,000	—	14.62	June 1, 2025	—	—	—	—
	November 29, 2021	133,333	66,667 [3]	16.45	October 1, 2025	—	—	—	—
	June 29, 2022	—	—	—	—	1,111 [4]	1,344	1,850	2,239
	September 1, 2022	—	—	—	—	6,127 [5]	7,414	6,126	7,412
	September 15, 2023	—	—	—	—	36,586 [5]	44,269	36,586	44,269
Joshua Malm		—	—	—	—	—	—	—	—
Susan Brennan	April 24, 2023	400,000 [6]	—	7.73	April 24, 2033	—	—	—	—

(1)The market value of each stock award is based on $1.21 per share, which was the closing price of our Common Stock on June 28, 2024, which was the last business day prior to our fiscal year end on June 30, 2024.
(2)Amounts represent PSUs that vest on the third anniversary of the grant date, subject to the attainment of certain performance objectives and subject to continued employment through the applicable vesting date. In accordance with the SEC rules, the number of PSUs shown represents the number of units that may be earned during the performance period based on target performance.
(3)Amount represents stock options that vest in three equal annual installments commencing on Mr. Weibel's employment start date, subject to continued employment through the applicable vesting date.
(4)40% of the RSUs vested on the second anniversary of the grant date and the remaining 60% will vest on the third anniversary of the grant date, subject to continued employment through the applicable vesting date.
(5)The RSUs vest in three equal annual installments beginning on the first anniversary of the grant date, subject to continued employment through the applicable vesting date.
(6)Ms. Brennan resigned from the Company effective June 3, 2024. Per the terms of her Separation Agreement, all outstanding stock options at the time of her resignation from employment with the Company became fully vested and remain exercisable until the applicable expiration date.

Employment Agreements

We have entered into employment agreements with certain of our executive officers, including our NEOs, which govern the terms of their employment with us. Additionally, we have entered into an independent contractor agreement with Mr. Malm, which governs the terms of his service with us.

Paul Weibel

Under the terms of Mr. Weibel's employment agreement, Mr. Weibel is entitled to an annual base salary in fiscal year 2024 of $300,000. In addition, in accordance with his employment agreement, Mr. Weibel is eligible to earn an annual bonus of up to 80% of his then-in-effect base salary (on target performance would result in a bonus payment equal to 40% of Mr. Weibel's then-in-effect base salary), subject to the achievement of performance objectives as determined by our Board.

Regardless of the manner in which Mr. Weibel's employment terminates, he is entitled to receive certain accrued amounts previously earned during his employment, including unpaid salary, reimbursement of expenses owed, and accrued but unpaid paid time off and any continuation of benefits required by applicable law.

In addition, Mr. Weibel is entitled to certain severance benefits under his employment agreement, subject to his execution of a release of claims and compliance with post-termination obligations. Pursuant to Mr. Weibel's employment agreement, upon a termination of his employment by the Company for reasons other than for "cause" (as defined in the employment agreement), Mr. Weibel is entitled to (i) an amount in cash equal to six months of annual base salary, payable in a lump sum, (ii) payment of the COBRA premiums for Mr. Weibel and his eligible dependents for a maximum period of up to 6 months from the date of his termination of employment, and (iii) accelerated vesting of all unvested Company equity awards, provided that any Company equity awards that vest based on the attainment of performance goals will remain outstanding and will be eligible to vest in accordance with the terms of the applicable award agreements.

Joshua Malm

Under the terms of Mr. Malm's independent contractor agreement, Mr. Malm is entitled to compensation in the amount of $40,000 per month, and is not entitled to any other salary, bonus, retirement, equity compensation or severance benefits. Pursuant to Mr. Malm's independent contractor agreement, the Company will reimburse Mr. Malm for all reasonable business costs and expenses incurred in connection with his performance of services.

Susan Brennan

Under the terms of Ms. Brennan's employment agreement, prior to her resignation in June 2024, Ms. Brennan received a base salary of $500,000 per year and was eligible to earn an annual bonus of up to 80% of her then-in-effect base salary, subject to the achievement of performance objectives as determined by our Board.

Regardless of the manner in which Ms. Brennan's employment would have terminated, she was entitled to receive certain accrued amounts previously earned during her employment, including unpaid salary, reimbursement of expenses owed, and accrued but unpaid paid time off and any continuation of benefits required by applicable law.

In addition, Ms. Brennan was entitled to certain severance benefits under her employment agreement, subject to her execution of a release of claims and compliance with post-termination obligations. Pursuant to Ms. Brennan's employment agreement, upon a termination of her employment by the Company for reasons other than for "cause", or by Ms. Brennan for "good reason" (as each term is defined in the employment agreement), in each case, outside of the Change in Control Period (as defined below), Ms. Brennan was entitled to (i) an amount in cash equal to 24 months of annual base salary, payable in a lump sum, (ii) her target bonus for the year of termination, prorated to reflect the number of days employed in the year of termination, (iii) reimbursement of the difference between the monthly COBRA premiums for Ms. Brennan and her eligible dependents and the monthly premium amount paid by similarly situated executives for a maximum period of up to 18 months from the date of her termination of employment, and (iv) accelerated vesting of all unvested Company stock options which will remain exercisable for the remainder of their full term.

