



**ADVANCED
MATERIALS**

2023 ANNUAL REPORT
TO SHAREHOLDERS

5E ADVANCED MATERIALS, INC.
TABLE OF CONTENTS

	Page
Forward Looking Information	1
PART I	
Items 1 and 2. Business and Properties.....	6
Business Overview	6
Properties.....	13
Item 1A. Risk Factors	25
Item 1B. Unresolved Staff Comments	54
Item 3. Legal Proceedings	54
Item 4. Mine Safety Disclosures	54
PART II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	55
Item 6. [Reserved]	55
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.....	56
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	60
Item 8. Financial Statements and Supplementary Data	61
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.....	82
Item 9A. Controls and Procedures	82
Item 9B. Other information.....	82
Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	82
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	83
Item 11. Executive Compensation.....	90
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.....	95
Item 13. Certain Relationships and Related Transactions, and Director Independence	99
Item 14. Principal Accountant Fees and Services	99
PART IV	
Item 15. Exhibits and Financial Statement Schedules	100

Selected Definitions

- “ABR” refers to American Pacific Borates Limited, a company incorporated under the laws of Western Australia.
- “ASX” refers to the Australian Securities Exchange.”
- “CDI” refers to a CHESS Depository Interest.
- “Company” refers to 5E Advanced Materials, Inc., a Delaware corporation.
- “Corporations Act” refers to the Australian Corporations Act, 2001 (Cth).
- “EPC” refers engineering, procurement and construction.
- “FEL” refers to front end loading, a stage gated project management system (with a number to the corresponding stage, e.g., FEL2)
- “NASDAQ” refers to The NASDAQ Global Select Market.
- “Reorganization” refers to the transactions pursuant to which, among other things, we 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) 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 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.
- “QP” refers to qualified persons.

TRADEMARKS AND TRADE NAMES

This Annual Report on Form 10-K contains and incorporates by reference references to trademarks and service marks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this Annual Report on Form 10-K or the documents incorporated by reference herein may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that the applicable licensor will not assert, to the fullest extent under applicable law, its rights to these trademarks and trade names. 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 contains various forward-looking statements relating to our future financial performance and results, financial condition, business strategy, plans, goals and objectives, 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 generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “budget,” “target,” “aim,” “strategy,” “estimate,” “plan,” “guidance,” “outlook,” “intend,” “may,” “should,” “could,” “will,” “would,” “will be,” “will continue,” “will likely result” and similar expressions, although not all forward-looking statements contain these identifying words. Forward-looking statements reflect our beliefs and expectations based on current estimates and projections. Forward-looking statements include, but are not limited to, statements concerning:

- The timing, completion and estimated production capacity of our proposed small-scale facility (“SSF”) and proposed large-scale complex;
- The outputs from our proposed SSF and their impact on future estimates and potential studies regarding our proposed large-scale complex;
- Unanticipated costs or delays associated with our proposed SSF;
- Use of our injection-recovery wells for extraction once our proposed SSF and large-scale complex is complete;
- Our ability to successfully and economically extract boron and lithium from colemanite and lithium rich minerals;
- The quantities of resources we expect to be able to extract and our production capabilities;
- The timing of completing and the expected ability of our proposed SSF facility to serve as a foundation for future design, engineering and cost optimization for our proposed large-scale complex;
- Our ability to secure the requisite funding for the successful engineering, development, construction, completion and operation of our proposed facilities;
- The timing and viability of achieving initial commercial production;
- Our ability to commercialize our output and to enter into commercial agreements;
- The total addressable market for materials we intend on producing and selling, including its current size, growth trajectory and the underlying factors that may drive growth in the overall market size;
- The cost and availability of natural gas and electricity;
- Our ability to timely and successfully reach anticipated full commercial production capacity;
- Our ability to achieve and maintain profitability and to develop and maintain positive cash flow from our proposed operating activities;
- Our ability to enter into and deliver product under binding supply agreements;
- Our ability to acquire and maintain the necessary mining licenses, permits and access rights;
- Our ability to acquire and maintain the necessary mineral property interests and related water rights;
- The demand for borates and lithium and the market for their end-use applications; and
- Our ability to develop downstream advanced materials capabilities.

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

- 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;
- Our limited operating history in the borates and lithium industries and no revenue from our proposed extraction operations at our properties;

- Our need for substantial additional financing to execute our business plan and our ability to access capital and the financial markets;
- Our status as an exploration stage company dependent on a single project with no known mineral reserves and the inherent uncertainty in estimates of mineral resources;
- Our lack of history in mineral production and the significant risks associated with achieving our business strategies, including our downstream processing ambitions;
- We have incurred significant net operating losses to date and we anticipate incurring continued losses for the foreseeable future;
- Risks and uncertainties relating to the development of the Fort Cady Project (the “Project”) in Newberry Springs, CA;
- Risks related to our ability to prepare and update further technical and economic analysis of the Project, and the timing thereof;
- Our dependence on a single project;
- Risks related to our ability to achieve and maintain profitability and to develop positive cash flow from our operating activities;
- Risks, including changes in technology, that could adversely affect the demand for end use applications that require borates, lithium, and related minerals and compounds;
- Our long-term success is dependent on our ability to enter into and deliver product under supply agreements;
- Risks related to estimates of our total addressable market;
- The costs and availability of natural gas, electricity, and water;
- Uncertain global economic conditions and the impact this may have on our business and plans;
- Our business could be affected by macroeconomic risks;
- Government efforts to combat inflation, along with other interest rate pressures arising from an inflationary economic environment, could lead to higher financing and project completion costs.
- Risks associated with our ongoing investment in the Project;
- Risks associated with the required infrastructure at the Project;
- Risks related to the titles of our mineral property interests and related water rights;
- Any restrictions on our ability to obtain, recycle, and dispose of water on site;
- Risks related to land use restrictions on our properties;
- Risks related to volatility in prices or demand for borates, lithium, and other minerals;
- Fluctuations in the U.S. dollar relative to other currencies;
- Risks related to mineral exploration and development;
- Risks related to equipment shortages and supply chain disruptions;
- Risks associated with any of our customers, suppliers, or any third parties not implementing ethical or legal business practices in compliance with applicable laws and regulations;
- Competition from new or current competitors in the mineral exploration and mining industry;
- Risks associated with consolidation in the markets in which we operate and expect to operate;
- Risks related to compliance with environmental and regulatory requirements, reclamation requirements, the potential generation and disposal of hazardous waste, climate change, and the proposed SEC rules on climate-related disclosures;
- Risks related to our ability to acquire and maintain necessary mining licenses, permits, or access rights;
- Litigation risk;
- Risks related to our main operations being located in California and our engagement with local communities;

- Our dependence on key management and third parties;
- Risks related to potential acquisitions, joint ventures, and other investments;
- Risks related to public health threats, including the novel coronavirus, that may continue to cause disruptions to our operations or may have a material adverse effect on our development plans and financial results;
- Information technology risks;
- Risks and costs relating to the Reorganization;
- Risks related to the possible dilution of our Common Stock;
- Risks related to our stock price and trading volume volatility;
- Risks relating to the development of an active trading market for our Common Stock;
- Risks related to our status as an emerging growth company;
- Risks related to technology systems and security breaches;
- A shortage of skilled technicians and engineers;
- Risks related to technology systems and security breaches;
- Our facilities of operations could be adversely affected by outside events outside of our control, such as natural disasters, climate change, wars, or health epidemics or pandemics;
- Risks and uncertainties related to the COVID-19 pandemic;
- Our increased costs as a result of being a U.S. listed public company;
- Strategic actions, including acquisitions and dispositions of investments, including but not limited to integrations of acquiring investments;
- Risks associated with our convertible debt (“Convertible Notes”);
- Risk of insufficient cash flow to service the Convertible Notes;
- Risk of foreclosure on our assets if we default on the Convertible Notes;
- Risk of dilution of the ownership interest of our existing stockholders if the Convertible Notes are converted;
- Risk of adverse impact on the price of our Common Stock if the Convertible Notes are converted;
- Risks associated with limitations on our ability to raise money through equity offerings and to incur additional indebtedness imposed by the Convertible Notes agreement;
- The transition to a new Chief Executive Officer (“CEO”) will be critical to our success and our business may be adversely impacted if we do not successfully manage the transition process in a timely manner; and
- Any other risks described elsewhere in this Annual Report on Form 10-K or the documents incorporated herein by reference.

While we believe these expectations, and the estimates and projections on which they are based, are reasonable and were made in good faith, these statements are subject to numerous risks and uncertainties. Forward-looking statements involve known and unknown risks, uncertainties and other important factors, which include, but are not limited to, the risks described under the heading “*Risk Factor Summary*” and “*Risk Factors*,” any of which could cause our 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. Therefore, you should not rely on any of these forward-looking statements.

These forward-looking statements speak only as of the date of this report and, except as required by law, we undertake no obligation to correct, update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except to the extent required under federal securities laws. You are advised, however, to consult any additional disclosures we make in our reports to the U.S. Securities and Exchange Commission (the “SEC”). All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this filing.

CAUTIONARY NOTE REGARDING RESERVES

Unless otherwise indicated, all mineral resource 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 Securities Exchange Act of 1934 (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 of the Securities Act of 1933, as amended (the "Securities Act") ("Regulation S-K 1300"). 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.

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

<i>Measured Mineral Resource</i> ("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.
<i>Indicated Mineral Resource</i> ("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.
<i>Inferred Mineral Resource</i> ("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.
<i>Probable Mineral Reserve</i> ("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.

Included as Exhibit 96.1 to this filing is an amended technical report, with an effective date of April 1, 2023, and a revised report date of February 20, 2024 (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. 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). The Amended Initial Assessment Report is discussed in *Business* and *Properties* and incorporated by reference as Exhibit 96.1 to this Amendment No. 3 to Form 10-K.

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 the Project 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 the Project 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 EMERGING GROWTH COMPANY STATUS

Section 102(b)(1) of the Jumpstart Our Business Startups Act (“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 Securities Exchange Act of 1934, as amended) 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. At times, we may elect to adopt a new or revised standard early.

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 our internal research and are based on a significant number of 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,” “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 boron specialty and advanced 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 5E Boron Americas (Fort Cady) Complex located in southern California, through our wholly owned subsidiary 5E Boron Americas, LLC (“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 our wholly owned subsidiary, 5E Boron Americas, LLC (f/k/a Fort Cady (California) Corporation). 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. 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 two 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 represented approximately 80-85% of total supply in 2022, with Eti Maden representing approximately 60% of global supply in 2022. 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 of Measured Mineral Resource plus Indicated Mineral Resource at the Project of boric acid (H₃BO₃) 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 Important 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 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 hot 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 less 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 of directors 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 thoughtfully develop our business over time in a systematic manner, starting with the development and construction of our SSF to support ongoing design work, engineering and cost optimization for 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, profitably with a focus on a more environmentally friendly in-situ extraction process as compared to traditional mining. The SSF, which we began constructing in April 2022, 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 Project is fully operational in accordance with our current plan, 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 the 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.

Appointment of Susan Brennan

On March 21, 2023, the Board of Directors (the "Board") announced the appointment of Ms. Susan Brennan as our new Chief Executive Officer, effective April 24, 2023. Ms. Brennan succeeded Mr. Anthony Hall, whose designation as our principal executive officer terminated as of that date. Ms. Brennan was appointed to the Board on June 3, 2023.

SSF Update

The SSF is our proposed smaller scale boron facility which is expected to serve 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. Once operational, the SSF will be an essential step in the overall Project development plan and is expected to serve as our initial extraction and processing facility. We have substantially completed construction of our SSF and progressed commissioning activities. Initial production of boric acid will commence upon final clearance from the U.S. Environmental Protection Agency ("EPA") under our Underground Injection Control Permit as well as successful completion of commissioning activities.

Per the EPA permit conditions, we have installed four upgradient and five downgradient water monitoring wells for the initial mining block and four injection-recovery wells. Additionally, we were required to plug and abandon all unused existing open historic wells located within the permit Area of Review (AOR) boundary. This was completed and all required reports, including the Well Completion Reports, were submitted to EPA in October 2022 and we received a response for those reports in May 2023 (the "May

2023 EPA Response Letter”). The May 2023 EPA Response Letter included a few questions regarding temperature logging requirements, mechanical integrity testing for the drill holes we plugged and abandoned, and legacy Duval drill holes and their potential impact to underlying groundwater. In June 2023, we submitted our response letter to the EPA's May 2023 Response Letter and we believe it has addressed the comments in the letter. Analytical information was used to develop the permit required Alert Level Report, which establishes alert levels for each water monitor well. This report was submitted to EPA in October 2022 as supporting documentation as part of the process to receive authorization to inject. Upon completion and review of the above referenced submittals, we expect to receive authorization to inject water (“Step Rate Testing”), a condition of the permit required to complete the final tests of the injection-recovery wells. The Step Rate Testing establishes porosity of the ore-body and forms a base-line parameter. After completing Step Rate Testing, we expect to receive authorization to inject acid, which is the start of mining.

This facility is being designed to process a pregnant leach solution (“PLS”) containing boron and lithium extracted from colemanite and lithium rich minerals. Assuming the timely and successful commissioning upon approval from the EPA, production from our SSF is primarily intended to provide PLS and data that will help us to more effectively optimize detail engineering of our proposed large-scale complex and estimate capital expenditures required to build our proposed large-scale complex. It is possible that a portion of the output from our SSF may be used to support customer origination efforts for eventual offtake and qualification and may be used for commercial sales and to progress our advanced materials development. The extraction of the PLS is expected to occur through our injection-recovery wells, four of which were completed by May 2022.

Fort Cady

Our previous development plans were focused on boron and sulphate of potash (“SOP”) and developing a large-scale complex under a phased development process. During the 2022 fiscal year, we changed the focus of our business plan and have worked with our external engineering partners on an updated process design for our proposed large-scale complex at the Project. 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 now intend 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 and lithium carbonate. 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 expected to serve as a foundation for future design, engineering, and cost optimization for our proposed large-scale complex. We believe that the successful completion 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. 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. We have begun to progress plans for the proposed large-scale complex processing plant, including defining infrastructure and detail engineering.

During the fiscal year, our team spent significant time completing our Amended Initial Assessment Report. A dedicated internal and external team pooled their professional and technical expertise to publish a report that we believe 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 technical report, we engaged two external EPC firms to assist management with our capital cost estimate, which we expect to use as the basis to stage a formal process to request proposals for detail design of the proposed large-scale complex.

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 with a targeted go-live date of the second calendar quarter of 2026.
- 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 with a targeted go-live date in the fourth calendar quarter of 2028 (Phase 2) and second calendar quarter of 2031 (Phase 3).
- 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. Once operation of the SSF commences, we will continue operating the facility to optimize costs, provide samples to future customers for qualification and offtake, and commence FEL2 and FEL3 engineering for the proposed large-scale complex. Completion of FEL2 and FEL3 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, in 2021, there were two major competitors in the borates industry, Rio Tinto Borates (“RTB”) and Eti Maden. 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. The two largest competitors in the production of boric acid are RTB and Eti Maden, which is owned by the Turkish Government. According to a 2021 report from Global Market Insights, together they supplied approximately 85% of global boron production demand in 2021 which has led to a global duopoly, with Eti Maden alone having supplied approximately 60% of the world’s demand in 2021.

Additionally, the lithium industry is highly competitive, and according to a Woods Mackenzie report, 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.

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 as 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 May 2021, ABR entered 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, ABR entered 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 facing global markets, including the semi-conductor, life sciences, aerospace, military and automotive markets.

In May 2022, we signed a non-binding letter of intent with Rose Mill Co. for boron 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 continue to advance discussions with other potential customers for boron advanced materials and lithium carbonate offtake.

In parallel with ongoing test works, we plan to explore options to sell by-product gypsum into the Californian gypsum market.

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 Environmental Protection Agency, the Bureau of Land Management (“BLM”), the Fish and Wildlife Service, the Army Corps of Engineers and other agencies, including legislation such as the federal Clean Water Act (“CWA”), the Safe Drinking Water Act (“SDWA”), the Clean Air Act, as amended (“CAA”), the National Environmental Policy Act (“NEPA”), the Endangered Species Act, the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), and the Resource Conservation and Recovery Act (“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.

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. 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.

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, impose 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 (“LRWQCB”) in 1988 and remain in compliance with the permit conditions. The water board 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. 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 the 13 injection-recovery and water monitoring wells. We must comply with the pre-operational conditions of the Class III UIC Permit prior to receiving full authorization for injection from the EPA. 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. Borate is a locatable mineral. 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.

NEPA 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 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 (“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 and Houston.

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 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 \$309 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, 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 the proposed plant and wellfield facilities. 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.

While we have to date not experienced any material adverse impact with respect to our employees or third-party vendors as a result of the pandemic, the effects of COVID-19 on supply chains have adversely impacted our equipment procurement activities and could continue to do so. Material extended lead times for numerous items have caused delays on anticipated start-up time frames and the related price increases due to scarcity of supply have also affected us. These considerations are factored into our forecast but may be subject to revision depending on a change or extension of event. We continue to implement mitigation and risk management measures to reduce potential delays such as engaging multiple suppliers, vendor site visits, and procuring rental equipment to bridge potential gaps, however no assurance can be given that we will be successful in these efforts.

Employees

As of June 30, 2023, we had 43 full-time employees. We expect to significantly increase the number of employees upon full production at the Project.

We use the services of independent consultants and contractors to perform various professional services, including land acquisition, legal, environmental 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.

