

Disclaimer



FORWARD-LOOKING STATEMENTS

The information in this Presentation includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. All statements other than statements of historical fact included in this presentation, "expect," "expect," "expect," "expect," "expect," "extraegy," "plan," "guidance," "outlook," "intend," "will likely result," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements are based on currently available information as to the outcome and timing of future events. We caution you that these forward-looking statements are subject to all of the risks and uncertainties, most of which are difficult to predict and many of which are beyond our control, incident to the extraction of the critical materials we intend to produce and advanced materials production and development. These risks include, but are not limited to: 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 market; our status as an exploration stage company dependent on as single project with no known Regulation S-K 1300 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 ability to othain, maintain and renew required governmental permits for our development activities, including satisfying all mandated conditions to any such permits; our ability to othain, stockholder approval for and successfully implement our currently proposed out of could differ materially from those expressed in any forward-looking statements. No representation or warranty (express or implied) is made as to, and no reliance should be placed on, any information, including projections, estimates,

You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this Presentation. Except as otherwise required by applicable law, we disclaim any duty to update and do not intend to update any forward-looking statements, all of which are expressly qualified by the statements in this section, to reflect events or circumstances after the date of this Presentation.

MARKET AND INDUSTRY DATA

This Presentation has been prepared by 5E and includes market data and other statistical information from third-party sources, including independent industry publications, government published independent sources. Although 5E believes these third-party sources are reliable as of their respective dates for the purposes used herein, neither we nor any of our affiliates, directors, officers, employees, members, partners, shareholders or agents make any representation or warranty with respect to the accuracy or completeness of such information. Although we believe the sources are reliable, we have not independently verified the accuracy or completeness of data from such sources. Some data is also based on 5E's good faith estimates, which are derived from our review of internal sources as well as the third-party sources described above. Additionally, descriptions herein of market conditions and opportunities are presented for informational purposes only there can be no assurance that such conditions will actually occur or result in positive returns.

CAUTIONARY NOTE REGARDING RESERVES

Unless otherwise indicated, all mineral resource estimates included in this Presentation 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 under the Exchange Act ("SEC Industry Guide 7"). 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 of Regulation S-K of the Securities Act of 1933, as amended (the "Securities Act") ("Regulation S-K 1300"). Regulation S-K 1300 uses the Committee for Mineral Resources International Reporting Standards ("CRIRSCO") - based classification system for mineral resources and mineral resources 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", "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

For additional information regarding these various factors, you should carefully review the risk factors and other disclosures in the Company's Form 10-K filed on August 30, 2023. Additional risks are also disclosed by 5E in its filings with the U.S. Securities and Exchange Commission throughout the year, including its Form 10-K, Form 10-G, and Form 8-Ks (and Form 8-Ks, as applicable), as well as in its filings under the Australian Securities Exchange. Any forward-looking statements are given only as of the date hereof. Except as required by law, 5E expressly disclaims any obligation to update or revise any such forward-looking statements. Additionally, 5E undertakes no obligation to comment on third-party analyses or statements regarding 5E's actual or expected financial or operating results or its securities.

Disclaimer (Continued...)



NO OFFER OR SOLICITATION

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ADDITIONAL INFORMATION AND WHERE TO FIND IT

This communication may be deemed to be solicitation material in respect of the Transactions and certain stockholder approvals required thereby. In connection with the Transaction, the Company filed a definitive proxy statement on Schedule 14A on December 18, 2023, with the Securities and Exchange Commission (the "SEC") and intends to file other relevant materials with the SEC. The Company has mailed the definitive proxy statement and a proxy card to each stockholder entitled to vote at the special meeting relating to the Transaction. INVESTORS AND SECURITY HOLDERS OF THE COMPANY ARE URGED TO READ CAREFULLY AND IN THEIR ENTIRETY ALL RELEVANT DOCUMENTS (INCLUDING ANY AMENDMENTS THERETO) FILED WITH THE SEC, INCLUDING THE COMPANY'S PROXY STATEMENT, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE COMPANY AND THE TRANSACTION. Copies of the proxy statement and other relevant materials and any other documents filed by the Company with the SEC may be obtained free of charge at the SEC's website, at www.sec.gov. In addition, stockholders may obtain free copies of the proxy statement and other relevant materials by directing a request to: 5E Advanced Materials, Inc., 9329 Mariposa Road, Suite 210, Hesperia, CA 92344.