Pursuant to Ms. Brennan's employment agreement, upon a termination of her employment by the Company for reasons other than for cause, or by Ms. Brennan for good reason, in each case, within three months prior to or within 12 months immediately after a change in control of the Company (the "Change in Control Period"), Ms. Brennan was entitled to the severance payments and benefits described above, except that she was also eligible to receive accelerated vesting of all unvested Company RSUs and for any PSUs outstanding and within 12 months of the end of their respective performance period(s), and where there is a reasonable probability that the respective performance goal(s) for such PSUs would have been achieved at target (or above) absent a change in control, as assessed by the Board or Compensation Committee, then such PSUs that would have vested within such 12 month period following the change in control based on target performance.

Ms. Brennan's employment agreement was terminated in connection with her resignation from the Company in June 2024.

Susan Brennan Separation Agreement

In connection with Ms. Brennan's resignation as President and Chief Executive Officer of the Company and as a director of the Board, effective as of June 3, 2024 (the "Effective Date"), the Company entered into a separation and release agreement (the "Separation Agreement") with Ms. Brennan. Pursuant to the Separation Agreement, Ms. Brennan is entitled to the following separation payments and benefits, provided she executed and did not revoke a general release of claims against the Company and its affiliates: (i) a lump sum payment of $350,000, representing her annual bonus for the 2024 fiscal year; (ii) a lump sum payment of $1,000,000, representing 24 months of her base salary; (iii) COBRA reimbursements for up to 18 months following the Effective Date; (iv) the acceleration of Ms. Brennan's unvested stock options, with such stock options remaining exercisable until the stock option expiration date set forth in the applicable stock option agreement; and (v) the Company's waiver of any repayment obligations pursuant to the terms of her retention agreement with the Company as a result of her termination of employment. The foregoing separation payments and benefits also are subject to Ms. Brennan's continued compliance with the restrictive covenants set forth in the Separation Agreement.

Retention Agreements

In connection with the Company executing a Restructuring Support Agreement in December 2023, the Company entered into an installment based cash-retention program, which included (i) a Retention Agreement for Ms. Brennan (the "Brennan Retention Agreement"), and (ii) a Retention Agreement for Mr. Weibel (the "Weibel Retention Agreement," and together with the Brennan Retention Agreement, the "Retention Agreements"), pursuant to which Ms. Brennan and Mr. Weibel were eligible to receive up to $412,500 and $287,500, respectively, in each case, in a successful out-of-court restructuring, and Ms. Brennan was eligible to receive up to an additional $381,300 and Mr. Weibel is eligible to receive up to an additional $268,800, in each case, in the event of a Chapter 11 case (collectively, the "Bonuses"). In fiscal year 2024, Ms. Brennan and Mr. Weibel received the portion of the Bonus attributed to a successful out-of-court restructuring.

Under the terms of the Retention Agreements, each of Ms. Brennan and Mr. Weibel will be required to repay the Bonuses to the Company in the event that they resign from their respective positions prior to December 31, 2024 or their employment is terminated other than due to involuntary termination by the Company without cause (as such term is defined in the Retention Agreements). As described above, pursuant to Ms. Brennan's Separation Agreement, the Company waived Ms. Brennan's repayment obligations pursuant to the terms of the Brennan Retention Agreement in connection with her resignation of employment in June 2024.

Health and Welfare Benefits; Perquisites

All of our employee executives are eligible to participate in our employee benefit plans, including our medical, dental, vision, disability, and life insurance plans, in each case on the same basis as all of our other employees. We generally do not provide perquisites or personal benefits to our NEOs, except in limited circumstances. Our Board may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

Retirement Plan

We sponsor a 401(k) plan covering substantially all of our employees, including our NEOs. Employees become eligible to participate in the plan upon completing three months of service and attainment of age 21. Eligible employees may elect to make either pretax or Roth contributions to the plan, subject to limitations set forth in the plan and the Code. We may make safe-harbor matching contributions equal to 100% of the first 4% of employees' eligible earnings and an additional 50% on the next 2% of employees' eligible earnings. We may also make discretionary profit-sharing contributions.

Clawback Policy

We have adopted a compensation recovery policy that is compliant with the Nasdaq Listing Rules, as required by the Dodd-Frank Act.

Compensation of Non-Employee Directors

We have entered into offer letters with Messrs. Salisbury, Hunt, Jennings, Lim, Dick, Jones and van't Hoff that provide for compensation for each non-employee director's service on our Board. Pursuant to the offer letters, each non-employee director serving as chair of the Board receives an additional annual retainer of $100,000. Additionally, the non-employee directors serving as the chairs of the audit, compensation and nominating and corporate governance committees receive additional annual retainers of $80,000, $70,000 and $70,000, respectively. Non-employee directors serving as members of the audit, compensation and nominating and corporate governance committees receive an additional annual retainer of $14,000. During 2024, the board formed, and subsequently dissolved, a special committee for the purpose of addressing issues related to the Company's liquidity situation and restructuring support agreement. Messrs. Salisbury and Jennings were members of the special committee and received

compensation of $15,000 and $20,000, respectively. Additionally, non-employee directors are eligible to receive long-term incentive awards, including in the form of RSUs, with an equivalent cash value as the above cash retainers, subject to any shareholder approvals required. Payment of the cash retainers and long-term incentive awards are paid or awarded, as applicable, by the Company in arrears in four equal installments on or about the last business day of each fiscal year quarter.