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, Suite 125, Hesperia, California. Our telephone number is +1 (442) 221-0225.

Properties

Fort Cady 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 New Berry 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 BNSF rail line serving Los Angeles 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.



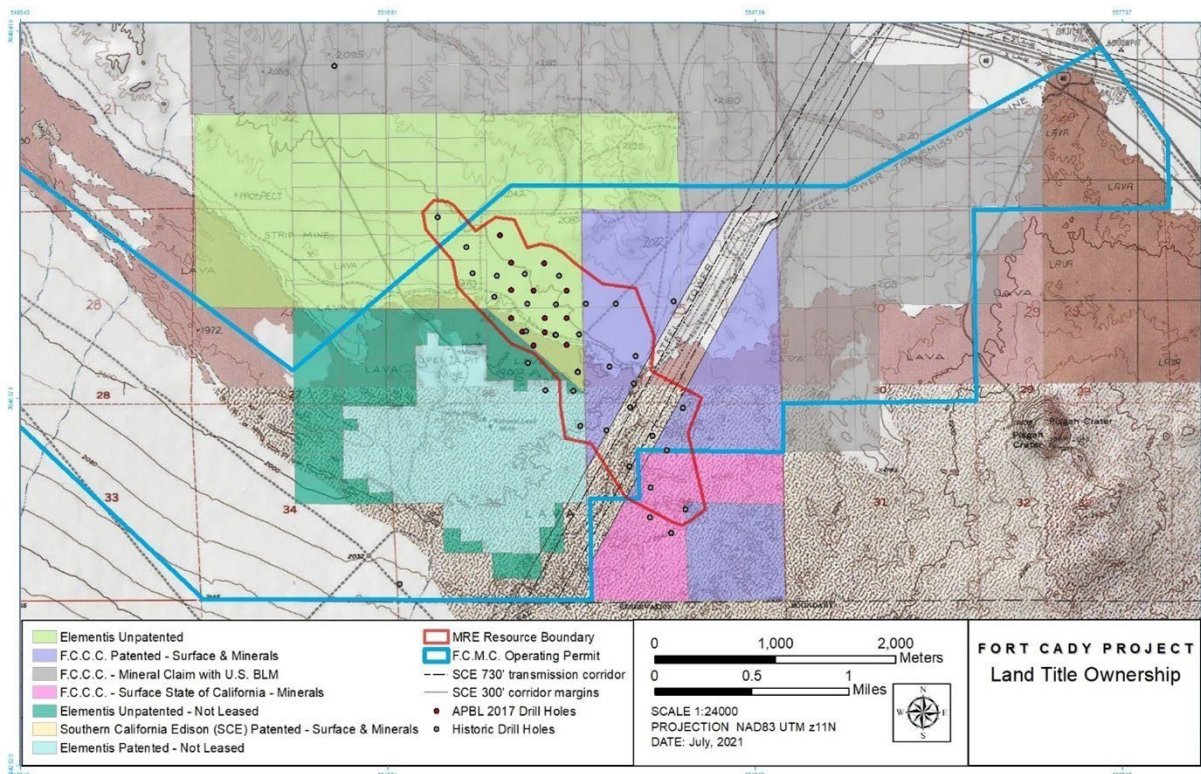
Mineral Title

We own fee simple (private) lands in Sections 25 and 36, T 8 N, R 5 E, SBM. 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, in Section 36, T8N, R5E, 272 acres of land in Section 36 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 Environmental Impact Statement (“EIS”) was required while CEQA and SBC - LUP determined that an Environmental Impact Report (“EIR”) was required. Under a Memorandum of Understanding (“MOU”), 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. However, a group of Australian investors, through extensive due diligence identified green shoots that the boron market dynamics were fundamentally beginning to change.

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, AMR 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 script-for-script 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, CA and Victorville, CA.

The BNSF Railroad main line from Las Vegas, NV to Los Angeles, CA runs subparallel to I-40. A rail loadout is located approximately 1.2 mi north of the National Trails Highway on a road that bears north and located 0.4 mi west of CR20796. 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, NV. 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, CA 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, CA 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 will operate 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. Prior to commencement of operations for any permitted piece of equipment, 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 3 solution mining UIC permits in the State of California. EPA issued the UIC permit for the Project in August 2020. The permit defines the AOR boundary. All subsurface solution mining activities, including monitoring wells and injection wells, are located within the AOR boundary.

Per the EPA permit conditions, we have installed four upgradient and five downgradient water monitor wells for the initial mining block and four injection-recovery wells. Additionally, we were required to plug and abandon all existing open historic wells located within the permit Area of Review (AOR) boundary. This was completed and all required reports, including the Well Completion Reports, were submitted to EPA in October 2022 and we received a response for those reports in May 2023. The May 2023 EPA response letter included a few questions regarding temperature logging requirements, mechanical integrity testing for the drill holes we plugged and abandoned, and legacy Duval drill holes and their potential impact to underlying groundwater. In June 2023, we submitted our response letter to the EPA’s May 2023 letter and we believe it has addressed the comments in the May 2023 letter. Analytical information was used to develop the permit required Alert Level Report, which establishes alert levels for each water monitor well. This report was submitted to EPA in October 2022 as supporting documentation as part of the process to receive authorization to inject. Upon completion and review of the above referenced submittals, we expect to receive authorization to inject water (“Step Rate Testing”), a condition of the permit required to complete the final tests of the injection-recovery wells. The Step Rate Testing establishes porosity of the ore-body and forms a base-line parameter. After completing Step Rate Testing, we expect to receive authorization to inject acid, which is the start of mining.

SSF Update

Upon final clearance from the EPA, the Small-Scale Facility will be ready to commence production of boric acid. During the fiscal year 2023, we spent significant time and resources constructing the facility. Historical data suggests the well-field will take a couple weeks to condition before producing boric acid and gypsum. We have engaged a third-party to build a lithium skid unit that will be attached to the facility which will implement a direct lithium extraction technology to produce a lithium chloride and ultimately pilot production of lithium carbonate.

Amended Initial Assessment Report

During the fiscal year, we spent significant time updating our initial assessment Technical Report Summary, prepared in accordance with Regulation S-K 1300. A dedicated internal and external team pooled their professional and technical expertise to publish a report that we believe highlights 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 the amended technical report, the Company engaged two external EPC firms to assist management with the capital cost estimate, which we expect to use as the basis to stage a formal process to request proposals for detail design of the proposed large-scale complex.

The Amended Technical Report Summary 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 with a targeted go-live date of the second calendar quarter of 2026;
- 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 with a targeted go-live date in the fourth calendar quarter of 2028 (Phase 2) and second calendar quarter of 2031 (Phase 3).
- 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 SSF once it is operating successfully.

The recovery of boron from the colemanite mineral at the Project will be performed by 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 expected to be withdrawn from the wells as products of the chemical reaction.

The extracted solution will be pumped to the proposed processing facility where boric acid will be crystallized from the solution or where alternate processing of the solution is expected to be performed to produce boric acid. Lithium and gypsum are expected to be recovered from the remaining solution with the final solution being substantially recycled back into the boron solution mine. The crystallized boric acid will be dried, sized, and bagged as final product. Other boron products are expected to be prepared for market, as required, by end-use customers. Lithium is expected to be produced via conversion to lithium carbonate and precipitation, while by-product gypsum will either be dried and sold or stored in the gypsum storage facility for later sale. Within the proposed processing facility, some HCl is expected to be regenerated from the gypsum precipitation process as a result of the sulfuric acid acidification of the process recycle stream. The weak HCl solution will be combined with recycled water to produce the make-up solution for reinjection into the formation. The process is expected to operate a zero liquid discharge evaporator and produce 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% B₂O₃ 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 our Amended Initial Assessment Report with our mineral resources pursuant to the requirements of Regulation S-K 1300 (refer to Exhibit 96.1). The report was prepared by Qualified Persons including Company management and third-party independent companies TMS and Confluence Water Resources, LLC. All QP’s have 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, 2023.

Mineral Resources

17 CFR § 229.1300 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 (%) B₂O₃ and Li as ppm. The drilling database contains 5,920 analytical values for B₂O₃ 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 x 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, variogram was successful for B₂O₃ 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 B₂O₃ 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% B₂O₃ 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). Sales pricing has risen over the past several years and months and is currently tracking in the upper \$1,400’s for boric acid. For this evaluation, current boric acid pricing 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 current spot sales price for boric acid. The geologic model used the 2% B₂O₃ cutoff which has a Boric Acid equivalent cutoff of 3.55% H₃BO₃.

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% B₂O₃ and 356 ppm Li, using a 2% cut-off grade for B₂O₃. Independent market research assessed the spot price of boric acid and technical grade lithium carbonate to be \$1,041 and \$58,746 per short ton, respectively. 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% B₂O₃ and 321 ppm Li. At this time, we have not yet established mineral reserves. Our Amended Technical Report Summary 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 ₂ O ₃ (wt%)	H ₃ BO ₃ (wt%)	Lithium (ppm)	B ₂ O ₃ (MST)	H ₃ BO ₃ (MST) ⁽²⁾	LCE (MST) ⁽³⁾
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 ₂ O ₃ (wt%)	H ₃ BO ₃ (wt%)	Lithium (ppm)	B ₂ O ₃ (MST)	H ₃ BO ₃ (MST) ⁽²⁾	LCE (MST) ⁽³⁾
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 ₂ O ₃ (wt%)	H ₃ BO ₃ (wt%)	Lithium (ppm)	B ₂ O ₃ (MST)	H ₃ BO ₃ (MST) ⁽²⁾	LCE (MST) ⁽³⁾
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
5E Land Patented, surface & minerals, SE	IMH	9.24	2.43	4.32	365	0.22	0.40	0.018
	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% B₂O₃ 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

⁽²⁾ Conversion factor from boric oxide to boric acid is 1.776

⁽³⁾ LCE was derived using a conversion factor of 5.323

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 Na₂O₂/Na₂CO₃ 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.

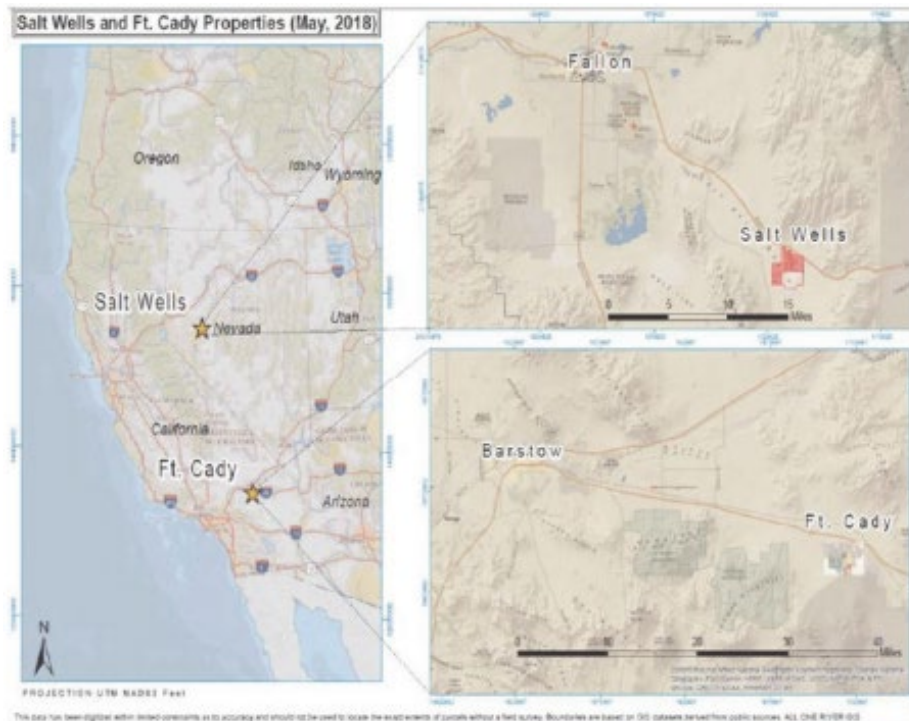
In the Amended Initial Assessment Report, the QP's made the following recommendations:

- 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 commissioning and 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 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 new agreement with Osmond provides optionality for 5E to retain an interest in the Salt Wells Project while deferring additional spending requirements to Osmond in the near term. This new agreement aligns with our strategy and

overall goal of bringing our Project in southern California online and becoming the first new producer of borate and lithium in the U.S. To date, the Company has spent approximately USD \$544,000 on exploration activities. Upon assigning the Earn-in Agreement to Osmond, we will defer all the additional exploration spending requirements to Osmond in exchange for retaining 20% of the mineral interest upon completion of exploration activities. Once the mineral title is transferred to us and Osmond, we may elect to form an unincorporated joint venture with Osmond to carry out joint activities at the Salt Wells Project, whereby future funding would be contributed on a pro-rate basis. Additionally, we obtained a right of first refusal to act as the exclusive sales and marketing agent for the sale of all borates produced from the Salt Wells Project. In addition, the Earn-in Agreement with Great Basin Resources Inc. provides for a 3% revenue royalty if concentrates or ore of minerals are sold in the future.

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 Securities Exchange Act of 1934, 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

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. Moreover, we operate in a very competitive and rapidly changing environment. 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 from those contained in any forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

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. As of June 30, 2023, we had cash and cash equivalents of approximately \$20.3 million which we believe will not be sufficient to fund our operating expenses and capital requirements for one year after the date that the financial statements are issued. 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, 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 \$10 million, an event of default under the Convertible Note agreement would occur if not cured after 30 days (See Risks Related to the Convertible Notes below in this Item 1A).

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 \$138.0 million as of June 30, 2023, 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 do not currently produce any material, nor do we currently sell any materials that may be derived from our properties. As a result, our revenues are expected to be determined, to a large degree, by the success of our construction and 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 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 and gypsum. 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, 2023 and June 30, 2022, we had cash and cash equivalents of \$20.3 million and \$31.1 million, respectively. We have had recurring net losses from operations and an accumulated deficit of \$138.0 million as of June 30, 2023 and \$107.4 million as at June 30, 2022. 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 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: achieving mechanical completion and commissioning of the SSF, potential additional drilling of wells to support operation of the SSF, operation of the SSF for several months and hiring additional personnel to support our development of the Project. While we believe that we will obtain additional financing and, together with cash on hand, will be able to fund the full scope of our current business plan for the next 12 months. However, this estimate is based on assumptions that may prove to be wrong. For example, changing circumstances could make it difficult to raise additional capital, cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more than currently expected because of unanticipated issues or circumstances beyond our control. In addition, 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 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.

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.

Our ability to raise additional funds may also be adversely impacted by potential worsening global economic conditions and the disruptions to, and volatility in, the credit and financial markets in the United States and worldwide resulting from the COVID-19 pandemic, 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. 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, shareholder's rights and the value of their investment in our 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 CDIs and Common Stock, the market price of our CDIs and Common Stock could be negatively impacted. There is, however, 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.

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: we announced 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 a targeted go-live date of the second calendar quarter of 2026;
- 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 with a targeted go-live date in the fourth calendar quarter of 2028 (Phase 2) and second calendar quarter of 2031 (Phase 3).
- 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 operational 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 our SSF and 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 timely and successfully complete and 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 proposed smaller scale boron facility which is expected to serve 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 completion 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. Assuming no unexpected delays in construction or supply chain issues, we currently expect production of boric acid to commence in upon final authorization from the EPA. However, there can be no assurance when we will receive final authorization. Until we receive authorization to inject acid and the SSF has been successfully completed and is operational, 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 timely and successfully complete and 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 completed and 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 Updated 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 Updated 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 may not be able to operate the SSF in a timely manner which would impact the successful construction of our proposed large-scale complex and potential for initial commercial production targeted in 2026.

We are currently targeting operating the SSF once we receive authorization to inject from the EPA which could cause delays to our targeted commercial production timeline. Our inability to successfully operate the SSF in a timely manner will impact our ability to determine the economic recoverability of mineral resources at the Project and will delay any future design, engineering, and cost optimization for our proposed large-scale complex. Delays will impact our ability to successfully begin initial commercial production targeted in 2026, which could have a further material adverse impact on our business and financial condition.

We have invested and 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.

In total, we have spent in excess of \$127 million on the Project thus far, including resource drilling, metallurgical test works, well injection tests, permitting activities and pilot-scale test works. For year ended June 30, 2023, our capital expenditures per our statement of cash flows were \$40.1 million, of which \$39.7 million was related to construction in progress.

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. 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, HCl, 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. Our target of reaching initial commercial production in fiscal year 2026 is dependent on a number of factors and assumptions, including timely and successful construction and operation of the SSF and obtaining the requisite funding for, and the successful construction of, our proposed large-scale complex. There can be no assurance that we will be able to meet that 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 production, produce minerals in commercial quantities 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.

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 the 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.

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. 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 and to demonstrate commercial viability impossible without further drilling and engineering. We intend to engage in additional exploratory drilling and engineering upon completion of 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. There can be no assurance that the Project deposit contains Proven or Probable Mineral Reserves as defined by SEC 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 Updated Initial Assessment Report released in May 2023 contains a combined 74.31 million short tons of Measured plus Indicated resources with an average grade of 4.15% B₂O₃ and 356 ppm Li, using a 2% cut-off grade for B₂O₃. At this time, our Updated 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 Updated Initial Assessment Report represent the amount of boron acid and lithium carbonate that the “Qualified Person” ((or QP), as such term is defined by Regulation S-K 1300) in that report estimated, at May 2023, 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, goodwill 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-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 Updated 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 (such as COVID-19) and other 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 Updated 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 semiconductor, aerospace, military, and automotive markets, which 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, 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 are unable to deliver the product required by such agreements, if we are otherwise unable to enter into binding product and supply agreements, or if 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 affect on our business, results of operations and financial condition.