PARTICPANTS IN PROXY SOLICITATION

The Company and its directors and executive officers and other members of management and employees may be deemed to be participants in the solicitation of proxies from the Company's stockholders in respect of the Transaction. Information about the directors and executive officers of the Company is set forth in its Annual Report on Form 10-K/A filed with the SEC on October 27, 2023, and the definitive proxy statement filed with the SEC on December 18, 2023, in connection with the Transaction. Other information regarding the persons who may be deemed participants in the proxy solicitations in connection with the Transaction, and a description of any interests that they have in the Transaction, by security holdings or otherwise, are contained in the definitive proxy statement filed with the SEC and any other relevant materials to be filed with the SEC regarding the Transaction when they become available. Stockholders, potential investors, and other interested persons should read the definitive proxy statement carefully before making any voting or investment decisions. You may obtain free copies of these documents from the sources indicated above.

NON-GAAP FINANCIAL MEASURES

This Presentation includes forward-looking non-GAAP financial measures. These measures may not be comparable to similar measures presented by other companies and should not be viewed as a substitute for measures reported under U.S. GAAP. These measures are commonly used in the mining industry to provide stockholders and potential investors with additional information regarding the Company's future performance in its mining operations at projected full-run rates. This presentation contains references to the following: Full Year 1 EBITDA, Full Year 3 EBITDA, Full Year 6 EBITDA and Full Production EBITDA, each of which are forward-looking non-GAAP financial measures that are detailed in the Company's Regulation S-K 1300 compliant Initial Assessment Report (the "Initial Assessment Report"). EBITDA is defined as net income before interest expenses, income tax expense, and depreciation. The Company has not provided a reconciliation of Full Year 1 EBITDA, Full Year 3 EBITDA, Full Year 6 EBITDA, and Full Production EBITDA to the Company's future net income, the most comparable financial measure calculated in accordance with GAAP, as such GAAP measure is not available on a forward-looking basis without unreasonable effort. Specifically, the Company could not calculate interest, income taxes, depreciation or the effect of certain corporate level transactions or activities, on a forward-looking basis with any reasonable degree of accuracy, but such items could be significant and have a material impact on the Company's net income. For more information regarding these forward-looking non-GAAP financial measures, you should read the Company's Initial Assessment Report included as Exhibit 96.1 to the Company's Annual Report on Form 10-K/A filed with the SEC on October 27, 2023.



Why 5E Advanced Materials?



Exposure to critical materials **Boron** and **Lithium**

Important to U.S. Reshoring, decarbonization, and domestic production required for the clean energy economy

Designated as Critical Infrastructure by the U.S. government with broader focus through defense, clean energy and EV markets

Initial facility is permitted, constructed and is being commissioned with production to commence in CY2024

Staged execution and value delivery model

Building a globally significant business with forecasted annual US\$682M¹ EBITDA profile in full production

Corporate Strategy





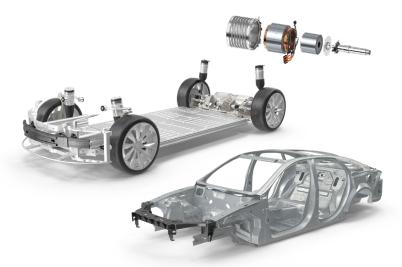


Boron Market - End Use



Electric Vehicles

- Widely used (and largely not substitutable) across Electrification of Transport.
- Key driver of demand in permanent magnets needed for electric motors.
- Industry demand and pricing growth currently outpacing inflation.



Clean Energy and Efficiency

 Critical material used in wide range of decarbonization technologies (EVs, clean energy production).



Food Security

- > 40% of lands to experience severe yield reduction by 2050 due to nutrient depletion.
- Boron is an essential micronutrient needed for crop health.