The following table sets forth the compensation earned by our non-employee directors during the year ended June 30, 2024.

Name	Fees earned or paid in cash ($)	Stock awards[1] ($)	All Other Compensation[2] ($)	Total ($)
David Jay Salisbury	143,000	115,124	21,570	279,694
Barry Dick	973	854	—	1,827
Stephen Hunt[3]	64,000	57,565	28,794	150,359
H. Keith Jennings	114,000	84,546	12,221	210,767
Bryn Jones[4]	—	—	—	—
Sen Ming (Jimmy) Lim	52,070	46,808	10,882	109,760
Graham van't Hoff	140,000	125,915	10,478	276,393
Stefan Selig[5]	210,000	—	—	210,000

(1)The amounts reported in this column represent the aggregate grant-date fair value of RSUs granted in the relevant fiscal year calculated in accordance with FASB Topic 718, excluding forfeiture estimates. The assumptions used in calculating the grant date fair value of the awards reported in this column are set forth in our financial statements in this Annual Report. The amounts reported in this column reflect the accounting cost for the stock awards and do not reflect the actual economic value that will be realized by the individual upon the vesting of the stock awards or the sale of the common stock underlying such awards. In fiscal year 2024, our non-employee directors received grants of RSUs on or about the last business day of each fiscal quarter pursuant to the terms of their offer letters. Each RSU award vested on July 1, 2024. As of June 30, 2024, Mr. Salisbury held 72,865 RSUs and 200,000 outstanding stock options, Mr. Dick held 706 RSUs, Mr. Jennings held 53,511 RSUs, Mr. Lim held 29,981 RSUs and Mr. van't Hoff held 79,695 RSUs. Messrs. Hunt, Jones and Selig did not hold outstanding equity awards as of June 30, 2024.
(2)The amount reported in this column represents cash remitted to each director to compensate for their respective tax liability for equity awards that vested during the year.
(3)Mr. Hunt resigned from the Board on June 30, 2024.
(4)Mr. Jones was appointed to the Board effective July 1, 2024.
(5)Mr. Selig was appointed as a member of our Board on December 11, 2023 and resigned effective June 11, 2024. Mr. Selig was compensated $35,000 per month for his services on our Board.

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

The following table sets forth certain information with respect to beneficial ownership of the Company's Common Stock as of September 6, 2024, by each person, or group of affiliated persons, known to the Company to own beneficially more than 5% of the Company's outstanding Common Stock, each director, each named executive officer, and all the executive officers and directors of the Company as a group. Unless otherwise indicated in the footnotes to the table, the address of each such person is care of the Company, 9329 Mariposa Road, Suite 210, Hesperia, California 92344.

Beneficial ownership is determined in accordance with Rule 13d-3 of the Exchange Act. Shares of Common Stock subject to options currently exercisable or exercisable within 60 days of September 6, 2024, are deemed outstanding for purposes of computing the percentage beneficially owned by such holder but are not deemed outstanding for purposes of computing the percentage beneficially owned by any other person. Except as otherwise indicated, the Company believes that the beneficial owners of the Common Stock listed below, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable, and that there are no other affiliations among the stockholders listed in the table. The percentage for each beneficial owner is calculated based on (i) the aggregate number of shares reported to be owned by such group or individual and (ii) the aggregate number of shares of Common Stock outstanding as of September 6, 2024 (68,826,797 shares).

Name	Shares of Common Stock Owned[1]	Right to Acquire Beneficial Ownership in Number of Common Stock[2]	Total Common Stock Beneficially Owned	Percent of Outstanding Common Stock[1][2]
Executive Officers:				
Paul Weibel	4,762	195,528	200,290	*
Joshua Malm	—	—	—	*
Directors:				
David Salisbury	65,621	—	65,621	*
Barry Dick	444	—	444	*
H. Keith Jennings	39,939	—	39,939	*
Bryn Jones	—	—	—	*
Sen Ming (Jimmy) Lim[3]	5,156,406	—	5,156,406	7.5%
Graham van't Hoff	59,796	—	59,796	*
All directors and named executive officers as a group (eight persons):	5,326,968	195,528	5,522,496	8.0%

*Represents beneficial ownership of less than 1% of the outstanding shares of our Common Stock.

(1) Includes shares of Common Stock that may be represented by CDIs.

(2) Includes common stock that may be acquired through the exercise of stock options that are currently exercisable or will be exercisable within 60 days of September 6, 2024, and shares of common stock that may be acquired through the vesting and settlement of Restricted Stock Units scheduled to occur within 60 days of September 6, 2024.

(3) These shares are owned by Virtova Capital Management Limited. Director Sen Ming (Jimmy) Lim is the sole stockholder of Virtova Capital Management Limited and, as such, may be deemed to be the beneficial owner of the shares held by Virtova Capital Management Limited.