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

Inflation has risen on a global basis, the United States has been experiencing historically high levels of inflation, and 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, or the FCPA, and other federal statutes and regulations, including those established by the Office of Foreign Assets Control, or 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, shadow flicker, 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 events 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 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 have been 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 SSF or 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, RTB (as defined below) 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 climate-related disclosure obligations in proposed SEC rule amendments could have uncertain impacts on our business, impose additional reporting obligations on us, and increase our costs.

In March 2022, the SEC proposed rule amendments that would 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 proposed rules would 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.

The proposed rules were closed to public comment and may be subject to challenges and litigation. Thus, the ultimate scope and impact of the proposed rules on our business remain uncertain. To the extent new rules, if finalized, impose additional reporting obligations on us, we could face substantial increased costs. 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.

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 Projects 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") will be critical to our success and our business may be adversely impacted if we do not successfully manage the transition process in a timely manner.

Our success depends, in part, on the effectiveness of our interim Principal Executive Officer, and the effective transition to our new permanent CEO in April. The new CEO will be critical to executing on and achieving our vision, strategic direction, culture, products, and technology. If we are unable to execute an orderly transition and successfully integrate the new CEO into our leadership team, 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 successful hiring and transition, but there can be no assurance that we will be successful in such efforts. The ability of the new CEO to quickly adapt to and understand 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.

We face risks related to health epidemics and other outbreaks, including the spread of COVID-19 or novel coronavirus, or fear of such an event.

Our business could be adversely affected by a widespread outbreak of contagious disease, including the outbreak of the 2019 novel strain of coronavirus, causing a contagious respiratory disease known as COVID-19, which was declared a pandemic by the World Health Organization on March 11, 2020. There is significant uncertainty around the breadth and duration of business disruptions related to health epidemics and other outbreaks, as well as its impact on the U.S. economy and consumer confidence. If a significant portion of our workforce becomes unable to work or travel to our operations due to illness or state or federal government restrictions (including travel restrictions and “shelter-in-place” and similar orders restricting certain activities that may be issued or extended by authorities), we may be forced to reduce or suspend operations, which could reduce exploration activities and development projects and impact liquidity and financial results. To the extent the a pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section.

We may be subject to litigation if one or more employees contract COVID-19 at work or litigation initiated by stockholders who view decisions by the Board of Directors or management as inconsistent with duties to the Company under Delaware law or who may assert claims under federal securities laws. We understand that, as indicated by sharp increases in average premiums for director and officer insurance policies in recent months, insurers expect increased litigation relating to COVID-19.

We are monitoring the situation and taking reasonable steps to keep our business premises, properties, vendors and employees in a safe environment and are constantly monitoring the impact of COVID-19. The extent to which COVID-19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions taken to contain it or treat its impact. While we have not seen a significant impact to our results from COVID-19 to date, if the virus continues to cause significant negative impacts to economic conditions or our ability to continue development of the Project, our results of operations, financial condition and liquidity could be adversely impacted.

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 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), 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.

As dependence on digital technologies is expanding, cyber incidents, including deliberate attacks or unintentional events have been increasing worldwide. Computers and telecommunication 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 and telecommunications systems and result in additional costs as well as disruptions to our business operations or the loss of our data. 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, such as, among others:

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

Risks Relating to Our CDIs and Common Stock

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

The market price of our CDIs and Common Stock 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 CDIs and Common Stock 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 CDIs and Common Stock 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 CDIs and Common Stock 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 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 becoming, and 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 the second annual report that we will be required to file with the SEC, Section 404 requires 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 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 CDIs and Common Stock may not be sustained and the trading price for our CDIs and Common Stock 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 2019, 2020 or 2021 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 CDIs and Common Stock 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 CDIs or Common Stock will appreciate in value. You may not realize a return on your investment in our CDIs and Common Stock and you may even lose your entire investment in our CDIs and Common Stock.

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 CDIs and Common Stock could decline.

The trading market for our CDIs and Common Stock 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 CDIs and Common Stock 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 CDIs and Common Stock or publish adverse or misleading research about our business, the market price of our CDIs and Common Stock 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 CDIs and Common Stock 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 CDIs and Common Stock.

We are an “emerging growth company” and the reduced disclosure requirements applicable to emerging growth companies may make our CDIs and Common Stock less attractive to investors and, as a result, adversely affect the price of our CDIs and Common Stock and result in a less active trading market for our CDIs and Common Stock.

We are an “emerging growth company” as defined in the U.S. Jumpstart Our Business Startups Act of 2012 (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 of 2002 (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 CDIs and Common Stock less attractive because of our reliance on some or all of these exemptions. If investors find our CDIs and Common Stock less attractive, it may adversely affect the price of our CDIs and Common Stock and there may be a less active trading market for our CDIs and Common Stock.

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.

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 will be 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 beginning in the year following our first annual report required to be filed with the SEC. This assessment will need to include 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 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 of Directors 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 of Directors to fill director vacancies, which prevents shareholders from being able to fill vacancies on our Board of Directors;
- 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 of Directors 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 of Directors to amend our Bylaws, which may allow our Board of Directors 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 of Directors 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 of Directors, 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 CDIs and Common Stock.

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 CDIs and Common Stock 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 CDIs and Common Stock. 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 make transactions in our securities and subject us to additional trading restrictions.

We have listed our Common Stock on the NASDAQ. In the future, our securities may fail to meet the continued listing requirements to be listed on the NASDAQ. If the NASDAQ delists our Common Stock from trading on its exchange, 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.

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.

On August 11, 2022, we issued \$60.0 million of Convertible Notes under a convertible note purchase agreement (the "Convertible Note Purchase Agreement"), which closed August 26, 2022. Pursuant to the Convertible Note Purchase Agreement, the Convertible Notes bear interest at a rate of 4.50% per annum, payable semi-annually, or 6.00% per annum if the Company elects to pay such interest through the delivery of additional Convertible Notes and are convertible into 3,409,091 shares of Common Stock at a conversion price of \$17.60 per share of Common Stock in accordance with the terms of the Convertible Note Purchase Agreement. The Convertible Notes mature on August 15, 2027. The Company may, at its election, force conversion of the Convertible Notes (i) if the last reported sale price of the Common Stock exceeds 200% of the conversion price for at least 20 trading days during the period of the first 24 months after issuance; (ii) if the last reported sale price of the Common Stock exceeds 150% of the conversion price for the following 12 months; and (iii) if the last reported sale price of the Common Stock exceeds 130% of the conversion price thereafter. Following certain corporate events that may occur prior to the maturity date or if the Company forces a mandatory conversion, the Company will, in certain circumstances, increase the conversion rate for a holder who elects to convert its Convertible Notes in connection with such a corporate event or has its Convertible Notes mandatorily converted, as the case may be.

The Convertible Note Purchase Agreement provides for standard and customary events of default, such as our failing to make timely payments and failing to timely comply with the reporting requirements of the Exchange Act. The Convertible Notes also contain customary affirmative and negative covenants, including maintaining a cash balance of at least \$10 million and limitations on incurring additional indebtedness or the creation of additional liens on our assets. In addition, if we experience a Change in Control, as defined in the Convertible Note Purchase Agreement, which includes the sale of all or substantially all of our assets, or our Common Stock ceasing to be listed on NASDAQ or any other eligible exchange, then the holder of the Convertible Notes can require us to repay the outstanding indebtedness in cash.

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 Convertible Notes Purchase Agreement. Our level of indebtedness under the Convertible Notes 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 Convertible Notes 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, may result in acceleration of the Convertible Notes and any additional convertible notes issued under the Convertible Notes Purchase Agreement. 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 shares of our Common Stock, if so elected by us, and conversion of the Convertible Notes and any additional convertible notes issued under the Convertible Notes Purchase Agreement could result in significant dilution of our Common Stock, which 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, for example, due to the unknown impacts of the COVID-19 pandemic, our business may not continue to 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, and any additional 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 any additional 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, or any additional 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 3. Legal Proceedings

Other than given as below, 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 in the future become subject to claims and legal proceedings 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 materially adverse effect on our business, financial condition, cash flows or results of operations.

On July 17, 2023, we filed a complaint (the "Complaint") against Matrix Services Inc. ("Matrix") in the United States District Court for the Central District of California, Eastern Division, alleging, among other things, numerous breaches by Matrix of its contractual obligations to 5E Boron Americas, LLC ("5EBA") under the Procurement and Construction Contract, effective April 26, 2022, by and between 5EBA and Matrix, relating to the construction of the SSF in California (the "Contract"). On August 10, 2023, Matrix filed an answer to the Complaint as well as a counterclaim for, among other things, alleged breaches by 5EBA of its contractual obligations to Matrix under the Contract and has requested relief in the approximate amount of \$5,500,000. We plan on filing a response disputing the counterclaims asserted by Matrix and reaffirming the grounds for recovery raised in the Complaint. This case is still its early stages, and discovery has begun and is ongoing.

Item 4. Mine Safety Disclosures

Not applicable.

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 following table sets forth, for each of the periods indicated, the high and low reported sales price of our Common Stock on the NASDAQ.

The closing price of our Common Stock on August 25, 2023 was \$2.59 per share. As of that date, there were 19 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 within the discretion of the Board of Directors.

Securities authorized for issuance under equity compensation plans.

See information incorporated by reference in Note 12, “Share-Based Compensation,” to our consolidated financial statements in Item 8 of this report and Item 12 of this report regarding securities authorized for issuance under our equity compensation plans.

Sales of Unregistered Securities

<u>Date</u>	<u>Title of Security</u>	<u>Number</u>	<u>Consideration Received</u>	<u>Exemption from Registration Claimed</u>	<u>Security Holder</u>
10/18/2022	Common Stock	100,000	⁽¹⁾ \$ 365,000	Section 4(a)(2)	Aaron Dean Bertolatti <ATF Bertolatti Family Trust>
10/20/2022	Common Stock	100,000	⁽¹⁾ 365,000	Section 4(a)(2)	irX Enterprises Pty Ltd <irX Trust>
10/21/2022	Common Stock	200,000	⁽¹⁾ 730,000	Section 4(a)(2)	JAWAF Enterprises Pty Ltd <Hall Family A/C>
10/24/2022	Common Stock	100,000	⁽¹⁾ 365,000	Section 4(a)(2)	Scor Go Luath Limited
1/13/2023	Common Stock	150,000	⁽¹⁾ 768,000	Section 4(a)(2)	BJS Robb Pty Ltd
		<u>650,000</u>	<u>\$ 2,593,000</u>		

⁽¹⁾ Shares issued for services

The transactions listed above are exempt from registration pursuant to Section 4(a)(2) of the Securities Act.

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 and liquidity, and cash flows of our Company and its predecessor for the years ended June 30, 2023 and 2022. The discussion is based on the historical financial statements of ABR for periods prior to the Reorganization and of the Company for periods after the Reorganization. The Company was incorporated under the laws of the state of Delaware to become the holding company of our business pursuant to the Reorganization. Prior to completion of the Reorganization, the Company had no business or operations and following completion of the Reorganization, the business and operations of the Company consists solely of the business and operations of the subsidiaries of ABR. Accordingly, financial information for the Company and a discussion and analysis of its results of operations and financial condition for the period of its operation prior to the Reorganization would not be meaningful and are not presented. Following the Reorganization, the historical financial statements of ABR as of and for the period ending June 30, 2022 are our financial statements as a continuation of the predecessor. Our financial statements will continue to consolidate ABR as an operating subsidiary. This MD&A should be read in conjunction with our consolidated financial statements, the accompanying notes to consolidated financial statements and other financial information included in this annual report. Except for historical information, the matters discussed in this MD&A contain various forward-looking statements that involve risks and uncertainties 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 “Risk Factors” and elsewhere in this annual report. 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.

Overview

5E Advanced Materials, Inc. is focused on becoming a vertically integrated global leader and supplier of boron specialty and advanced 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 5E Boron Americas (Fort Cady) Complex (the “Project”) located in southern California, 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 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.

Results of Operations

	Year ended June 30,		Change	
	2023	2022	\$	%
COSTS AND EXPENSES				
Project expenses	\$ 9,988	\$ 12,902	\$ (2,914)	-23%
General and administrative	25,365	54,684	(29,319)	-54%
Research and development	262	133	129	97%
Impairment	908	—	908	N/A
Depreciation and amortization expense	184	112	72	64%
Total costs and expenses	36,707	67,831	(31,124)	-46%
LOSS FROM OPERATIONS	(36,707)	(67,831)	31,124	-46%
NON-OPERATING INCOME (EXPENSE)				
Other income	62	65	(3)	-5%
Interest income	1,147	3	1,144	*
Derivative gain (loss)	11,743	—	11,743	N/A
Interest expense	(6,854)	(6)	(6,848)	*
Other income (expense)	(15)	1,056	(1,071)	-101%
Total non-operating income (expense)	6,083	1,118	4,965	*
NET INCOME (LOSS)	\$ (30,624)	\$ (66,713)	\$ 36,089	-54%

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

Project Expenses

Project expenses include drilling, environmental, site-prep, engineering, consumables, testing and sampling, hydrology, permits, surveys, and other expenses associated with further progressing the Project. The \$2.9 million decrease in project expenses during 2023 compared to 2022 was due to decreased activity related to the preparation for construction of the SSF. During the year ended June 30,

2022, primarily expenses related to drilling water monitoring wells (\$6.9 million) and engineering and technical reports (\$3.4 million) that were not eligible for capitalization as construction in progress. These decreases were partially offset by costs related to our plug and abandonment program incurred during the year ended June 30, 2023 (\$4.5 million), EPA compliance (\$1 million), construction related insurance (\$0.76 million) and other site related costs.

General and administrative expense

General and administrative expenses include professional fees, costs associated with marketing, press releases, on-going SEC and public company costs, public relations, rent, salaries, sponsorships, share based compensation and other expenses. The \$29.3 million decrease in 2023 was primarily a \$26.7 million reduction in share based compensation costs and lower professional fees of \$8.5 million, primarily related to the reorganization and subsequent listing of our shares on the NASDAQ during the year ended June 30, 2022. These decreases were partially offset by higher salaries and benefits (\$4.2 million) and insurance (\$0.9 million). The increase in salaries and benefits during the year ended June 30, 2023 resulted from the hiring of additional personnel during the period combined with severance payments made to certain individuals during the period. Our head count increased to 43 at the end of the current period from 23 at the end of the previous year, the majority of which were personnel related to the construction and ultimate operation of the SSF. Currently, all salaries and benefits are reported in general and administrative expense. Share based compensation in the prior year was driven by \$31 million in shares issued as payment for consulting fees under our Advisory Agreement with Blue Horizon Advisors, LLC (“BHA”) for services related to assessing the Project, recruiting a U.S. based management team, and advising in connection with our listing on the NASDAQ.

Research and development

Research and development expense includes costs incurred under our research agreement with Georgetown University and Boston College that aims to enhance the performance of permanent magnets through increased use of boron. Research and development increased during the current year due to the agreement entered into with Boston College. Both agreements have since been terminated.

Impairment

During the year ended June 30, 2023, we elected not to renew our mineral lease with Elementis Specialties, Inc. and the mineral lease expired on March 31, 2023 resulting in the recognition of approximately \$908 thousand of related impairment expense during the current year.

Depreciation and amortization expense

The \$72 thousand increase in depreciation and amortization expense was primarily due to additional assets placed in service during the current year. Depreciation and amortization also increased as we had a full year of depreciation related to assets that were placed in service in the later half of the prior year.

Interest Income

The increase in interest income was attributable to our investment of excess cash in treasury bills and certificates of deposits (original maturities of three months or less) during the year ended June 30, 2023. The weighted average interest rate earned on these investments was approximately 3.9%.

Derivative gain

The derivative gain (loss) during the year ended June 30, 2023 related to changes in fair value of the embedded conversion feature of our Convertible Notes that was required to be bifurcated and accounted for separately as a stand-alone derivative instrument during the quarter ended September 30, 2022. The provision resulting in the separate derivative accounting for the conversion feature expired on November 26, 2022. The expiration resulted in the transfer of the fair value of the convertible note derivative at expiration to additional paid-in capital and no future related gains or losses are expected.

Interest expense

Interest expense increased primarily due to the issuance of the convertible note on August 26, 2022 and includes \$4.9 million of debt issuance cost and discount amortization during the year ended June 30, 2023. During the year ended June 30, 2023, we capitalized interest costs of approximately \$1.2 million to construction in progress. Interest expense for the year ended June 30, 2022 related to a note that was paid off during the year ended June 30, 2022 and interest on vehicle notes payable.

Other income (expense)

The change from net non-operating income to non-operating expense during the year ended June 30, 2023 was primarily driven by net foreign exchange gains of \$1.1 million resulting from the impact of the strengthening U.S. dollar (vis a vis the Australian dollar) as we had no foreign cash holdings during the year ended June 30, 2022. All cash balances have been transferred to our bank account in the U.S. and were held in U.S. dollars at June 30, 2022.

Income Tax

We did not have any income tax expense or benefit for the years ended June 30, 2023 and 2022, as we did not generate any net income for either period.