Traditional

- Historical uses include:
- Glass (borosilicate glass, fiberglass composites)
- Ceramics
- Cleaning agents





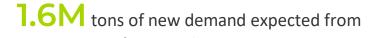


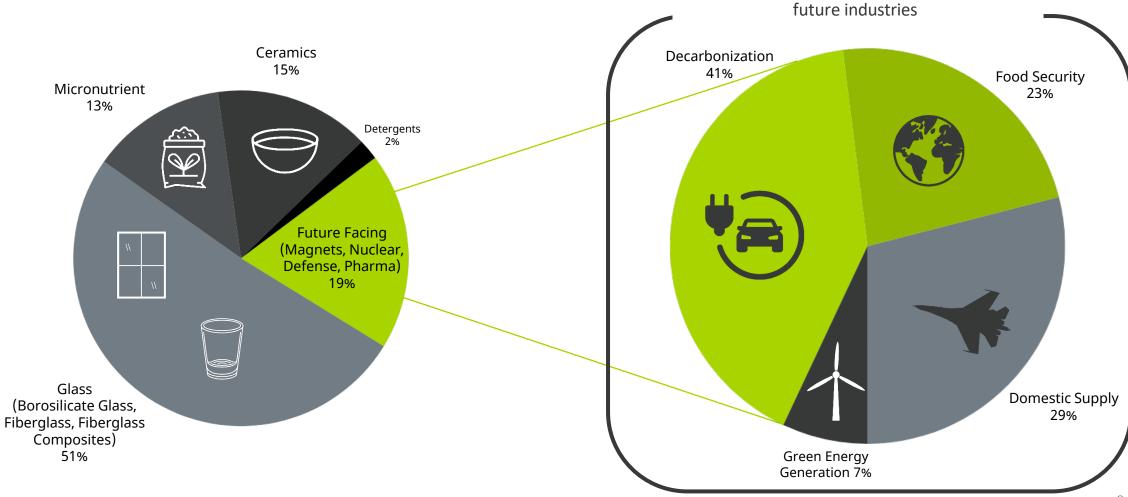
Boron Market - Demand Profile



Traditional Boron Markets¹

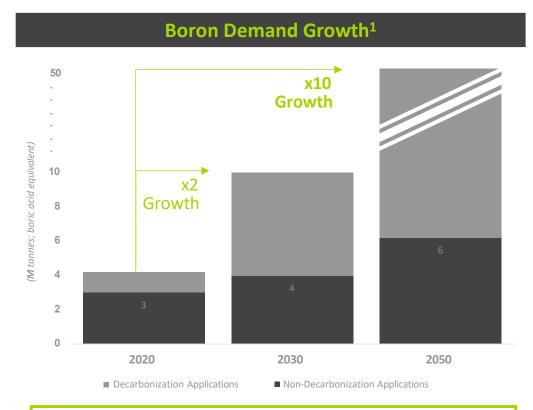
Emerging Boron Markets¹



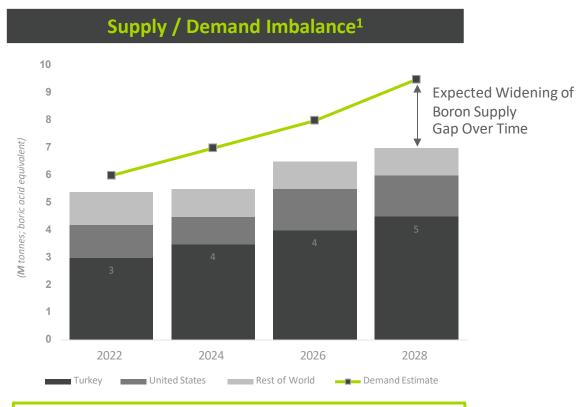


Boron Market - Outlook





Demand Growth Expected to be Driven by Decarbonization Sectors

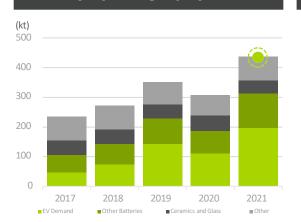


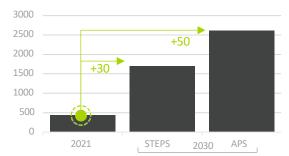
Supply Pressures Bringing the Boron Supply Gap Into Focus