Shares Owned by Certain Beneficial Holders

The amounts and percentages of Common Stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of such security, or "investment power," which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has the right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed a beneficial owner of the same securities and a person may be deemed to be a beneficial owner of securities as to which such person has no economic interest.

The following table sets forth the information for each person deemed to beneficially own 5% or more of our outstanding Common Stock, based on information regarding the beneficial ownership of Common Stock available to us as of September 6, 2024. The table also sets out the names of all persons and entities (of which the Company is aware) who are substantial holders in the Company within the meaning of section 671B of the Corporations Act and the number of Shares in which each substantial holder has an interest.

	Shares of Common Stock Beneficially Owned [1]	
Name and Address of Beneficial Owner	**Shares**	**Percentage**
Ascend Global Investment Fund SPC for and on behalf of Strategic SP [2] 1 Kim Seng Promenade, #10-01 East Tower, Great World City, Singapore 237994	41,622,848	39.6%
BEP Special Situations IV LLC [3] 300 Crescent Court, Suite 1860 Dallas, TX 75201	36,256,994	34.5%
Virtova Capital Management Limited [4] Room 1104, Crawford House, 70 Queen's Road Central Central, Hong Kong, SAR	5,128,206	7.5%
Atlas Precious Metals Inc. [5] 100 King Street, W#1600 Toronto, Ontario, M5X1G5, Canada	4,092,000	5.6%
Mayfair Ventures Pte Ltd [6] 62 Ubi Road 1, 02-01 Oxley Bizhub 2, Singapore, 408734	3,563,954	5.2%

(1) Includes shares of Common Stock represented by CDIs. Shares of Common Stock that Ascend Global Investment Fund SPC for and on behalf of Strategic SP ("Ascend"), BEP Special Situations IV LLC ("BEP SSIV") and Meridian Investments Corporation ("Meridian") may acquire through conversion of the Convertible Notes are not deemed outstanding for purposes of computing the percentage beneficially owned by any other entities.

(2) Based on a Schedule 13D/A filed on August 27, 2024, and information known to the Company. Ascend directly holds a portion of the Convertible Notes, which are convertible pursuant to the Amended & Restated Note Purchase Agreement. Shares beneficially owned include (i) 18,128,497 shares of Common Stock issuable upon conversion of the principal amount of Convertible Notes (assuming all accrued interest is paid-in-kind until maturity), (ii) 5,365,854 shares of Common Stock owned, and (iii) 18,128,497 shares of Common Stock beneficially owned by Meridian Investments Corporation ("Meridian"). Ascend is the sole shareholder of Meridian, and as a result may be deemed to share beneficial ownership of the securities held of record by Meridian. Ascend Financial Holdings Limited ("Ascend Financial") is the sole shareholder of Ascend Capital Advisors (S) Pte. Ltd., which is the sole partner of Ascend. As a result, each of the foregoing entities may be deemed to have beneficial ownership of the securities held by Ascend. By virtue of his control of Ascend Financial, Mr. Halim Susanto may also be deemed to share beneficial ownership of the securities beneficially owned by Ascend under Section 13(d) of the Exchange Act and the rules promulgated by the SEC thereunder. Mr. Susanto disclaims beneficial ownership of the securities beneficially owned by Ascend.

(3) Based on a Schedule 13D/A filed on August 27, 2024, and information known to the Company. BEP SS IV directly holds a portion of the Convertible Notes, which are convertible pursuant to the Amended & Restated Note Purchase Agreement. Shares beneficially owned include 36,256,994 shares of Common Stock issuable upon conversion of the principal amount of Convertible Notes (assuming all accrued interest is paid-in-kind until maturity). Bluescape Energy Partners IV GP LLC ("Bluescape GP") is the general partner of Bluescape Energy Recapitalization and Restructuring Fund IV LP, which wholly owns BEP SS IV. As such, Bluescape GP may be deemed to have beneficial ownership of the securities directly held by BEP SS IV.

(4) Based on Schedule 13G filed on July 9, 2024 and information known to the Company. Director Sen Ming (Jimmy) Lim is the sole stockholder of Virtova Capital Management Limited and, as such, may be deemed to be the beneficial owner of the shares held by Virtova Capital Management Limited.

(5) Based on information known to the Company. Eileen Shipes is the trustee and The Harold Roy Shipes and Eileen Anne Shipes Revocable Trust is the controlling stockholder of Atlas Precious Metals Inc. and, as such, may be deemed to be the beneficial owner of the shares held by Atlas Precious Metals Inc.

(6) Based solely on a Schedule 13G filed on February 3, 2023. Mayfair Ventures Pte Ltd. has sole dispositive power over 3,563,954 shares of common stock. Chow Woei Horng is the sole stockholder of Mayfair Ventures Pte Ltd. and, as such, may be deemed to be the beneficial owner of the shares held by Mayfair Ventures Pte Ltd.

Securities authorized for issuance under equity compensation plans.