Liquidity and Capital Resources

Overview

As of June 30, 2023, we had cash and cash equivalents of \$20.3 million and working capital of \$13.3 million compared to \$31.1 million and \$25.2 million as of June 30, 2022, respectively. Our predominant source of cash has been generated through equity financing from issuances of our Common Stock and the issuance of the convertible note in August 2022. Since inception, we have not generated revenues, and as such, have relied on equity and debt financing to fund our operating and investing activities.

In August 2022, we executed a \$60 million private placement of senior secured Convertible Notes to complete construction and commissioning of our Small-Scale Facility, fund operation of our SSF, commence detail engineering and procure long lead items for our proposed large-scale complex and general corporate purposes.

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

	For the year ended June 30,		Change	
	2023	2022	\$	%
	(\$ in thousands)			
Net cash used in operating activities	\$ (30,695)	\$ (28,615)	\$ (2,080)	7%
Net cash used in investing activities	(39,307)	(11,400)	(27,907)	245%
Net cash provided by financing activities	59,268	30,622	28,646	94%
Net increase (decrease) in cash and cash equivalents	<u>\$ (10,734)</u>	<u>\$ (9,393)</u>	<u>\$ (1,341)</u>	<u>14%</u>

Cash Flows from Operating Activities

Net cash used in operating activities for each of the above periods was primarily the result of expenses incurred in preparing us for operations. During the year ended June 30, 2023, we used \$2.1 million more than in the previous year. The increase in cash used in operations during the current period was due to increased salaries and benefits resulting from increased headcount combined with an increase in project expenses related to the preparation for construction of the SSF.

Cash Flows from Investing Activities

Our cash flows from investing activities increased significantly from the prior year as we commenced construction of the SSF. Substantially all our investing activities relate to equipment purchases, engineering, and the construction of our SSF. 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 Environmental Protection Agency in exchange for putting surety bonds in place.

Cash Flows from Financing Activities

Net cash provided by financing activities for the year ended June 30, 2023 consisted primarily of net proceeds of \$55.8 million received from the issuance of a convertible note in August 2022 and proceeds received from the exercise of stock options.

Net cash provided by financing activities for the year ended June 30, 2022 consisted primarily of \$25.5 million of proceeds (net of share issuance costs) from the issuance of 1.76 million shares of Common Stock and \$5.2 million of proceeds from the exercise of stock options.

Future Capital Requirements

With our current capital resources, we believe that we have sufficient funds to construct and commission our SSF; however, delay of final authorization to commence mining could push out operation of the facility until we raise additional capital. Over the next 12 months we have plans to do the following below that will require additional capital:

- Operate the Small-Scale Facility;
- Progress FEL2, FEL3, 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;
- Further define our advanced materials strategy with consideration to engineering and repurposing our Small-Scale Facility to produce boron advanced materials once sufficient data has been obtained for flow sheet optimization and the production of product for customer qualification; and
- Continue hiring team members necessary to support our operation efforts of becoming a global producer of boric acid, lithium carbonate and gypsum.

As of today, we are currently operating under our most recently updated modified business plan until we secure additional financing. Absent additional financing as outlined above, we would no longer be able to meet our ongoing obligations or progress operations. If we are not able to procure other financing cash flows and our cash balance falls below \$10 million, an event of default under the Convertible Note agreement would occur if not cured after 30 days. Our available liquidity is expected to fall below \$10 million in the latter part of calendar year 2023 based on our most recently updated modified business plan. An event of default would cause our Convertible Note balance outstanding to become immediately due and payable, of which we would not have the resources to repay without additional financing. Given that raising additional capital is not entirely within our control combined with our expectation of incurring significant operating and development costs in the foreseeable future, 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. See Note 1 - *Going Concern* in the notes to the consolidated financial statements in Item 8 of this Form 10-K.

Contractual Obligations

Purchase Obligations

As of June 30, 2023, we had purchase order commitments of \$7.3 million in respect of construction works in progress, drilling, and technical reports.

Mineral Lease Payments

Prior to its expiration in March 2023, we had a mineral lease agreement with Elementis for the purposes of obtaining exclusive rights to exploration at the Project. The mineral lease agreement required us to make an annual minimum royalty payment of \$75 thousand, escalated annually based on inflation, until the expiration date of the lease. During the year ended June 30, 2022 we paid Elementis \$186 thousand. No payments were made during the year ended June 30, 2023.

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. We also describe 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 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 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 year ended June 30, 2023, we recognized a derivative related to the Convertible Note. The valuation methodology used as the basis of determining the amount allocated to the derivative instrument and the derivative gain 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 gain and amount reflected as a discount to the convertible note could have been materially different.

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 12, “Share Based Compensation,” to our consolidated financial statements in Item 8 of this report for a full discussion of our stock-based compensation.

New Accounting Requirements

See Note 1, “Organization and Summary of Significant Accounting Policies,” to our consolidated financial statements in Item 8 of this report for a discussion of new accounting requirements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not required.

Item 8. Financial Statements

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 sheet of 5E Advanced Materials, Inc. and its subsidiaries (the “Company”) as of June 30, 2023, and the related consolidated statements of operations and comprehensive income (loss), of stockholders’ equity and of cash flows for the year 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, 2023, and the results of its operations and its cash flows for the year 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 to the consolidated financial statements, the Company has a Convertible Note which contains a financial covenant requiring the Company to maintain a cash balance of at least \$10 million and available liquidity is expected to fall below \$10 million in the latter part of calendar year 2023 that 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 audit. 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 audit of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit 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 audit 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 audit 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 audit 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 audit provides a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Denver, Colorado
August 30, 2023

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

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
5E Advanced Materials, Inc.
Hesperia, California

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of 5E Advanced Materials, Inc. (the “Company”) as of June 30, 2022, the related consolidated statements of operations and comprehensive income, stockholders’ equity, and cash flows for the year then ended, and 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 at June 30, 2022, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

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 audit. 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit 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 audit 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 audit 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 audit 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 audit provides a reasonable basis for our opinion.

/s/ BDO USA, LLP

We served as the Company's auditor from 2021 through 2022.

Spokane, Washington
September 28, 2022

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

	June 30, 2023	June 30, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 20,323	\$ 31,057
Prepaid expenses and other current assets	1,808	1,506
Total current assets	22,131	32,563
Mineral rights and properties, net	7,637	8,364
Construction in progress	67,553	25,625
Properties, plant and equipment, net	3,056	2,871
Reclamation bond deposit	309	1,086
Right of use asset	207	371
Other assets	6	6
Total assets	<u>\$ 100,899</u>	<u>\$ 70,886</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 8,728	\$ 7,212
Lease liabilities, current	136	164
Total current liabilities	8,864	7,376
Long-term debt, net	37,671	148
Lease liabilities	74	211
Asset retirement obligations	724	489
Total liabilities	<u>47,333</u>	<u>8,224</u>
Commitments and contingencies (Note 14)		
Stockholders' Equity:		
Common stock, \$0.01 par value; 180,000 shares authorized; 44,187 and 43,305 shares outstanding June 30, 2023 and 2022 respectively	441	433
Additional paid-in capital	191,113	169,593
Retained earnings (accumulated deficit)	(137,988)	(107,364)
Total stockholders' equity	53,566	62,662
Total liabilities and stockholders' equity	<u>\$ 100,899</u>	<u>\$ 70,886</u>

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

5E ADVANCED MATERIALS, INC.
CONSOLIDATED STATEMENT OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
(In thousands, except per share amounts)

	For the year ended June 30.	
	2023	2022
Operating expenses:		
Project expenses	\$ 9,988	\$ 12,902
General and administrative	25,365	54,684
Research and development	262	133
Impairment	908	—
Depreciation and amortization expense	184	112
Total operating expenses	<u>36,707</u>	<u>67,831</u>
Income (loss) from operations	<u>(36,707)</u>	<u>(67,831)</u>
Non-operating income (expense):		
Other income	62	65
Interest income	1,147	3
Derivative gain (loss)	11,743	—
Interest expense	(6,854)	(6)
Other income (expense)	(15)	1,056
Total non-operating income (expense)	<u>6,083</u>	<u>1,118</u>
Income (loss) before income taxes	<u>(30,624)</u>	<u>(66,713)</u>
Income tax provision (benefit)	<u>—</u>	<u>—</u>
Net income (loss)	<u>\$ (30,624)</u>	<u>\$ (66,713)</u>
Net income (loss) per common share — basic and diluted	<u>\$ (0.70)</u>	<u>\$ (1.63)</u>
Weighted average common shares outstanding — basic and diluted	<u>43,842</u>	<u>40,807</u>
Comprehensive income (loss):		
Net income (loss)	\$ (30,624)	\$ (66,713)
Reporting currency translation gain (loss)	—	(1,417)
Comprehensive income (loss)	<u>\$ (30,624)</u>	<u>\$ (68,130)</u>

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

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

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Comprehensive Income (loss)</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Equity</u>
	<u>Shares</u>	<u>Amount</u>				
Balance at June 30, 2021	38,391	\$ 384	\$ 101,179	\$ 1,417	\$ (40,651)	\$ 62,329
Shares issued for:						
Cash	1,760	18	26,291	—	—	26,309
Exercise of stock options	1,904	19	5,203	—	—	5,222
Consulting fees	1,250	12	31,021	—	—	31,033
Share issuance costs	—	—	(797)	—	—	(797)
Share based compensation	—	—	6,696	—	—	6,696
Net income (loss)	—	—	—	—	(66,713)	(66,713)
Other comprehensive income (loss), net of tax	—	—	—	(1,417)	—	(1,417)
Balance at June 30, 2022	<u>43,305</u>	<u>\$ 433</u>	<u>\$ 169,593</u>	<u>\$ —</u>	<u>\$ (107,364)</u>	<u>\$ 62,662</u>
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	<u>\$ 44,187</u>	<u>\$ 441</u>	<u>\$ 191,113</u>	<u>\$ —</u>	<u>\$ (137,988)</u>	<u>\$ 53,566</u>

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

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

	<u>For the year ended June 30,</u>	
	<u>2023</u>	<u>2022</u>
Cash Flows From Operating Activities:		
Net income (loss)	\$ (30,624)	\$ (66,713)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	184	112
Share based compensation	4,953	6,696
Common stock issued for consulting fees	—	31,033
Unrealized (gain) loss on convertible note derivative instrument	(11,743)	—
Impairment	908	—
Accretion of asset retirement obligations	37	9
Amortization of debt issuance costs and discount — convertible note	4,907	—
Amortization of right of use asset	164	125
Interest earned on reclamation bond	—	(1)
Net foreign exchange (gain) loss	—	(1,056)
Change in:		
Prepaid expenses and other current assets	(302)	(1,347)
Accounts payable and accrued liabilities	821	2,533
Other assets	—	(6)
Net cash used in operating activities	<u>(30,695)</u>	<u>(28,615)</u>
Cash Flows From Investing Activities:		
Construction in progress	(39,731)	(9,994)
Mineral rights and properties additions	—	(186)
Properties, plant and equipment additions	(352)	(1,220)
Reclamation bonds	776	—
Net cash used in investing activities	<u>(39,307)</u>	<u>(11,400)</u>
Cash Flows From Financing Activities:		
Proceeds from issuance of convertible note	60,000	—
Debt issuance costs	(4,160)	—
Payments on note payable	(38)	(112)
Proceeds from issuance of common stock	—	26,309
Share offering costs	—	(797)
Proceeds from exercise of stock options	3,466	5,222
Net cash provided by financing activities	<u>59,268</u>	<u>30,622</u>
Net increase (decrease) in cash and cash equivalents	(10,734)	(9,393)
Effect of exchange rate fluctuation on cash	—	(361)
Cash and cash equivalents at beginning of period	31,057	40,811
Cash and cash equivalents at end of period	<u>\$ 20,323</u>	<u>\$ 31,057</u>
Supplemental Disclosure of Cash Flow Information:		
Cash paid for interest	\$ 7	\$ 6
Noncash Investing and Financing Activities:		
Accounts payable and accrued liabilities change related to construction in progress	\$ 2,197	\$ 2,922
Interest paid through issuance of additional convertible notes	1,710	—
Construction in progress transferred to properties, plant and equipment	—	55
Equipment acquired with notes payable	—	206
Recognition of operating lease liability and right of use asset	—	283
Increase (decrease) in asset retirement costs	198	103

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 boron specialty and advanced materials whose mission is to enable decarbonization, increase food security, and ensure domestic supply of critical materials.

Reorganization

5E Advanced Materials, Inc. acquired all of the issued and outstanding shares of American Pacific Borates Limited (“ABR”), our 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, we changed our 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 us and pursuant to the Scheme, we issued to the shareholders of ABR, either one share of our common stock for every ten ordinary shares of ABR or one CHESSE Depositary Interests (“CDIs”) over our common stock for every one ordinary share of ABR, in each case, as held on the Scheme record date. We maintain an Australian Stock Exchange (“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 under the symbol “5EA” and holders of shares of our common stock are able to trade their shares on NASDAQ under the symbol “FEAM.” All share and per share data presented in our consolidated financial statements have been retroactively adjusted to reflect a one for ten (1:10) exchange ratio (“Exchange Ratio”) of all of our issued and outstanding common stock. As a result of the reorganization, we became the parent company of ABR, and for financial reporting purposes the historical financial statements of ABR have become our historical financial statements as a continuation of the predecessor.

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 known as Fort Cady (California) Corporation) (“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.

Going Concern

We evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date that these consolidated financial statements are issued. This evaluation initially does not take into consideration the potential mitigating effect of management’s plans that have not been fully implemented as of the date the financial statements are issued. When substantial doubt exists under this methodology, we evaluate whether the mitigating effect of our plans sufficiently alleviates substantial doubt about our ability to continue as a going concern. The mitigating effect of our 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 entity’s ability to continue as a going concern within one year after the date that these consolidated financial statements are issued. In performing our analysis, we excluded certain elements of our operating plan that cannot be considered probable. The future receipt of potential funding from equity or debt issuances cannot be considered probable at this time because these plans are not entirely within our control as of the date of these consolidated financial statements. As discussed in Note 8, the Convertible Note contains a financial covenant requiring us to maintain a cash balance of at least \$10 million. Our available liquidity is expected to fall below \$10 million in the latter part of calendar year 2023 based on our most recently updated modified business plan, which includes an increase in Small-Scale Facility costs due to increases in third-party construction cost estimates. If our cash balance falls below \$10 million, an event of default under the Convertible Note agreement would occur and, if not cured within 30 days, would result in the \$61.7 million principal balance of Convertible Notes becoming immediately due and payable, of which we would not have the funds to repay unless additional financing is obtained.

Our plans include reduced spending and the pursuit of additional capital. Given that raising additional capital is not entirely within our control combined with our expectation of incurring significant operating and development costs in the foreseeable future, there exists

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

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.

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.

Concentration of Risk

We maintain cash deposits at several major banks, which at times may exceed amounts covered by insurance provided by the United States Federal Deposit Insurance Corporation (“FDIC”). We monitor the financial health of the banks and have not experienced any losses in such accounts and believe we are not exposed to any significant credit risk.

Risk and Uncertainties

We are subject to a number of risks similar to those of other companies of similar size in our industry, including but not limited to, the success of our 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.

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 our asset retirement obligations (“ARO”), assumptions used to value the embedded conversion option of our convertible note, 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, we evaluate 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

We record 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. The related cash flow impact of our derivative activities 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.

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.

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

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. We consider 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. Our 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. We periodically review our inputs to ensure the fair value level classification is appropriate. When transfers between levels occur, it is our policy to assume that the transfer occurred at the end of the period in which the change in circumstances that caused the transfer occurred.

We use a Black-Scholes option valuation model to determine the grant date fair value our employee stock options and a Monte Carlo Simulation model to determine the grant date fair value of market-based stock grants. Both models use Level 2 inputs. See note 12—Share Based Compensation for a description of the inputs used.

Foreign Currency Translation

Functional and reporting currency—Items included in our consolidated financial statements and each of our subsidiaries are measured using the currency of the primary economic environment in which the entity operates (“the functional currency”). As of June 30, 2022, the U.S. dollar was the functional currency of ABR. The change in functional currency during fiscal year 2022 was due to all cash and cash equivalents, operating and capital costs being denominated in the U.S. dollar. The change in functional currency was applied prospectively effective July 1, 2022 in accordance with U.S. GAAP. To give effect to the change in functional currency, the assets and liabilities of entities with an Australian dollar functional currency on June 30, 2022 were converted into U.S. dollars at a fixed exchange rate of 1.454 U.S. dollars to one AUD dollar and the stockholders’ equity and accumulated deficit were converted at applicable historical rates. Our functional currency and the functional currency of 5EBA is the U.S. dollar. The reporting currency for these consolidated financial statements is U.S. dollars.

During the fourth quarter ended June 30, 2022, ABR transferred substantially all of its assets to us and has no ongoing operations. Accordingly, we recognized the remaining accumulated foreign currency translation adjustment of \$248 thousand as a gain in our consolidated statement of operations and comprehensive income (loss) ("statement of operations").

Transactions in foreign currency—Transactions made in a currency other than the functional currency are remeasured to the functional currency at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are remeasured to the functional currency at the exchange rate at that date and non-monetary assets and liabilities are remeasured at historical rates. Foreign currency transaction gains and losses are included in profit or loss.

Translation to reporting currency—The results and financial position of entities that have a functional currency different from the reporting currency are translated into the reporting currency as follows:

- Assets and liabilities are translated at the closing rate at the end of the reporting date;
- Income and expenses are translated at average exchange rates, unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions; and
- All resulting exchange differences are recognized in other comprehensive income or loss.