The following table sets forth the equity awards outstanding under the Company's 2022 Equity Compensation Plan (the "Incentive Plan") and the employee share option plan of the Company's predecessor, ABR (the "ABR Employee Share Option Plan"), and as of June 30, 2024:

	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (#)		Weighted- Average Exercise Price of Outstanding Options, Warrants and Rights ($)[1]	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Shares Reflected in the First Column) (#)
Equity compensation plan approved by security holders				
2022 Equity Compensation Plan	1,137,286	(2)	$ 5.10	1,209,824
Equity compensation plans not approved by security holders				
ABR Employee Share Option Plan	3,326,665	(3)	$ 10.19	—
Total	**4,463,951**		**$ 9.33**	**1,209,824**

(1)Represents the weighted-average exercise price of the applicable outstanding options. Restricted share units ("RSUs"), performance share units ("PSUs") and director restricted share units ("DSUs") outstanding under the Incentive Plan vest and convert to shares of common stock without the payment of consideration. Therefore, the weighted-average exercise price excludes RSUs, PSUs and DSUs outstanding under the Incentive Plan.

(2)Represents 675,000 shares underlying outstanding options, 367,806 shares of unvested RSUs, and 94,480 shares of unvested PSUs (at "target" performance).

(3)Represents 3,326,665 shares underlying outstanding options as of June 30, 2024. After the completion of the Reorganization, no further shares of Common Stock may be issued pursuant to the ABR Employee Share Option Plan.

Australian Disclosure Requirements

In addition to the Company's primary Nasdaq listing, Common Stock are also quoted in the form of CDIs on the ASX and trade under the code "5EA". As part of our ASX listing, we are required to comply with certain of the disclosure and other obligations set out in the ASX Listing Rules. The following information is provided in accordance with the requirements of the ASX and the ASX Listing Rules (where that information has not been provided elsewhere in this Annual Report).

Place of Incorporation and Restrictions on the Acquisition of Securities

The Company is incorporated in the State of Delaware and is registered as a foreign company in Australia under the Corporations Act (ARBN 665 137 170). As a foreign company, the Company is not subject to Chapters 6, 6A, 6B or 6C of the Corporations Act (dealing with the acquisition of its shares, including substantial holdings and takeovers).

Under the Delaware General Corporation Law, shares in the Company are generally freely transferable. Transfers may, however, be subject to restrictions imposed by United States federal or state securities laws, by the Company's Certificate of Incorporation or Bylaws, or by an agreement signed with the holders of shares on issue.

The Company's Certificate of Incorporation and Bylaws do not impose any specific restrictions on the transfer of the Company's shares. Transfers of the Company's shares will be made only on the transfer books of the Company or by a transfer agent designated to transfer the Company's shares.

Repurchases of the Company's securities are governed by the safe harbor provisions set forth in Rule 10B-18 of the Securities Exchange Act of 1934. However, provisions of the Delaware General Corporation Law, the Company's Certificate of Incorporation and Bylaws could make it more difficult to acquire the Company by means of a tender offer (takeover), a proxy contest or otherwise, or to remove incumbent officers and directors of the Company. These provisions could discourage certain types of coercive takeover practices and takeover bids that the Company's Board may consider inadequate and encourage persons seeking to acquire control of the Company to first negotiate with the Board.

Issued Capital

As of July 31, 2024, the Company had 63,491,135 shares of Common Stock on issue, of which:

- 30,282,604 shares of Common Stock were held by 16 stockholders and quoted on Nasdaq. (Note: The actual number of stockholders is greater than this number and includes holders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. The number of active holders of record also do not include holders whose shares may be held in trust by other entities.); and
- 33,208,531 shares of Common Stock were held by CHESS Depositary Nominees Pty Ltd (as Depositary Nominee) on behalf of 3,739 CDI holders, representing 332,085,310 CDIs quoted on ASX.

In addition, as of July 31, 2024, the Company had the following unquoted securities on issue which entitle the holder (upon vesting) to be issued Common Stock:

- 2,341,665 unquoted options, held by 17 option holders;
- 131,048 Restricted Share Units, held by 5 employees and directors of the Company pursuant to the Company's 2022 Equity Compensation Plan;
- 94,480 Performance Share Units, held by 5 employees and directors of the Company pursuant to the Company's 2022 Equity Compensation Plan; and
- 71,671 Convertible Notes, held by 3 Noteholders pursuant to the Amended and Restated Note Purchase Agreement, dated May 28, 2024: Approximately 35,836 Convertible Notes held by Bluescape, approximately 17,918 Convertible Notes held by Ascend and approximately 17,918 Convertible Notes held by Meridian.

Voting Rights

Each holder of Common Stock is entitled to one vote per Common Stock held. Holders of CDIs are entitled to receive notice of, and to attend as guests (but not vote at) meetings of stockholders. Holders of CDIs are the beneficial owner of one share of Common Stock for every 10 CDIs held. The Depositary Nominee (or its custodian) is the legal holder of the Common Stock underlying the CDIs.

As the beneficial owners, holders of CDIs may:

- direct the Depositary Nominee (or its custodian) how to vote the Common Stock represented by their CDIs by completing the CDI Voting Instruction Form that accompanies the relevant notice of meeting or proxy statement; or
- appoint themselves (or another person) to be the Depositary Nominee's proxy with respect to the Common Stock represented by their CDIs for the purposes of attending and voting at the meeting by completing the CDI Voting Instruction Form that accompanies the relevant notice of meeting or proxy statement.