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, 2023 and 2022, cash and cash equivalents consisted of \$20.3 million and \$31.1 million, respectively, of funds held in bank accounts with financial institutions in the United States.

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

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. Mineral lease payments are capitalized.

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, 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) we can obtain the benefit and control others' access to it, and (c) the transaction or event giving rise to our 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. Expenditures for improvements that significantly extend the useful life of an asset are capitalized. Expenditures for maintenance and repairs are charged to operations when incurred.

Assets under construction (“Construction in progress”) include roads, fencing, tailings facility, equipment for our small-scale facility, injection-recovery wells, and land improvements and will be depreciated in accordance with our depreciation policy once placed in service.

Asset Retirement Obligations—Our 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, we record a liability (an ARO) on our consolidated balance sheet and capitalize 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 our statement of operations (See Notes 2 and 5).

For activities that do not qualify for asset capitalization, the costs associated with the obligation are charged to operations. Environmental compliance costs related to maintaining our 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, 2023 and 2022 were \$309 thousand and \$1,086 thousand, respectively.

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

Leases—We determine 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. We have 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 we are reasonably certain to exercise) from the balance sheet presentation.

Right-of-use (“ROU”) assets represent our right to use an underlying asset for the lease term and lease liabilities represent our 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, we utilize our 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 we 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 we 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—Our financial instruments consist of cash and cash equivalents, a convertible note, vehicle notes, and accounts payable and accrued liabilities. It is management’s opinion that we are not exposed to significant interest, currency or credit risks arising from its financial instruments. The fair values of these instruments, with the exception of the convertible note and vehicle notes, approximate their carrying value. See Note 8 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. 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 awards is reversed. A forfeiture rate is not estimated when determining the fair value of the options on the grant date.

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. Diluted loss per share is not separately presented for the years ended June 30, 2023 and 2022, as the effect on the basic loss per share would be anti-dilutive.

Income Taxes—We use 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 our ability to recover our 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, we develop 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 we use to manage the underlying businesses. A valuation allowance is recorded against deferred tax assets if we believe it is more likely than not the related tax benefits will not be realized.

We evaluate 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.

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

In August 2020, FASB issued ASU No. 2020-06—Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity’s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an

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

Entity's Own Equity. The update addresses issues identified as a result of the complexity associated with applying GAAP for certain financial instruments with characteristics of liabilities and equity. We adopted this standard during the quarter ended September 30, 2022. The adoption of this standard did not have an effect on our previously reported consolidated financial statements.

In May 2021, FASB issued ASU No. 2021-04—Earnings Per Share (Topic 260), Debt— Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging— Contracts in Entity's Own Equity (Subtopic 815-40) Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options. The update is to clarify and reduce diversity in accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange. The adoption of this standard during the quarter ended September 30, 2022 did not have an effect on our consolidated financial statements.

2. Mineral Rights and Properties, Net

We own surface properties and the associated mineral rights for the Fort Cady Project (the "Project"). We have capitalized the cost of drilling water supply wells, which provide water for the Project. For the years ended June 30, 2023 and 2022, we recognized hydrology income of \$62 thousand and \$62 thousand, respectively.

On October 1, 2011, 5EBA executed a 10-year net royalty lease agreement with Elementis Specialties, Inc. ("Elementis") to explore, develop and mine boron and lithium on claims held by Elementis. During the year ended June 30, 2022, we extended the mineral lease agreement with Elementis until March 31, 2023. During the quarter ended March 31, 2023, we elected not to renew our mineral lease with Elementis and the mineral lease expired on March 31, 2023 resulting in the recognition of approximately \$908 thousand of related impairment expense during the current quarter.

Mineral Interests and Properties consisted of the following at June 30.

	June 30, 2023	June 30, 2022
	(in thousands)	
Mineral properties	\$ 6,733	\$ 6,733
Hydrology wells	547	547
Mineral interest – Elementis lease	—	908
Asset retirement cost, net of accumulated amortization of \$23 and \$6 at June 30, 2023 and 2022, respectively ⁽¹⁾	357	176
Mineral rights and properties, net	<u>\$ 7,637</u>	<u>\$ 8,364</u>

⁽¹⁾ Asset retirement costs represent the carrying value of capitalized costs associated with asset retirement obligations discussed in Note 5.

3. Construction in Progress

Construction work in progress represents the equipment which has been acquired and is not in use and prepayments for design, engineering, and construction services in relation to the development of the Project. Construction in Progress consisted of the following.

	June 30, 2023	June 30, 2022
	(in thousands)	
Engineering services	\$ 9,122	\$ 8,656
Equipment	31,692	13,548
Construction	21,579	—
Injection and recovery wells	4,002	3,421
Capitalized interest	1,158	—
Total construction in progress	<u>\$ 67,553</u>	<u>\$ 25,625</u>

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

4. Properties, Plant and Equipment

Properties, plant, and equipment consisted of the following.

Asset category	Depreciation method	Estimated useful life (in years)	June 30, 2023	June 30, 2022
(in thousands)				
Land	N/A	—	\$ 1,533	\$ 1,533
Buildings	Straight-line	7-15	873	873
Vehicles	Straight-line	3-5	345	276
Plant and equipment	Straight-line	5-10	623	340
			3,374	3,022
Less accumulated depreciation			(318)	(151)
Properties, plant and equipment, net			<u>\$ 3,056</u>	<u>\$ 2,871</u>

We recognized depreciation expense of \$184 thousand and \$112 thousand for the years ended June 30, 2023 and 2022, respectively. Included in depreciation expense was amortization related to asset retirement costs (Note 2) of \$17 thousand and \$6 thousand for the years ended June 30, 2023 and 2022, respectively.

5. Asset Retirement Obligations

The change in our ARO for the years ended June 30 is set forth below.

	June 30, 2023	June 30, 2022
(in thousands)		
Asset retirement obligation — beginning of period	\$ 489	\$ 377
Obligation incurred during the period	31	106
Revisions to previous estimates ⁽¹⁾	167	(3)
Accretion	37	9
Asset retirement obligation — end of period	<u>\$ 724</u>	<u>\$ 489</u>

⁽¹⁾Revisions are primarily due to changes in estimated costs and timing of expected abandonment.

6. Leases

We lease offices in Hesperia, CA and Houston, TX under operating lease agreements, which expire in February 2024 and December 2024, respectively. In June 2022, we entered into a three-year operating lease for the field office we have been utilizing in Newberry Springs, CA. Previously, the field office was leased on a month-to-month basis and was classified as a short-term lease. Other operating leases include lodging for employees working in the field.

A summary of our leases including short-term leases follows.

	Lease Inception	Weighted Average Remaining Lease Term (in years)	Weighted Average Discount Rate	Cash Paid for Rent		Rent Expense	
				Year ended,		2023	2022
				2023	2022	2023	2022
(in thousands)							
Operating leases							
Office space	2021 - 2022	1.5	1.80%	\$ 165	\$ 92	\$ 165	\$ 93
Other operating leases	2021	0.0	0.07%	3	32	3	32
Total operating leases				168	124	168	125
Short term leases	N/A	N/A	N/A	15	57	15	57
Total for all leases				<u>\$ 183</u>	<u>\$ 181</u>	<u>\$ 183</u>	<u>\$ 182</u>
Reported rent expense:							
Project expenses						\$ 60	\$ 57
General and administrative						123	125

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

Future minimum annual lease payments under our existing lease agreements are as follows.

	(in thousands)
Fiscal year 2024	\$ 140
Fiscal year 2025	74
Total	214
Less imputed interest	(4)
Net lease liability	210
Current portion	136
Long-term portion	<u>\$ 74</u>

7. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consisted of the following.

	June 30, 2023	June 30, 2022
	(in thousands)	
Accounts payable - trade ⁽¹⁾	\$ 1,492	\$ 3,459
Accrued expenses	1,350	1,489
Accrued capital expenditures	3,386	1,446
Accrued payroll	1,072	780
Accrued interest	1,388	—
Current portion of debt	40	38
Accounts payable and accrued liabilities	<u>\$ 8,728</u>	<u>\$ 7,212</u>

⁽¹⁾ Includes \$699 thousand and \$1.6 million related to construction in progress at June 30, 2023 and 2022, respectively.

8. Debt

Debt consisted of the following.

	June 30, 2023	June 30, 2022
	(in thousands)	
Convertible note	\$ 61,710	\$ —
Vehicle notes payable	148	186
Total debt	61,858	186
Current portion of debt	40	38
Long-term debt	61,818	148
Unamortized convertible note discount — embedded conversion feature	(20,691)	—
Unamortized debt issuance costs - convertible note	(3,456)	—
Long-term debt, net	<u>\$ 37,671</u>	<u>\$ 148</u>

Convertible Note

On August 11, 2022, we executed a \$60 million private placement of Senior Secured Convertible Note (“the Note” or “Convertible Note”), with Bluescape Energy Partners (“Bluescape”). The Note, which is convertible into our common stock and matures in August 2027, closed on August 26, 2022. At our election, the Note bears interest at an annual rate of 4.50% if paid in cash, or at an annual rate of 6.00% if paid through the issuance of additional notes, contains a financial covenant requiring us to maintain a cash balance of at least \$10 million, and is secured by a security interest in substantially all of our assets. The purchaser may convert the Note at any time before August 2027 at a conversion price of \$17.60 (“Conversion Price”). We have the right, at any time on or before the twenty-four (24) month anniversary of the closing date of the Note (“Closing Date”), to convert the Note to our common stock in whole or in part if the closing price of our common stock is at least 200% of the Conversion Price of the Note (“Threshold Price”) for each of the twenty (20) consecutive trading days prior to the time we deliver a conversion notice. The Threshold Price for our right to convert the Note decreases to 150% after the twenty-four (24) month anniversary of the Closing Date and on or before the thirty-six (36) month anniversary of the Closing, and to 130% at any time after the thirty-six (36) month anniversary of the Closing Date.

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

Due to a provision in the Convertible Note agreement that allowed for a change in the conversion price upon a digressive issuance by us within three months of the closing date, the conversion feature of the Note was deemed an embedded derivative requiring separate accounting as a stand-alone derivative instrument (convertible note derivative). The Note was recorded at its face amount of \$60 million less debt issuance costs of \$4.2 million and the fair value of the convertible note derivative of \$24.9 million. Fair value information for the convertible instrument follows.

	June 30 2023	August 26, 2022 (Inception)
	(in thousands)	
Fair value of convertible note (Level 2)	\$ 40,316	\$ 35,104
Fair value of embedded conversion feature (Level 3)	—	24,896
Total fair value of convertible note instrument	<u>\$ 40,316</u>	<u>\$ 60,000</u>

The valuation model 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 our underlying share price can materially affect the fair value estimate and reported net income (loss). The assumptions used in the valuation model include the following, with a change in volatility and debt rate having the most significant impact on the valuation.

	June 30, 2023	August 26, 2022 (Inception)
Risk-free interest rate	4.4%	3.2%
Volatility	50.0%	40.0%
Debt rate	17.5%	17.3%

The provision resulting in the separate derivative accounting for the conversion feature expired November 26, 2022, and accordingly, the fair value of the convertible note derivative at expiration of the provision was transferred to additional paid-in capital (see Note 9).

Vehicle Notes Payable

Payments on the vehicle notes are \$40, \$42, \$44 and \$22 (all thousands) over the next four years and bear interest at 3.9%.

Interest Expense

The components of interest expense recognized during the years ended June 30 follows.

	Year ended June 30,	
	2023	2022
	(in thousands)	
Convertible note interest	\$ 3,098	\$ —
Vehicle notes payable interest	7	6
Amortization of debt issuance costs and discount — convertible note	4,907	—
Gross interest expense	8,012	6
Less: amount capitalized to construction in progress	1,158	—
Interest expense, net of amounts capitalized	<u>\$ 6,854</u>	<u>\$ 6</u>
Effective interest rate — convertible note	25.25%	—

9. Convertible Note Derivative

The convertible note derivative related to the Convertible Note described above and was valued upon initial recognition at fair value using a with-and-without methodology utilizing a binomial lattice model (Level 3). Prior to its derecognition, the convertible note derivative was re-measured at fair value at each period end using a Black-Scholes option valuation model with the resulting gain or loss recognized in the statement of operations. As described above in Note 8, the fair value of the convertible note derivative was transferred to additional paid-in capital during the three months ended December 31, 2022.

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

The components of changes to the fair value of the convertible note derivative for the year ended June 30, 2023 are summarized below.

	(in thousands)
Convertible note derivative — June 30, 2022	\$ —
Additions	24,896
Fair value adjustment (gain) loss	(11,743)
Reclassified to additional paid-in capital	(13,153)
Convertible note derivative — June 30, 2023	<u>\$ —</u>

10. Equity

We are authorized to issue up to 180,000,000 shares of common stock, par value \$0.01 per share, and 20,000,000 shares of preferred stock, par value, \$0.01 per share. We have no outstanding shares of preferred stock. During the years ended June 30, 2023 and 2022, we issued 882 thousand and 4.9 million shares of our common stock for cash proceeds of \$3.4 million and \$31.5 million, respectively. Share issue costs of \$797 thousand were incurred during the year ended June 30, 2022.

11. Net 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 stock options, warrants, and convertible securities were exercised or converted into common stock. Diluted loss per share equals basic loss per share as the effect of including dilutive securities in the calculation would be antidilutive. For the years ended June 30, 2023 and 2022, respectively, stock options of 4,724 thousand and 5,092 thousand were excluded from the computation of diluted loss per share as our reported net losses for those periods would be antidilutive.

12. Share Based Compensation

For the years ended June 30, our share based compensation expense included in general and administrative expense consisted of the following.

	<u>2023</u>	<u>2022</u>
	(in thousands)	
Share based compensation expense — service based		
Employee share option plan	\$ 3,064	\$ 5,812
2022 Equity Compensation Plan — Options	934	—
2022 Equity Compensation Plan — PSU's	101	—
2022 Equity Compensation Plan — RSU and DSU's	854	646
Total service based compensation	<u>4,953</u>	<u>6,458</u>
Options issued to suppliers	—	238
Consulting stock awards	—	31,033
Total share based compensation expense	<u>\$ 4,953</u>	<u>\$ 37,729</u>

As of June 30, 2023, we had approximately \$5.5 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 1.7 years.

2022 Equity Compensation Plan

In March 2022, our 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 authorized the grant of stock options, restricted share units, performance share units, director share units, performance cash units and other equity-based awards. Our 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 our common stock on the date of grant. As of June 30, 2023, approximately 1.4 million shares of common stock were available for issuance under the Incentive Plan. It is our policy to issue new shares of common stock to satisfy stock option exercises.

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

Employee Share Option Plan

Our predecessor parent company ABR established an employee share option plan (“ESOP”). The objective of the ESOP was to assist in the recruitment, reward, retention and motivation of employees and contractors. Individuals may receive the options or nominate a relative or associate to receive the options. The plan was open to executive officers, employees, and eligible contractors. Additionally, the board authorized the awards of options outside of the plan to suppliers and vendors. Vesting periods of options granted varied as determined by the ABR board of directors. The total number of shares authorized for award of share options under the ESOP was limited to 5% of common stock over a 3-year period. During fiscal year 2022, as part of reorganization, 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 at an exchange ratio of one replacement option for every ten ABR options held.

Option Awards

The fair value of stock option awards granted to directors, officers, employees and/or consultants are estimated on the grant date using the Black-Scholes option valuation model and the closing price of our 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, 2023 and 2022, respectively, using the Black-Scholes option valuation model are as follows.

	Year ended June 30,	
	2023	2022
Exercise price	\$7.73 - \$25.62	\$14.62 - \$18.27
Share price	\$4.24 - \$18.03	\$9.87 - \$12.35
Volatility	79% - 105%	69% - 85%
Expected term in years	5 - 10	0.9 to 3.9
Risk-free interest rate	2.91% - 3.56%	0.1% - 1.5%
Dividend rate	Nil	Nil

The following table summarizes stock option activity for each of the periods presented. During the year ended June 30, 2023, the intrinsic value of options exercised was \$6.2 million. The number of options granted by ABR have been adjusted for the Exchange Ratio and the exercise prices have been converted to U.S. dollars using a rate of 1.368 U.S. dollars to one AUD dollar, the exchange rate that existed on the date prior to implementation of the Scheme.

	Year ended June 30,			
	2023		2022	
	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	4,874	\$ 9.67	5,554	\$ 5.19
Granted	800	16.67	1,700	15.39
Exercised	(835)	4.15	(1,904)	2.75
Expired/forfeited	(652)	17.42	(476)	5.48
Outstanding at end of the period	<u>4,187</u>	<u>10.91</u>	<u>4,874</u>	<u>9.67</u>
Vested at the end of the period	3,349	\$ 9.82	3,367	\$ 7.30
Unvested at the end of the period	838	15.23	1,507	6.05

	Year ended June 30,			
	2023		2022	
	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	1,507	\$ 6.05	270	\$ 5.79
Granted	800	7.11	1,700	6.26
Vested	(1,177)	5.88	(463)	4.65
Expired/forfeited	(292)	8.26	-	-
Unvested at end of the period	<u>838</u>	<u>6.42</u>	<u>1,507</u>	<u>6.05</u>

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

The following table provides information about stock options outstanding and exercisable at the end of each period presented.