Alternatively, holders of CDIs can elect to convert their CDIs into Common Stock and vote those Common Stock at the meeting. Such conversion must be completed prior to the record date fixed by the Company for determining the entitlement of stockholders to attend and vote at the meeting.

Options, Restricted Share Units, Performance Share Units, Director Share Units and Convertible Notes do not carry voting rights.

Distribution of CDI Holders

Below is a distribution schedule of the number of holders of CDIs, as of July 31, 2024 and assuming all shares of Common Stock are held as CDIs.

	Number of Holders	Number of CDIs
1-1,000	687	334,019
1,001-5,000	1,099	3,047,495
5,001-10,000	480	3,729,099
10,001-100,000	1,104	40,638,373
100,001 and over	369	284,336,324
	3,739	332,085,310

The number of stockholders and/or CDI holders who hold less than a marketable parcel of securities (where a "marketable parcel" is a parcel of securities worth at least A$500, pursuant to the ASX Operating Rules) was 2,578, based on the closing price of the Company's common stock and CDIs as of July 31, 2024.

Twenty Largest CDI Holders

Below are details of the 20 largest holders of CDIs, and the number and percentage of issued CDIs held by those holders, as of July 31, 2024 and assuming all shares of Common Stock are held as CDIs.

Name	Number of CDIs Held[1]	Percentage of CDIs
Virtova Capital Management Limited	51,282,060	15.4%
Mayfair Ventures Pte Ltd	35,639,540	10.7%
Citicorp Nominees Pty Limited	21,441,877	6.5%
HSBC Custody Nominees (Australia) Limited	11,092,418	3.3%
HSBC Custody Nominees (Australia) Limited - A/C 2	9,202,886	2.8%
BNP Paribas Nominees Pty Ltd <Ib Au Noms Retailclient>	5,626,783	1.7%
Mr Zachary Purton	5,418,000	1.6%
Bring On Retirement Ltd	5,288,772	1.6%
Mr Daniel Eddington + Mrs Julie Eddington <Dj Holdings A/C>	4,207,528	1.3%
Jawaf Enterprises Pty Ltd <Hall Family A/C>	3,000,000	0.9%
Allen Group Holdings Pty Ltd	2,510,000	0.8%
E & E Hall Pty Ltd <E & E Hall P/L S/F A/C>	2,293,957	0.7%
Rda Asset Management Limited	2,232,000	0.7%
Northmead Holdings Pty Ltd <The Greenwell Family A/C>	2,100,000	0.6%
Peloton Capital Pty Ltd	1,951,220	0.6%
Mr Aaron Dean Bertolatti <Bertolatti Family A/C>	1,811,000	0.5%
Mr Ross William Mutton	1,708,901	0.5%
Jawaf Enterprises Pty Ltd <Hall Family A/C>	1,627,034	0.5%
Scor Go Luath Limited	1,594,000	0.5%
Dejul Trading Pty Ltd <Eddington Trading A/C>	1,500,000	0.5%

(1)Including shares of Common Stock represented as though they were held as CDIs (with ten CDIs representing a beneficial ownership interest in one share of Common Stock).

Additional Information

Paul Weibel is the Company's corporate secretary.

Our principal executive office in the United States is 9329 Mariposa Road, Suite 210, Hesperia, California, 92344 (telephone: +1 442 221 0225). Our registered office in the United States is 1209 Orange Street, Wilmington, Delaware, 19801.

Our registered office in Australia is c/- American Pacific Borates Pty Ltd, Level 12, 197 St George's Terrace, Perth WA 6000 (telephone: +61 8 6141 3145).

Registers of our securities are held as follows:

- For CDIs in Australia: Computershare Investor Services Pty Limited, Level 12, 197 St George's Terrace, Perth WA 6000. Investor Enquiries: + 61 8 9323 2000 (within Australia) or +61 3 9415 4000 (outside Australia).
- For Common Stock in the United States: Computershare Trust Company N.A., 250 Royall Street, Canton MA 02021. Telephone: +1 781 575 3100.

There is no current on-market buy-back of the Company's securities.

The Company does not have any restricted securities on issue, or securities subject to voluntary escrow.

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

Related Party Transactions

The Company's Audit Committee charter requires that the Audit Committee review and approve or disapprove all related person transactions that are required to be disclosed by Item 404 of Regulation S-K. The Company reviews all relationships and transactions reported to it in which the Company and our directors and executive officers or their immediate family members or any person who is known by the Company to be the beneficial owner of more than five percent (5%) of our voting stock are participants to determine whether such persons have a direct or indirect material interest. The Company's Secretary is primarily responsible for the development and implementation of processes and controls to obtain information from the directors and executive officers with respect to related person transactions and for then determining, based on the facts and circumstances, whether the Company or a related person has a direct or indirect material interest in the transaction.

Our Board of Directors has adopted a policy regarding transactions affecting director independence as part of a comprehensive governance program. This policy regarding transactions between us or any of our affiliates and our directors, officers, and employees is set forth in writing in our Corporate Governance Guideline and our Code of Business Conduct. These documents are available on our website. The Board of Directors believes these documents promote the effective functioning of the Board, its committees, and management. Accordingly, they are periodically reviewed and revised, as appropriate.