	<u>Number of Shares</u> (In thousands)	<u>Weighted Average Exercise Price per Share</u>	<u>Weighted Average Remaining Contractual Life</u> (In years)	<u>Aggregate Intrinsic Value</u> (In thousands)
Outstanding and exercisable at:				
June 30, 2023	3,349	\$ 9.82	1.4	\$ -
June 30, 2022	3,367	7.30	1.1	24,568

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

The following table summarizes the activity related to full value awards during the periods presented.

	<u>Serviced- Based Shares</u>	<u>Weighted Average Grant Date Fair Value per Share</u> (In thousands, except per share data)	<u>Performance- Based Shares</u>	<u>Weighted Average Grant Date Fair Value per Unit</u>	<u>Total Shares</u>
Non-vested shares/units outstanding at July 1, 2021					
Granted	48.8	\$ 18.03	19.2 ⁽¹⁾	—	68.0
Non-vested shares/units outstanding at July 1, 2022					
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					
	<u>209.8</u>	\$ 6.78	<u>139.1</u>	\$ 7.20	<u>348.9</u>

⁽¹⁾ During the year ended June 30, 2022, we granted approximately 19.2 thousand performance share units, which based on the generating cumulative revenues of at least \$90 million during the period July 1, 2022 through June 30, 2025, could vest within a range of 0% to 150%. 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 target over the period.

⁽²⁾ During the year ended June 30, 2023, we granted approximately 181.4 thousand performance share units, which based on the achievement of certain operational targets, could vest within a range of 0% to 100%. The operational 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) generate 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 period.

Consulting Stock Awards

Pursuant to an agreement ABR had in place with its U.S.-based advisory board Blue Horizon Advisors LLC (“BHA”), we issued 400,000 shares of common stock to BHA in March 2022 upon the listing of our shares on the NASDAQ. The fair value of these shares of \$13.2 million was recognized as share based compensation and included in general and administrative expenses in the consolidated statement of operations for the year ended June 30, 2022.

Additionally, during the year ended June 30, 2022, we issued a total 600,000 shares to BHA, pursuant to the terms of the Advisory Agreement dated April 16, 2021 and as consideration for Advisory Board services provided. Share based compensation recognized related to these issuances was \$10.0 million and is included in general and administrative expense in our consolidated statement of operations.

The agreement also included a provision enabling BHA to earn an additional 1,000,000 shares of common stock upon meeting four different market-based milestones (250,000 shares per milestone). The market-based milestones were based on our common stock achieving a ten-day volume weighted average price of \$21.94, \$29.25, \$36.57, and \$43.88 before December 31, 2022. The first milestone was reached in March 2022. The fair value of these awards was determined using a Monte Carlo Simulation valuation

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

model, which incorporates assumptions as to stock price volatility, the expected life of awards, a risk-free interest rate and dividend yield. During the year ended June 30, 2022, we recognized related share based compensation expense of \$7.8 million in general and administrative expense in our consolidated statement of operations as all services required for the awards have been fulfilled.

The assumptions used to estimate the fair value of the market-based stock grants under the Monte Carlo Simulation model for the period ended June 30, 2022 are as follows.

Hurdle stock price	\$ 21.94	\$ 29.25	\$ 36.57	\$ 43.88
Volatility	76.82%	76.82%	76.82%	76.82%
Expected term in years	1.12	1.12	1.12	1.12
Risk-free interest rate	0.22%	0.22%	0.22%	0.22%
Expected dividend yield	0%	0%	0%	0%
Estimated fair value per share	\$ 10.68	\$ 9.01	\$ 6.63	\$ 4.88

13. Defined Contribution Plan

We sponsor a defined contribution plan under Section 401(k) of the Internal Revenue Code. This plan covers all of our employees that have attained the age of 21 and have completed three months service with us. We match employee deferrals 100% up to 4% and 50% up to 6% of an employee's eligible earnings, subject to limitations imposed by the IRS. Our contributions to this plan were \$206 thousand and \$128 thousand for the years ended June 30, 2023 and 2022, respectively.

14. Commitments and Contingencies

Purchase Obligations

As of June 30, 2023, we had purchase order commitments of \$7.3 million in respect of construction works in progress, drilling, and technical reports.

Litigation

On July 17, 2023, we filed a complaint (the "Complaint") against Matrix Services Inc. ("Matrix") in the United States District Court for the Central District of California, Eastern Division, alleging, among other things, numerous breaches by Matrix of its contractual obligations to 5EBA under the Procurement and Construction Contract, effective April 26, 2022, by and between 5EBA and Matrix, relating to the construction of the SSF in California (the "Contract"). On August 10, 2023, Matrix filed an answer to the Complaint as well as a counterclaim for, among other things, alleged breaches by 5EBA of its contractual obligations to Matrix under the Contract and has requested relief in the approximate amount of \$5,500,000. We plan on filing a response disputing the counterclaims asserted by Matrix and reaffirming the grounds for recovery raised in the Complaint. This case is still its early stages, and discovery has begun and is ongoing. An estimate of reasonably possible losses, if any, cannot be made at this time.

15. Income Taxes

We did not record a U.S. federal or state income tax benefit for losses incurred during the years ended June 30, 2023 and 2022. We have concluded that it is more likely than not that our 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.

	2023	2022
	(in thousands)	
United States	\$ 30,624	\$ 51,234
Australia	—	15,479
Total net loss	<u>\$ 30,624</u>	<u>\$ 66,713</u>

The following table presents a reconciliation of the United States statutory income tax rate to our effective income tax rate for the years ended June 30.

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

	<u>2023</u>	<u>2022</u>
	(\$ in thousands)	
Loss before income taxes	\$ 30,624	\$ 66,713
Statutory income tax rate	21%	21%
Income tax benefit at statutory tax rates	\$ 6,431	\$ 14,010
State income tax benefit	1,755	2,801
Foreign rate differential	—	822
Share based compensation	(185)	(751)
Disallowed exploration costs	—	(861)
Nondeductible interest on convertible note	(649)	—
Tax return true up	(1,769)	—
Impact of change in functional currency	(743)	—
Other	(256)	97
Change in valuation allowance	(4,584)	(16,118)
Income tax benefit	<u>\$ —</u>	<u>\$ —</u>

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 deferred taxes at June 30 are as follows.

	<u>2023</u>	<u>2022</u>
	(\$ in thousands)	
Deferred tax assets:		
Net operating loss carryforward	\$ 18,781	\$ 14,282
Amortization of exploration expenditures	8,437	6,423
Unrealized loss - translation	—	308
Share based compensation	2,796	1,946
Other deferred tax assets	740	867
Total deferred tax assets	30,754	23,826
Less: valuation allowance	(24,791)	(23,671)
Deferred tax assets, net of valuation allowance to offset	5,963	155
Deferred tax liabilities:		
Debt	(5,773)	—
Depreciation	(33)	(53)
Other deferred tax liabilities	(157)	(102)
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

As of June 30, 2023, we had U.S. federal, state, and Australian net operating loss (“NOL”) carryforwards of \$59.0 million, \$52.0 million and \$9.2 million, respectively. As of June 30, 2022, we had U.S. federal, state, and Australian NOL carryforwards of \$35.1 million, \$29.2 million and \$16.2 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 \$59.0 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 can carryforward all its NOL indefinitely.

The utilization of our 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 so apply, we will adjust the tax attributes accordingly. We face the risk that our ability to use our tax attributes will be substantially restricted if we undergo an “ownership change” as defined in Section 382 of the U.S. Internal Revenue Code, or Section 382.

We evaluate both the positive and negative evidence available to determine the realizability of our deferred tax assets. As of June 30, 2023 and 2022, we had a valuation allowance of \$24.8 million and \$23.7 million, respectively, of which both primarily relate to net operating losses and exploration costs.

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

Changes in the balance of our deferred tax asset valuation allowance during the years ended June 30 were as follows:

	<u>2023</u>	<u>2022</u>
	(\$ in thousands)	
Valuation allowance	\$ 1,120	\$ 15,730

We had no unrecognized tax benefits as of June 30, 2023 or 2022. We recognize interest accrued related to unrecognized tax benefits and penalties in our income tax provision, if applicable. We have not recognized any interest or penalties in the fiscal years presented in these financial statements. We are subject to income tax in the U.S. federal jurisdiction, State of California and Australia. Tax years 2019 and forward remain subject to examination but there are currently no ongoing exams in any taxing jurisdictions.

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 Principal Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures as of June 30, 2023 (the "Evaluation Date"). Based on that evaluation, the Company's Chief Executive Officer and Principal Financial Officer concluded that the Company's disclosure controls and procedures were effective as of the Evaluation Date.

Management's Annual Report on Internal Control Over Financial Reporting

Our management 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. Management's report was not subject to attestation by our registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

Remediation of Previously Reported Material Weakness

During our fiscal year end June 30, 2022, management identified a material weakness in our internal control over financial reporting related to a lack of segregation of duties in the administrative rights of our accounting system. During the quarter ended December 31, 2022, we finalized the design and implementation of the controls to address the material weakness as highlighted below. During the quarter ended June 30, 2023, we finalized testing of the operating effectiveness of the relevant controls. Specifically, the Company took the following steps to remediate this material weakness and concluded that the material weakness was remediated as of June 30, 2023:

- implemented a new accounting system that automates and standardizes system access, including the use of an automated workflow for the preparation and review of journal entries,
- added additional resources, and
- enhanced existing segregation of duties controls within the Company's accounting processes and systems.

The applicable measures have been implemented for a sufficient period of time and management has concluded, through testing, that the enhanced controls are operating effectively.

Changes in Internal Control Over Financial Reporting

Other than as set forth above, 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, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

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 October 27, 2023, 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.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Susan Brennan	61	President, Chief Executive Officer and Director
Paul Weibel, CPA	39	Chief Financial Officer, Treasurer and Corporate Secretary

Ms. Brennan was appointed Chief Executive Officer and President in March 2023 and a Director in June 2023. Previously, Ms. Brennan has served as the President of Susan Brennan Leadership, LLC, a consulting firm that advises companies in the energy, automotive, and technology industries, since October 2022. Before launching Susan Brennan Leadership, LLC, Ms. Brennan served as the President and Chief Executive Officer of Romeo Power, an energy technology leader delivering electrification solutions for complex commercial vehicle applications, from August 2021 to October 2022. From November 2013 to August 2021, Ms. Brennan served as the Chief Operations Officer of Bloom Energy Corporation. Previously, she spent decades in a variety of leadership positions in the automotive manufacturing industry, including at Nissan North America, the Ford Motor Company, and the Douglas and Lomason Company. Ms. Brennan holds a MBA in Economics from the University of Nebraska at Omaha and a Bachelor of Science in Microbiology from the University of Illinois-Campaign-Urbana.

Paul 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, and director of Fort Cady (California) Corporation in April 2022. Mr. Weibel was appointed Corporate Secretary in June 2023. Mr. Weibel served as Corporate Secretary of Fort Cady (California) Corporation from August 2021 to April 2022 and Treasurer since April 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 2014. Paul holds a Bachelor of Science in Accounting and Finance from Lehigh University.

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 October 27, 2023, the names and ages of the members our Board of Directors. Biographies of each director are included below the table.

<u>Name</u>	<u>Age</u>	<u>Current Position</u>
David Jay Salisbury	71	Chairman of the Board
Susan Brennan	61	President, Chief Executive Officer and Director
Stephen Hunt	60	Director
Sen Ming Lim	49	Director
H. Keith Jennings	52	Director
Graham van't Hoff	60	Director

Board Skills Matrix

	David Jay Salisbury	Susan Brennan	Stephen Hunt	H. Keith Jennings	Sen Ming (Jimmy) Lim	Graham van't Hoff	Total
Executive Leadership	✓	✓	✓	✓	✓	✓	6
Mining/Rare Earth Minerals/Specialty							
Chemicals Industry Experience	✓			✓		✓	3
Business Operations	✓	✓		✓		✓	4
Strategic Development/Planning	✓	✓	✓	✓	✓	✓	6
Corporate Governance				✓		✓	2
Financial and Accounting				✓			1
Marketing, Branding and Consumer Insights		✓					1
Capital Markets				✓	✓		2
ESG Leadership	✓	✓		✓		✓	4
M&A Experience		✓		✓	✓	✓	4
International Experience	✓	✓	✓	✓	✓	✓	6

Board Diversity Matrix (as of October 27, 2023)

Total Number of Directors: 6

Part I: Gender Identity	Female	Male	Nonbinary	Did Not Disclose
Directors	1	5	—	—
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	1	3	—	—
Two or More Races or Ethnicities	—	—	—	—
LGBTQ+	—	—	—	—
Did Not Disclose Demographic Background	—	—	—	—

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. 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.

Stephen Hunt was appointed as a Director in January 2022. Mr. Hunt has also served as a Director of ABR since May 2017. Mr. Hunt is currently Executive Chairman of Sparc Technologies Ltd. (ASX: SPN), which is developing and commercializing graphene applications as well as photocatalytic hydrogen production and sodium ion anode material. Mr. Hunt's experience includes over 20 years of serving as a Director of multiple ASX-listed companies. Previous Directorships include Executive Chairman and Non-Executive Director of Volt Resources Ltd. (ASX: VRC), Non-Executive Director of Magnis Energy Technologies Ltd. (ASX: MNS), Non-Executive Director of IMX Resources Ltd. and Australian Zircon Ltd.

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 (J.P. Morgan) and Hong Kong (Morgan Stanley and Goldman Sachs). Mr. Lim has served as a Non-Executive Director of Stanmore Resources Limited since October 2019 and as a Director of Virtova Alpha Investments Limited since November 2018.

Mr. 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 served as Executive Vice President and Chief Financial Officer of Weatherford International (NASDAQ: WFRD). Prior to this, 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 also served as the Vice President & Treasurer of Cameron International (NYSE: CAM). Mr. Jennings holds a Bachelor of Commerce from the University of Toronto and an MBA from Columbia University and is a Chartered Professional Accountant.

Mr. Graham van't Hoff was appointed as a 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. Mr. van't Hoff finished his 35 year career with Royal Dutch Shell PLC (NYSE: SHEL) as the Executive Vice President of Global Chemicals 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 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 strategic objectives and leading corporate governance practices.

Corporate Governance

Our Board believes sound corporate-governance processes and practices, as well as high ethical standards, are critical to handling challenges and to achieving business success. We embrace leading governance practices and conduct ongoing reviews of our governance structure and processes to reflect changing circumstances. Below are highlights of our corporate-governance practices and principles.

Director Independence

Our Common Stock is listed on the Nasdaq Stock Market (the "Nasdaq"). Under the rules of the Nasdaq, independent directors must comprise a majority of a listed company's board of directors within one year of listing on the Nasdaq. In addition, subject to specified exceptions, each member of a listed company's audit, compensation, and nominating and corporate governance committees must be independent. Under the rules of the Nasdaq, a director will only qualify as an "independent director" if the director has no relationship which, in the opinion of the Company's board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Audit Committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries.

At least annually, our Board evaluates all relationships between us and each director in light of relevant facts and circumstances for the purposes of determining whether a relationship exists that might interfere with such director's ability to satisfy his or her responsibilities as an independent director. Based on this evaluation, our Board will make an annual determination of whether each director is independent within the meaning of the independence standards of Nasdaq and the SEC.

Our Board has determined that each of Messrs. Salisbury, Hunt, Jennings, and van't Hoff qualifies as an "independent director" as defined under the rules of the Nasdaq. Ms. Brennan and Mr. Lim are not independent. Our Board also has determined that Messrs. Jennings, Hunt, and Salisbury, who comprise our Audit Committee, Messrs. van't Hoff and Jennings, who comprise our Compensation Committee, and Messrs. Salisbury and van't Hoff, 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.

Board Leadership Structure

Our Corporate Governance Guidelines provide that the Board will determine the Board leadership structure in a manner that it determines to be in the best interests of the Company and its stockholders. The Chairman of the Board and CEO positions may, but need not be, filled by the same individual. At this time, the offices of the Chairman of the Board and the CEO are not combined. If the offices were combined, the Board would appoint a lead independent director to coordinate the activities of the other independent directors and to perform such other duties and responsibilities as the Board may determine.

Role of the Board in Risk Oversight

The Board is responsible for the oversight of risk, while management is responsible for the day-to-day management of risk. The Board, directly and through its committees, carries out its oversight role by regularly reviewing and discussing with management the risks inherent in the operation of our business and applicable risk mitigation efforts. Management meets regularly to discuss the Company's business strategies, challenges, risks and opportunities and reviews those items with the Board at regularly scheduled meetings. The Compensation Committee is responsible for overseeing the management of risks relating to our compensation plans and arrangements, including whether the Company's incentive compensation plans encourage excessive or inappropriate risk taking. The Audit Committee is responsible for overseeing our risk assessment and management processes related to, among other things, our financial reports and record-keeping, major litigation and financial risk exposures and the steps management has taken to monitor and control such exposures. The Nominating and Corporate Governance Committee is responsible for risk oversight associated with corporate governance practices and the composition of our Board and its committees.

Board Committees

Our Board has established an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The composition and responsibilities of each of the committees of our Board are described below. Copies of the charters of the committees are available on the investor relations page of 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 10-K. Members serve on these committees until their resignation or until otherwise determined by our Board. Our Board may establish other committees as it deems necessary or appropriate from time to time.