Since the beginning of our fiscal year ended June 30, 2023, there have been no transactions, and there currently are no proposed transactions, in which we are to be a participant and in which any related person has or will have a direct or indirect material interest involving the lesser of $120,000 and one percent (1%) of the average of our total assets as of the end of last three completed fiscal years. A related person is any executive officer, director, nominee for director, or holder of 5% or more of our Common Stock, or an immediate family member of any of those persons.

Indemnification Agreements

We have entered into agreements to indemnify our directors and executive officers. These agreements will, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of our Company or that person's status as a member of our Board of Directors to the maximum extent allowed under Delaware law.

Director Independence

Consistent with our corporate governance guidelines and Nasdaq rules, our Board has determined that each of Messrs. Salisbury, Dick, Jennings, Lim, Jones, and van't Hoff qualifies as an "independent director." Our Board also has determined that Messrs. Jennings, Lim and Salisbury, who comprise our Audit Committee, Messrs. van't Hoff and Jennings, who comprise our Compensation Committee, and Messrs. van't Hoff and Salisbury, who comprise our Nominating and Corporate Governance Committee, satisfy the independence standards for such committees established by the SEC and the rules of the Nasdaq, as applicable. In making such determinations, our Board considered the relationships that each such non-employee director has with our Company and all other facts and circumstances our Board deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director and any institutional stockholder with which he or she is affiliated.

Item 14. Principal Accountant Fees and Services

Fees billed by PricewaterhouseCoopers LLP for the fiscal years ended June 30, 2024 and 2023, respectively, are as follows:

	2024	2023
Audit fees	$ 801,100	$ 629,080
Audit-related fees	—	—
Tax fees	31,998	—
All other fees	2,323	2,900
Total fees	$ 835,421	$ 631,980

Audit fees for the years ended June 30, 2024, and 2023 relate to the audit of the Company's year-end financial statements included in this Annual Report on Form 10-K for the respective fiscal year, including consents, comfort letters and other items related to SEC matters. Tax fees for the year ended June 30, 2024 are related to tax compliance services for domestic and foreign tax returns. All other fees for each of the years ended June 30, 2024 and 2023 relate to accounting research and disclosure software.

Pre-Approval Policies and Procedures

Under the Sarbanes-Oxley Act, all audit and non-audit services performed by our auditors must be approved in advance by our Board to assure that such services do not impair the auditors' independence from us. In accordance with its policies and procedures, our Board pre-approved the audit services performed by PricewaterhouseCoopers LLP as of and for the year ended June 30, 2024.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) and (2) Financial Statements; Financial Statement Schedules

Our consolidated financial statements as of and for the years ended June 30, 2024 and 2023, together with the notes thereto, and the reports of our independent registered public accounting firm PricewaterhouseCoopers, LLP dated September 9, 2024 thereon, are presented in "Item 8. Financial Statements and Supplementary Data" of this Annual Report.

Financial Statement Schedules

Financial statement schedules listed under SEC rules but not included in this report are omitted because they are not applicable or the required information is provided in the notes to our consolidated financial statements.

Item 16. Form 10-K Summary

None.

EXHIBITS

(a)(3) Exhibits

The following documents are filed as exhibits hereto:

Exhibit Number	Exhibit Title
2.1#	Scheme Implementation Agreement dated as of October 11, 2021 between American Pacific Borates Limited and 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
3.1	Amended and Restated Certificate of Incorporation of 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on January 19, 2024).
3.2	Amended and Restated Bylaws of 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
4.1*	Description of Registrant's Securities.
4.2+	Form of Non-Plan Replacement Option Award for Executives (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-8 filed with the SEC on April 5, 2022).
4.3+	Form of Non-Plan Replacement Option Award for Non-Executives (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-8 filed with the SEC on April 5, 2022).
4.4	Form of Series A Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the SEC on August 28, 2024).
4.5	Form of Series B Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed with the SEC on August 28, 2024).
10.1+	5E Advanced Materials, Inc. 2022 Equity Compensation Plan (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.2	Form of Indemnification Agreement for Directors and Officers (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.3+	Brennan Employment Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on March 21, 2023).
10.4+	Offer Letter from Fort Cady (California) Corporation to Mr. Weibel (incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.5+	Offer Letter from 5E Advanced Materials, Inc. to Mr. van't Hoff (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the SEC on October 25, 2022).
10.6+	Promotion Letter from Fort Cady (California) Corporation to Mr. Weibel (incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.7	Letter dated November 4, 2021 by 5E Advanced Materials, Inc. to ASX Limited regarding acknowledgment of CHESS Depositary Nominee (CDN) Function (incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.8+	Offer Letter from 5E Advanced Materials, Inc. to Mr. Jennings (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on October 25, 2022).
10.9+	Offer Letter from 5E Advanced Materials, Inc. to Mr. Hunt (incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.10+	Offer Letter from 5E Advanced Materials, Inc. to Mr. Lim (incorporated by reference to Exhibit 10.12 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.11+	Offer Letter from 5E Advanced Materials, Inc. to Mr. Salisbury (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022).
10.12	Convertible Note Purchase Agreement dated August 11, 2022 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on August 11, 2022).
10.13	Registration Rights Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on August 31, 2022).
10.14+	Addendum to Offer Letter from Fort Cady (California) Corporation to Mr. Weibel (as amended by Promotion Letter from Fort Cady (California) Corporation to Mr. Weibel) (incorporated by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K filed with the SEC August 30, 2023).
10.15	Standstill Agreement dated November 9, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on November 9, 2023).

Exhibit Number	Exhibit Title
10.16	Restructuring Support Agreement, dated December 5, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on December 6, 2023).
10.17	Ascend Subscription Agreement, dated December 5, 2023 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on December 6, 2023).
10.18+	Brennan Retention Agreement, dated December 1, 2023 (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed with the SEC on December 6, 2023).
10.19+	Weibel Retention Agreement, dated December 1, 2023 (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed with the SEC on December 6, 2023).
10.20+	Revised Selig Offer Letter, dated December 11, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Amended Current Report on Form 8-K/A filed with the SEC on December 11, 2023).
10.21	Amended and Restated Note Purchase Agreement, dated January 18, 2024 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on January 19, 2024).
10.22	Amended and Restated Investor and Registration Rights Agreement, dated January 18, 2024 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on January 19, 2024).
10.23	Amended and Restated 5ECAP Subscription Agreement, dated January 18, 2024 (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed with the SEC on January 19, 2024).
10.24	Equity Distribution Agreement, dated March 28, 2024, by and among the Company, Canaccord Genuity LLC and D.A. Davidson & Co. (incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed with the SEC on March 28, 2024).
10.25	Amendment No. 2 to the Amended and Restated Note Purchase Agreement, dated May 24, 2024 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 28, 2024).
10.26+*^	Brennan Separation Agreement, dated June 3, 2024.
10.27	Second Amended and Restated Investor and Registration Rights Agreement, dated June 11, 2024 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on June 11, 2024).
10.28+*^	Independent Contractor Agreement with Malm Consulting LLC, dated September 9, 2024.
10.29	Debt Commitment Letter, dated August 25, 2024, by and between the Company and Bluescape (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on August 26, 2024).
10.30	Debt Commitment Letter, dated August 25, 2024, by and between the Company and Ascend (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on August 26, 2024).
10.31	Placement Agency Agreement, dated as of August 26, 2024, between the Company and Maxim Group LLC (incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed with the SEC on August 28, 2024).
10.32	Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on August 28, 2024).
21.1*	Subsidiaries of the Company.
23.1*	Consent of PricewaterhouseCoopers, LLP.
23.2*	Consent of Barr Engineering Co.
23.3*	Consent of Mike Rockandel Consulting LLC.
23.4*	Consent of Terra Modeling Services.
23.5*	Consent of Confluence Water Resources LLC.
23.6*	Consent of Escalante Geological Services LLC.
23.7*	Consent of Paul Weibel, CPA, 5E Advanced Materials, Inc.
31.1*	Certification of the Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a).
31.2*	Certification of the Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a).
32.1**	Certification of the Principal Executive Officer required by Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. 1350.
32.2**	Certification of the Principal Financial Officer required by Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. 1350.
96.1	Amended Initial Assessment Report (February 2024) (incorporated by reference to Exhibit 96.1 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024).
97.1*	Clawback Policy.
101	Interactive data files (formatted as Inline XBRL).

Exhibit Number	Exhibit Title
104	Cover page interactive data file (formatted as Inline XBRL and contained in Exhibit 101).

+ Management contract or compensatory plan, contract or arrangement.
* Filed herewith.
** Furnished herewith.
^ Information in this exhibit identified by brackets is confidential and has been excluded because it (i) is not material and (ii) is the type of information that the registrant treats as private or confidential.

SIGNATURES

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

5E ADVANCED MATERIALS, INC.

By: /s/ Paul Weibel

Paul Weibel
Chief Executive Officer
(Principal Executive Officer)

Date: September 9, 2024

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of 5E Advanced Materials, Inc. hereby severally constitute and appoint Paul Weibel, our true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and generally to do all things in our names and on our behalf in such capacities to enable 5E Advanced Materials, Inc. to comply with the provisions of the Securities Exchange Act of 1934, as amended, and all the requirements of the Securities Exchange Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Capacity	Date
/s/ Paul Weibel Paul Weibel	Chief Executive Officer (Principal Executive Officer)	September 9, 2024
/s/ Joshua Malm Joshua Malm	Interim Chief Financial Officer (Principal Accounting Officer and Principal Financial Officer)	September 9, 2024
/s/ David Salisbury David Salisbury	Chairman of the Board	September 9, 2024
/s/ Barry Dick Barry Dick	Director	September 9, 2024
/s/ H. Keith Jennings H. Keith Jennings	Director	September 9, 2024
/s/ Bryn Jones Bryn Jones	Director	September 9, 2024
/s/ Sen Ming Lim Sen Ming Lim	Director	September 9, 2024
/s/ Graham van't Hoff Graham van't Hoff	Director	September 9, 2024