The following table provides membership and meeting information for 2023 for each of these committees of our Board with directors marked with an asterisk (*) identified as committee chair:

Name	Audit	Nominating and Corporate Governance	Compensation
David Jay Salisbury	✓	✓	
Stephen Hunt	✓		
H. Keith Jennings	✓*		✓
Sen Ming (Jimmy) Lim			
Graham van't Hoff		✓*	✓*
Susan Brennan			

Audit Committee

Messrs. Jennings, Hunt and Salisbury are the members of the Audit Committee. Mr. Jennings is the Chairman of the Audit Committee. Each proposed member of the Audit Committee qualifies as an independent director under the Nasdaq corporate governance standards and the independence requirements of Rule 10A-3 of the Exchange Act. Our Board has determined that Mr. Jennings qualifies as an "audit committee financial expert" as such term is defined in Item 407(d)(5) of Regulation S-K, and that each of the members is able to read and understand fundamental financial statements, as defined under the rules of the Nasdaq.

Under its charter, the functions of the Audit Committee include, among other things:

- the Company's accounting and financial reporting processes and the integrity of its financial statements;

- the audits of the Company’s financial statements and the appointment, compensation, qualifications, independence and performance of the Company’s independent auditors;
- the Company’s compliance with legal and regulatory requirements; and
- the performance of the Company’s internal accounting controls, disclosure controls and procedures and internal control over financial reporting.

The Audit Committee held a total of 5 meetings during the fiscal year ended June 30, 2023. The meetings attended by each Director, and the number of meetings that they were each eligible to attend, is as follows:

Name	Meetings Attended	Eligible to Attend
David Jay Salisbury*	3	3
Stephen Hunt*	5	5
H. Keith Jennings*	3	3
Sen Ming (Jimmy) Lim	2	2

*current member

Compensation Committee

Messrs. van’t Hoff and Jennings are the members of the Compensation Committee. Mr. van’t Hoff is the Chairman of the Compensation Committee. All of the members of the Compensation Committee are independent directors and are considered to be a “non-employee director” under Rule 16b-3 of the Exchange Act.

Under its charter, the functions of the Compensation Committee include, among other things:

- determine, or recommend to the Board for determination, the compensation of the Chief Executive Officer (the “CEO”) and all other executive officers (as defined herein) of the Company;
- make recommendations to the Board with respect to (to the extent set forth in this charter or otherwise directed by the Board) compensation of the non-employee directors;
- make recommendations to the Board with respect to incentive compensation plans and equity-based plans that are subject to Board approval;
- exercise oversight with respect to the Company’s compensation philosophy, incentive compensation plans and equity-based plans covering executive officers and senior management;
- review and discuss with management the Company’s Compensation Discussion & Analysis required by SEC rules to be included in the Company’s proxy statement and annual report on Form 10-K; and
- produce the annual compensation committee report for inclusion in the Company’s proxy statement and annual report on Form 10-K.

The Compensation Committee charter also provides that the Compensation Committee shall have the sole authority to retain or obtain the advice of a compensation consultant, legal counsel or other adviser. However, before engaging or receiving advice from a compensation consultant, external legal counsel or any other adviser, the Compensation Committee will consider the independence of each such adviser.

The Compensation Committee held a total of 4 meetings during the fiscal year ended June 30, 2023. The meetings attended by each Director, and the number of meetings that they were each eligible to attend, is as follows:

Name	Meetings Attended	Eligible to Attend
Graham van’t Hoff*	2	2
H. Keith Jennings*	2	2
David Jay Salisbury	2	2
Stephen Hunt	2	2

*current member

Nominating and Corporate Governance Committee

Messrs. Salisbury and van't Hoff are members of the Nominating and Governance Committee. Mr. van't Hoff is the Chairman of the Nominating and Corporate Governance Committee. All of the members of the Nominating and Governance Committee are independent directors.

Under its charter, the functions of the Nominating and Corporate Governance Committee include, among other things:

- identify and recommend to the Board for selection the individuals qualified to serve on the Company's Board (consistent with criteria that the Board has approved) either for election by stockholders at each meeting of stockholders at which directors are to be elected or for appointment to fill vacancies on the Board;
- develop, recommend to the Board and assess corporate governance policies for the Company; and
- oversee the evaluation of the Board.

The Nominating and Corporate Governance Committee has the sole authority to retain and terminate any search firm to be used to identify director candidates and shall have sole authority to approve the search firm's fees and other retention terms.

The Nominating and Corporate Governance Committee meets periodically, and no less frequently than annually, to assess, develop and communicate with the full Board concerning the appropriate criteria for nominating and appointing directors, including the Board's size and composition, corporate governance policies, applicable listing standards and laws, individual director performance, expertise, experience, qualifications, attributes, skills, tenure and willingness to serve actively, the number of other public and private Company Boards on which a director candidate serves, consideration of director nominees proposed or recommended by stockholders and related policies and procedures, and other appropriate factors. Whenever a new seat or a vacated seat on the Board is being filled, candidates that appear to best fit the needs of the Board and the Company will be identified, interviewed and evaluated by the Nominating and Corporate Governance Committee. Potential director candidates recommended by the Company's management and stockholders are evaluated in the same manner as nominees identified by the Nominating and Corporate Governance Committee. Candidates selected by the Nominating and Corporate Governance Committee will then be recommended to the full Board.

The Nominating and Corporate Governance Committee held a total of 4 meetings during the fiscal year ended June 30, 2023. The meetings attended by each Director, and the number of meetings that they were each eligible to attend, is as follows:

Name	Meetings Attended	Eligible to Attend
David Jay Salisbury*	4	4
Graham van't Hoff*	2	2
Sen Ming (Jimmy) Lim	2	2

*current member

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. 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.

Election of Directors

We have voluntarily adopted a majority-voting standard for uncontested elections of directors. Our Bylaws provide that, unless otherwise required by law or our Certificate of Incorporation or Bylaws, the election of our directors will be decided by a majority of the votes cast at a meeting of the stockholders by the holders of stock entitled to vote in the election, unless our Secretary determines that the number of nominees for director exceeds the number of directors to be elected, in which case directors will be elected by a plurality of the votes of the shares represented in person or by proxy at any meeting of stockholders held to elect directors and entitled to vote on such election of directors.

If a nominee for director who is not an incumbent director does not receive a majority of the votes cast, the nominee will not be elected. Our Nominating and Corporate Governance Committee has established procedures under which a director standing for reelection in an uncontested election must tender a resignation conditioned on the incumbent director's failure to receive a majority of the votes cast. If an incumbent director who is standing for reelection does not receive a majority of the votes cast, the Nominating and Corporate Governance Committee will make a recommendation to the Board of Directors on whether to accept or reject the resignation, or whether other action should be taken. The Board of Directors must act on the committee's recommendation and publicly disclose its decision and the rationale behind it within 90 days from the date of the certification of the election results. The

director who fails to receive a majority vote is not permitted to participate in the committee's recommendation or the Board of Directors' decision.

Corporate Governance Guidelines and Code of Business Conduct

We have adopted Corporate Governance Guidelines and a written Code of Business Conduct, which are available on our website at <https://5advancedmaterials.com/investors/corporate-governance/>. The information in or accessible through our website is not incorporated into, and is not considered part of, this 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 Business Conduct and Ethics is applicable to our directors, executive officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. The Code of Business Conduct and Ethics 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 of directors. Any such waivers granted, as well as substantive amendments to this Code, will be publicly disclosed by appropriate means in compliance with applicable listing standards and SEC rules.

Stockholder Communications

Any stockholder or other interested party who wishes to communicate with our Board or any individual director may send written communications to our Board or such director, care of 5E Advanced Materials, Inc., 9329 Mariposa Road, Suite 210, Hesperia, California, 92344, Attention: Corporate Secretary. Our Corporate Secretary shall initially review and compile all such communications and may summarize such communications prior to forwarding to the appropriate party. Our Secretary will not forward communications that are not relevant to the duties and responsibilities of the Board. The Board will generally respond, or cause the Company to respond, in writing to bona fide communications from stockholders addressed to one or more members of the Board.

Delinquent Section 16(a) Reports

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 Securities and Exchange Act of 1934, 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 2023, except for the following (i) each member of the Board of Directors have not filed a Form 4 with respect to their director grants received on June 29, 2022 and July 1, 2022; and (ii) each executive officer has not filed a Form 4 with respect to their employee grants received on May 9, 2022, June 29, 2022, August 15, 2022, and September 1, 2022. These late filings are not due to the fault of any of the individuals above.

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://5advancedmaterials.com/investors/corporate-governance/>

Item 11. Executive Compensation

Introduction and Named Executive Officers

During fiscal year 2023, our named executive officers or “NEOs” were:

Name	Age	Position
Susan Brennan ⁽¹⁾	61	President, Chief Executive Officer and Director
Henri Tausch ⁽²⁾	58	Former Chief Executive Officer and Director
Anthony Hall ⁽³⁾	48	Performed the functions of Principal Executive Officer
Paul Weibel, CPA ⁽⁴⁾	39	Chief Financial Officer, Treasurer and Corporate Secretary
Dinakar Gnanamgari ⁽⁵⁾	40	Former Chief Commercial Officer

- On March 21, 2023, the Board appointed Susan Brennan as Chief Executive Officer effective April 24, 2023.
- On September 28, 2022, the Board accepted the resignation of Henri Tausch as President and Chief Executive Officer and as a member of the Board, effective as of October 31, 2022.
- On October 1, 2022, the Board engaged the services of Anthony Hall to perform the functions of the Company’s Principal Executive Officer until the appointment of Susan Brennan.
- Paul Weibel was appointed Corporate Secretary in June 2023.
- On May 12, 2023, Dinakar left the Company as part of cost cutting measures.

Summary Compensation Table

	Fiscal Year Ended June 30,	Salary (\$)	Bonus (\$)	Stock Awards ⁽¹⁾ (\$)	Option Awards ⁽²⁾ (\$)	All Other Compensation (\$)	Total (\$)
Susan Brennan	2023	96,154	— ⁽⁸⁾	1,000,000	1,480,000	—	2,576,154
Henri Tausch	2023	196,250	—	—	—	914,191 ⁽³⁾	1,110,441
	2022	351,000	278,582	79,174	2,478,908	19,554 ⁽⁴⁾	3,207,218
Anthony Hall	2023	—	—	—	—	286,776 ⁽⁵⁾	286,776
Paul Weibel	2023	297,033	— ⁽⁸⁾	221,993	—	77,510 ⁽⁶⁾	596,536
	2022	245,192	80,831	22,564	1,564,384	46,936 ⁽⁶⁾	1,959,907
Dinakar Gnanamgari	2023	274,598	—	124,591	—	98,181 ⁽⁷⁾	497,370
	2022	250,961	100,000	22,564	1,173,907	12,298 ⁽⁴⁾	1,559,730

- The amounts reported in this column represent the aggregate grant-date fair value of stock awards granted in the relevant year compiled in accordance with FASB Topic 718, excluding forfeiture estimates. Stock Awards comprise Restricted Stock Units (“RSUs”) and Performance Stock Units (“PSUs”). For additional details regarding Stock Awards, see “— Outstanding Equity Awards at Fiscal Year End” below. Based on a probability analysis, no value was reported for the 2022 PSUs granted.
- The amounts reported in this column represent the aggregate grant-date fair value of option awards granted in the relevant year compiled in accordance with FASB Topic 718, excluding forfeiture estimates. For additional information regarding the valuation assumptions used to determine the grant-date fair value of option awards in this column, see footnote 12 to our consolidated financial statements in Item 8 of this Form 10K. For additional details regarding Option Awards, see “— Outstanding Equity Awards at Fiscal Year End” below.
- Amount reflects \$881.7 thousand in severance and \$32.4 thousand in employer match contributions under our 401(k) plan.
- These amounts reflect employer match contributions under our 401(k) plan.
- Amount reflects amounts paid to Mr. Hall as compensation for performing the functions of the Company's Principal Executive Officer from October 2022 through April 2023.
- Amounts reflect \$60 thousand and \$35 thousand paid to Mr. Weibel during 2023 and 2022, respectively as reimbursement for relocation costs. The remaining amounts in both years reflect employer match contributions under our 401(k) plan.
- Amount reflects \$91.7 thousand paid as severance to Mr. Gnanamgari and \$6.5 thousand in employer match contributions under our 401(k) plan.
- The Company's Compensation Committee approved fiscal year 2023 bonuses for Susan Brennan and Paul Weibel in the amount of \$80,000 and \$95,000, respectively. The amounts are contingent upon the closing of an equity financing.

Employment Agreements

We had employment agreements with each of the above NEOs.

Susan Brennan

Under the terms of Ms. Brennan's employment agreement, Ms. Brennan will receive a base salary of \$500,000 per year and was eligible to earn a target bonus opportunity of eighty percent (80%) of her annual base salary. She received an annual equity award for fiscal year 2023 with a value equivalent to \$1.0 million, which consisted of 117,925 restricted share units ("RSUs") and 117,925 performance share units ("PSUs"). Ms. Brennan also received an additional one-time sign-on bonus of 400,000 stock options having a per share exercise price of \$7.73.

Ms. Brennan's Employment Agreement provides severance benefits to her if her employment is terminated by the Company for reasons other than for cause, or by Ms. Brennan for good reasons (as each term is defined in the employment agreement). However, if such termination is 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 would receive a higher level of severance benefits. Severance benefits under the Employment Agreement and in connection with a change of control are "double trigger" and any payments under the Employment Agreement are subject to Ms. Brennan's execution of a general release in favor of the Company and its affiliates, and their respective officers and directors, as well as compliance with a perpetual confidentiality obligation, a non-disparagement obligation, a covenant not to compete, and a covenant not to solicit the Company's customers or employees during employment and for 18 months following any termination of employment. Finally, pursuant to the terms of the equity awards Ms. Brennan receives under the Equity Compensation Plan, if Ms. Brennan is terminated by the Company for reasons other than for cause, by her for good reason, or by reason of her death or disability, she may be entitled to accelerated vesting, and/or pro-rated vesting, for certain of her equity or equity-linked awards, depending on whether the termination is during a Change in Control Period.

Paul Weibel

Under the terms of Mr. Weibel's employment agreement, Mr. Weibel's salary in fiscal year 2023 was \$300,000. 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). During the year ended June 30, 2022, Mr. Weibel received options to purchase 250,000 common shares in our stock with a weighted average per-share exercise price equal to \$16.08 and vest in accordance with the terms of each award (see footnote (4) to table below), subject to his continued employment. Mr. Weibel's retirement benefits are paid in accordance with 401(k) requirements. Mr. Weibel's Employment Agreement provides severance benefits to him if his employment is terminated by the Company for reasons other than for cause. Severance benefits under the Employment Agreement, which include six months of annual base pay, six months COBRA coverage and the continued vesting of outstanding equity based compensation awards, are subject to Mr. Weibel's execution of a general release as well as compliance with a perpetual confidentiality obligation.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth the outstanding equity awards held by our directors and NEOs as of June 30, 2023.

Named	Option Awards				Stock Awards			
	Number of Common Stock Underlying Unexercised Options (#) Exercisable	Number of Common Stock Underlying Unexercised Options (#) Unexercisable	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 (\$) ⁽⁷⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested ⁽⁸⁾	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested (\$) ⁽⁷⁾
Named Executive Officers								
Susan Brennan	—	400,000 ⁽¹⁾	7.73	4/24/2033	117,925 ⁽³⁾	386,794	117,925	386,794
Paul Weibel	100,000	150,000 ⁽²⁾	16.08	10/1/2025	11,041 ⁽⁴⁾	36,214	7,976	26,161
Directors								
David Salisbury	200,000	—	6.58	7/6/2024	19,736 ⁽⁵⁾	64,734	—	—
Stephen Hunt	—	—	—	—	12,379 ⁽⁵⁾	40,603	—	—
Sen Ming (Jimmy) Lim	—	—	—	—	11,087 ⁽⁵⁾	36,365	—	—
H. Keith Jennings	—	—	—	—	9,889 ⁽⁶⁾	32,436	—	—
Graham Van't Hoff	—	—	—	—	8,479 ⁽⁶⁾	27,811	—	—

- Options vest cliff vest on April 24, 2026.
- 133,333 options vest in equal annual installments on each of November 29, 2023 and 2024 and 16,667 options vest on May 18, 2024.
- RSUs vest, subject to continued employment, in equal annual installments on each of April 24, 2024, 2025 and 2026.
- 1,851 RSUs vest, subject to continued employment, 40% on June 29, 2024, and 60% on June 29, 2025 and 9,190 RSUs vest in equal annual installments on each of September 1, 2023, 2024 and 2025
- 3,701 DSUs vest on the date of the second annual meeting of stockholders after the date of grant and the remaining RSUs vest on July 31, 2023.
- DSUs/RSUs vest on July 1, 2023.
- The value of each stock award is based on the target number of shares of Common Stock into which such stock award may convert and the closing price of our Common Stock on June 30, 2023.
- PSUs cliff vest, subject to continued employment, on the third anniversary of the grant date, subject to achievement of performance objectives.

2022 Equity Compensation Plan

We have adopted the 5E Advanced Materials, Inc. 2022 Equity Compensation Plan for purposes of granting options in us and other awards based on our shares to employees and other service providers of ours. The following is a summary of the principal terms of the Incentive Plan, which is qualified in its entirety by reference to the full text of the Incentive Plan, which is filed as an exhibit hereto and incorporated herein by reference.

Purpose of the Plan

The purpose of the Incentive Plan is to promote our financial interests by providing a means through which our current and prospective directors, officers, key employees, and consultants can be retained and motivated through acquiring an equity interest in us or be paid incentive compensation in the form of our Common Stock.

Administration of the Plan

The Incentive Plan is administered by the Board of Directors or, to the extent it has delegated its authority under the Incentive Plan, the Compensation Committee of the Board (or such other committee of the Board) (the "Administrator"). The Compensation Committee comprises "nonemployee directors" for purposes of Rule 16b-3 under the Exchange Act. The Administrator has the power in its discretion to grant awards under the Incentive Plan, to designate the eligible participants, to determine the terms and conditions of such awards, to construe and interpret the provisions of the Incentive Plan, and to make any other determination and take any other action as it deems necessary or desirable for the administration of the Incentive Plan and to protect our interests, among other authority provided under the Incentive Plan.

Number of Authorized Shares

The aggregate number of shares of Common Stock that may be issued or transferred pursuant to awards granted under the Incentive Plan may not exceed 2,500,000 shares of Common Stock. The number of shares that may be issued to any individual under the Incentive Plan (when combined with all of our other securities-based arrangements, as applicable) may not exceed 2% our outstanding number of issued shares from time to time.

The maximum number of shares subject to awards granted during a single fiscal year to any nonemployee director, taken together with any cash fees paid to such nonemployee director during the fiscal year, may not exceed \$750,000 in total value (calculating the value of any such awards based on the grant-date fair value of such awards for financial-reporting purposes).

In the event of certain changes in our capitalization, the Administrator will adjust the number, class and type of securities available for issuance under the Incentive Plan and all awards shall be adjusted in accordance with certain tax requirements. Except as described below, shares subject to an award under the Incentive Plan that are terminated, canceled, or forfeited will be available for subsequent awards under the Incentive Plan. Shares withheld in payment of the exercise price of an option or withholding taxes related to an award will be returned to the Incentive Plan share reserve for future grants of awards under the Incentive Plan and will not reduce the Incentive Plan Share Reserve. To the extent an award under the Incentive Plan is paid out in cash rather than Shares, such cash payment will not reduce the number of Shares available for issuance under the Incentive Plan Share Reserve.

Eligibility and Participation

Eligibility to participate in the Incentive Plan is generally limited to our employees, consultants, directors, and officers or those of any of our affiliates.

Types of Awards under the Incentive Plan

The Incentive Plan authorizes the Administrator to grant awards, individually or collectively, to recipients in any of the following forms, subject to such terms, conditions, and provisions as the Administrator may determine to be necessary or desirable:

7. nonqualified stock options (“NSOs”);
8. restricted share units (“RSUs”);
9. performance share units (“PSUs”);
10. director share units (“DSUs”);
11. performance cash units (“PCUs”); and
12. other equity-based awards.

Term of Awards

The term of each award will be determined by the Administrator and stated in the award agreement. In the case of an option, the term may not exceed 10 years from the grant date or such shorter term as may be provided in the award agreement.

Options

Stock options entitle the option holder to purchase shares at a price established by the Administrator. The Administrator will determine the terms of the options, including the vesting and other conditions that must be satisfied for the vesting and exercisability of such awards.

Exercise Price

The Administrator will determine the exercise price of each option at the date of grant, which price may not be less than 100% of the fair market value of the underlying Shares on the date of grant. The Incentive Plan prohibits the reduction of the exercise price of options without stockholder approval, other than in connection with a change in our capitalization.

Exercise of Options

An option holder may exercise his or her Options by delivering notice of the number of Options that are being exercised accompanied by payment in full of the applicable exercise price, in such form and pursuant to such procedures as we may designate from time to time, and may consist of any consideration and method of payment authorized by the Board and permitted by the award agreement and the Incentive Plan.

Separation from Service

In the event that an Incentive Plan participant’s service with us ceases during the vesting period, any unvested options, RSUs, PSUs, and PCUs held by the participant shall expire and be forfeited immediately; provided, however, that the Administrator shall have the absolute discretion to accelerate the vesting of such awards. In respect of options, except as otherwise provided in an award agreement, vested options must be exercised in accordance with the terms of the Incentive Plan by the earlier of the first anniversary date of the termination of service and the expiry date of the option. In respect of PSUs and PCUs, should the Administrator choose to

accelerate vesting of PSUs or PCUs, performance-vesting conditions will be waived. In respect of DSUs, all unvested DSUs will automatically vest on the first business day following the date the individual ceases to hold any directorship with us or one of our affiliates.

Stock Awards

Stock awards, including RSUs, PSUs, DSUs, and other types of awards deriving their value from the Shares, may be granted under the Incentive Plan. These stock awards may be denominated in Shares or units payable in Shares (e.g., RSUs) and may be settled in cash, Shares, or a combination of cash and Shares. Dividend equivalent rights, which represent a right to receive the equivalent value of dividends paid on Shares, may be granted in connection with DSUs. The Administrator will determine the terms of stock awards, including the vesting and other conditions that must be satisfied for the vesting of such awards.

Tax Withholding

The Administrator may require a recipient to remit and will have the right to deduct or withhold an amount sufficient to satisfy applicable withholding tax requirements with respect to any award granted under the Incentive Plan.

Change in Control

The effect, if any, of certain transactions described in the Incentive Plan constituting a change in control of us on any awards outstanding at the time immediately prior to such change in control will be specifically set forth in the corresponding award agreement, or if no such treatment is specified, then such outstanding awards shall be subject to any agreement of purchase, merger, or reorganization that effects such change in control, which agreement shall provide for treatment of such awards.

Termination and Amendment of the Incentive Plan

The Board or the Committee may amend, suspend, or terminate the Incentive Plan or any award at any time, subject to any required shareholder approval and any required consent from participants to the extent required under the Incentive Plan or by applicable law.

Term of Plan

The Incentive Plan became effective on the date of our admission to, and the listing of shares for trading on, Nasdaq, and will continue in effect until terminated through a resolution by the Board, provided that the termination of the Incentive Plan will not affect awards then outstanding, and the terms and conditions of the Incentive Plan shall continue to apply to such awards.

Retirement Plan and Employee Benefits

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.

Compensation of Directors

The following table sets forth the compensation earned by our directors during the year ended June 30, 2023.

Name	Fees earned or paid in cash (\$)	Stock awards (\$)	Total (\$)
David Salisbury	128,000	106,445 ⁽¹⁾	234,445
Stephen Hunt	70,304	60,887 ⁽²⁾	131,191
Sen Ming (Jimmy) Lim	60,717	54,607 ⁽³⁾	115,324
H. Keith Jennings	60,012	59,549 ⁽⁴⁾	119,561
Graham Van't Hoff	132,189	27,811 ⁽⁵⁾	160,000

⁽¹⁾ 16,035 RSUs

⁽²⁾ 8,678 RSUs

⁽³⁾ 7,386 RSUs

⁽⁴⁾ 8,676 RSUs, 1,213 DSUs

⁽⁵⁾ 8,479 RSUs

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 October 27, 2023, 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 and director nominee, 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 October 27, 2022, 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 October 26, 2023 was 44,237,054.

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				
Susan Brennan	—	—	—	*
Paul Weibel	—	169,730	169,730	*
Directors				
David Salisbury	17,387	200,000	217,387	*
Stephen Hunt ⁽³⁾	145,131	—	145,131	*
H. Keith Jennings	6,229	—	6,229	*
Sen Ming (Jimmy) Lim ⁽⁴⁾	5,135,189	—	5,135,189	11.61%
Graham van't Hoff	9,591	—	9,591	*
All directors and named executive officers as a group (seven persons)	<u>5,313,527</u>	<u>369,730</u>	<u>5,683,257</u>	<u>12.85%</u>

*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 October 26, 2023.
- (3) Includes 82,797 shares of our Common Stock held by Mr. Hunt individually, 20,834 shares of our Common Stock held in Mr. Hunt's superannuation fund, and 41,500 shares of our Common Stock held by Minerals and Metals Pty Ltd., a corporation of which Mr. Hunt is the sole stockholder and director.
- (4) 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 October 27, 2023. The table

also sets out the names of all persons (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.

Name and Address of Beneficial Owner	Number of Shares	Percentage of Outstanding Common Stock ⁽¹⁾
Virtova Capital Management Limited ⁽²⁾ Room 1104, Crawford House, 70 Queen's Road Central Central, Hong Kong, SAR	5,128,206	11.59%
Atlas Precious Metals Inc. ⁽³⁾ 100 King Street, W#1600 Toronto, Ontario, M5X1G5, Canada	4,092,000	9.25%
Mayfair Ventures Pte Ltd ⁽⁴⁾ 62 Ubi Road 1, 02-01 Oxley Bizhub 2, Singapore, 408734	3,563,954	8.06%
BEP Special Situations IV LLC ⁽⁵⁾ 300 Crescent Court, Suite 1860 Dallas, TX 75201	3,611,438	8.16%

- Includes shares of Common Stock represented by CDIs. Shares of Common Stock that BEP Special Situations IV LLC may acquire through conversion of the Convertible Notes are not deemed outstanding for purposes of computing the percentage beneficially owned by any other person.
- 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.
- 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.
- 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.
- BEP Special Situations IV LLC ("BEP SS IV") directly holds the Convertible Notes, which are convertible pursuant to the Note Purchase Agreement into 3,409,091 shares of Common Stock. 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. The foregoing information is derived from the Schedule 13G filing of BEP SS IV and Bluescape GP dated August 26, 2022.

Australian Disclosure Requirements

In addition to the Company's primary NASDAQ listing, the Company's Common Stock is 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 in the United States of America 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 the Company's 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, 2023, the Company had 44,218,406 shares of Common Stock on issue, of which:

- 14,017,918 shares of Common Stock were held by 20 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
- 30,200,488 shares of Common Stock were held by CHES Depositary Nominees Pty Ltd (as Depositary Nominee) on behalf of 3,991 CDI holders, representing 302,004,880 CDIs quoted on ASX.

In addition, as of July 31, 2023, the Company had the following unquoted securities on issue which entitle the holder (upon vesting) to be issued Common Stock:

- 4,187,333 unquoted options, held by 25 option holders;
- 11,103 Director Share Units, held by 3 directors of the Company pursuant to the Company's 2022 Equity Compensation Plan;
- 148,248 Restricted Share Units, held by 12 employees and directors of the Company pursuant to the Company's 2022 Equity Compensation Plan;
- 139,184 Performance Share Units, held by 12 employees and directors of the Company pursuant to the Company's 2022 Equity Compensation Plan; and
- 60,000 Convertible Notes held by Bluescape pursuant to the Convertible Note Purchase Agreement.

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 CDI's, at July 31, 2023 and assuming all shares of Common Stock are held as CDIs.

	Number of Holders	Number of CDIs
1-1,000	776	389,941
1,001-5,000	1,205	3,333,190
5,001-10,000	540	4,204,189
10,001-100,000	1,172	41,429,586
100,001 and over	298	252,647,974
	3,991	302,004,880

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 94, based on the closing price of the Company's common stock and CDIs as of July 31, 2023.

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 at July 31, 2023 and assuming all shares of Common Stock are held as CDIs.

Name	Number of CDIs Held ⁽¹⁾	Percentage of CDIs
1 Virtova Capital Management Limited	51,282,060	17.0%
2 Mayfair Ventures Pte Ltd	35,639,540	11.8%
3 Citicorp Nominees Pty Limited	19,865,507	6.6%
4 Hsbc Custody Nominees (Australia) Limited	12,244,547	4.1%
5 Hsbc Custody Nominees (Australia) Limited - A/C 2	8,047,103	2.7%
6 J P Morgan Nominees Australia Pty Limited	5,693,178	1.9%
7 Mr Daniel Eddington + Mrs Julie Eddington <Dj Holdings A/C>	5,433,880	1.8%
8 Bring On Retirement Ltd	5,065,479	1.7%
9 Mr Zachary Purton	4,085,000	1.4%
10 Bnp Paribas Nominees Pty Ltd <Ib Au Noms Retailclient Drp>	3,797,968	1.3%
11 Jawaf Enterprises Pty Ltd <Hall Family A/C>	3,575,000	1.2%
12 Bnp Paribas Noms Pty Ltd <Drp>	2,791,286	0.9%
13 Allen Group Holdings Pty Ltd	2,510,000	0.8%
14 E & E Hall Pty Ltd <E & E Hall P/L S/F A/C>	2,318,957	0.8%
15 Northmead Holdings Pty Ltd <The Greenwell Family A/C>	2,000,000	0.7%
16 Mr Aaron Dean Bertolatti <Bertolatti Family A/C>	1,811,000	0.6%
17 Rda Asset Management Limited	1,598,000	0.5%
18 Scor Go Luath Limited	1,594,000	0.5%
19 Viewade Pty Limited <Oliver Super Fund A/C>	1,466,670	0.5%
20 Hylec Investments Pty Limited <Hylec Controls P/L S/F A/C>	1,311,670	0.4%

- Including shares of Common Stock represented as though they were held as CDIs (with 10 CDIs representing a beneficial ownership interest in 1 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/o 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

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 management 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 last fiscal year, 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.

Item 14. Principal Accountant Fees and Services

Fees billed by PricewaterhouseCoopers LLP and BDO USA LLP for the fiscal years ended June 30, 2023 and 2022, respectively, are as follows:

	2023	2022
Audit fees	\$ 629,080	\$ 472,100
Audit-related fees	—	—
Tax fees	—	14,495
All other fees	2,900	—
Total fees	<u>\$ 631,980</u>	<u>\$ 486,595</u>

Audit fees for the year ended June 30, 2023 include \$629,080 paid to PricewaterhouseCoopers LLP for the audit of the Company’s year-end financial statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2023, consents, and other items related to SEC matters.

Audit fees for the year ended June 30, 2022 include amounts paid to BDO for the audit of the Company’s year-end financial statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2022, professional services rendered in connection with certain Form S-1 and S-8 registration statements and other items related to SEC matters. There were no other audit-related fees, tax fees, or any other fees billed by BDO during the year ended June 30, 2022.

Pre-Approval Policies and Procedures

Under the Sarbanes-Oxley Act of 2002, as amended, all audit and non-audit services performed by our auditors must be approved in advanced by our board of directors to assure that such services do not impair the auditors’ independence from us. In accordance with its policies and procedures, our board of directors pre-approved the audit services performed by PricewaterhouseCoopers and BDO as of and for the year ended June 30, 2023.

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, 2023 and 2022, together with the notes thereto, and the reports of our independent registered public accounting firms PricewaterhouseCoopers, LLP (PCAOB ID 238, Denver, Colorado) dated August 30, 2023 and BDO USA, LLP (PCAOB ID 243, Spokane, Washington) dated September 28, 2022 thereon, are presented in “Item 8. Financial Statements and Supplementary Data” of our Annual Report on Form 10-K filed August 30, 2023.

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.

Exhibits

(a)(3) Exhibits

The following documents are filed as exhibits hereto:

<u>Exhibit Number</u>	<u>Exhibit Title</u>
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*	Certificate of Incorporation of 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022)
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 Capital Stock of 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 4.1 to the Company's Amended Current Report on Form 8-K/A filed with the SEC on February 2, 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 CHESSE Depository 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 on August 30, 2023)
14.1*	Code of Business Conduct and Ethics (incorporated by reference to Exhibit 14.1 to the Company's Annual Report on Form 10-K filed with the SEC on October 27, 2023)
16.1*	Letter from BDO USA, LLP to the SEC, dated October 3, 2022 (incorporated by reference to Exhibit 16.1 to the Company's Current Report on Form 8-K filed with the SEC on October 3, 2022)
21.1*	Subsidiaries of the Company (incorporated by reference to Exhibit 21.1 to the Company's Registration Statement on Form 10-12B filed with the SEC on March 7, 2022)
23.1*	Consent of Barr Engineering Co (incorporated by reference to Exhibit 23.1 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)
23.2*	Consent of Mike Rockandel Consulting LLC (incorporated by reference to Exhibit 23.2 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)
23.3*	Consent of Louis Fourie, P. Geo., Principal, Terra Modeling Services (incorporated by reference to Exhibit 23.3 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)

<u>Exhibit Number</u>	<u>Exhibit Title</u>
23.4*	Consent of Mathew Banta, PH, Principal, Confluence Water Resources LLC (incorporated by reference to Exhibit 23.4 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)
23.5*	Consent of Escalante Geological Services LLC (incorporated by reference to Exhibit 23.5 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)
23.6*	Consent of Paul Weibel, CPA, Chief Financial Officer, 5E Advanced Materials, Inc. (incorporated by reference to Exhibit 23.6 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)
23.7*	Consent of BDO USA, P.C. (incorporated by reference to Exhibit 23.1 to the Company's Annual Report on Form 10-K filed with the SEC on August 30, 2023)
23.8*	Consent of PricewaterhouseCoopers LLP (incorporated by reference to Exhibit 23.2 to the Company's Annual Report on Form 10-K filed with the SEC on August 30, 2023)
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 (incorporated by reference to Exhibit 32.1 to the Company's Annual Report on Form 10-K filed with the SEC on August 30, 2023)
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 (incorporated by reference to Exhibit 32.2 to the Company's Annual Report on Form 10-K filed with the SEC on August 30, 2023)
96.1*	Amended Initial Assessment Report (February 2024) (incorporated by reference to Exhibit 23.4 to the Company's Annual Report on Form 10-K filed with the SEC on February 2, 2024)
104**	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)
#	Schedules have been omitted pursuant to Items 601(a)(5) and 601(b)(2) of Regulation S-K. The Company hereby undertakes to furnish supplemental copies of any of the omitted schedules upon request by the U.S. Securities and Exchange Commission. The Company may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedules so furnished.
+	Management contract or compensatory plan, contract or arrangement.
*	Previously filed.
**	Furnished herewith