Lithium Market - Outlook



Lithium Demand²





50 new Lithium operations are required to meet stated market demand by 2030

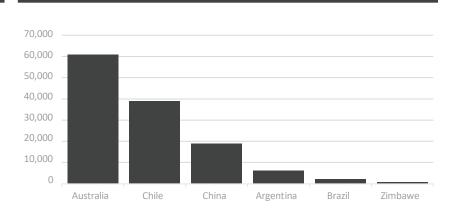
US Lithium Producers



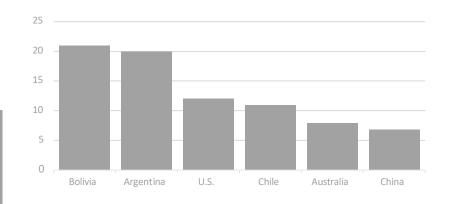
- 5E Advanced Materials | Fort Cady | 5.5ktpa LCE
- Tennessee | 30ktpa LiOH
- North Carolina | 30ktpa LiOH
- Nevada Rhyolite Ridge | 22ktpa LCE

In the 1990s, the United States was the largest lithium producer, producing over one-third of the global production.

Lithium Production by Country



Lithium Reserves by Country



Staged Project Delivery





| Resources ² | Initial Facility | Phase 1 | Phase 2 | Phase 3 | FULL PRODUCTION |
|------------------------|-------------------------|-----------------------------------|---------------------------------|-----------------------------------|---------------------------------|
| Defined | Built | Planning | nning Planning Planning | | Planning |
| 171M tons | 2,000 | 90,000 stpa | 180,000 stpa | 180,000 stpa | 450,000 stpa |
| 7.9M tons Boric | stpa Boric Acid | Boric Acid | Boric Acid | Boric Acid | Boric Acid |
| Acid | 100 stpa | 1,100 stpa Lithium Carbonate | 2,200 stpa Lithium Carbonate | 2,200 stpa Lithium Carbonate | 5,500 stpa Lithium Carbonate |
| 0.3M tons of LCE | Lithium Carbonate | US\$389M* | US\$620M* | US\$947M* | LICCI OFFM* |
| | US\$70M | CAPEX | CAPEX | CAPEX | US\$1,955M* CAPEX |
| | CAPEX | | | | |
| Designated Critical | | US\$101.2M ¹ EBITDA | US\$360.9M¹ EBITDA | US\$621.9M ¹ EBITDA | US\$682M ¹ EBITDA |

Infrastructure by U.S. govt

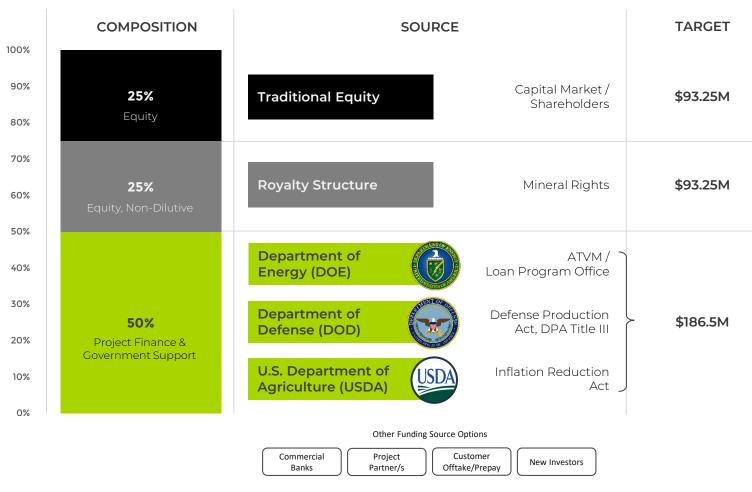
¹Phase 1, Phase 2, Phase 3, and Full Production ESITDA are forward-looking non-GAAP financial measures. For more information, see "Non-GAAP Financial Measures" above.

²Regulation S-K 1300 Initial Assessment Report with a revised report date of October 27, 2023 (using 2% cut-off grade) prepared by Qualified Persons. Figures presented reflect total estimated measured, indicated and inferred resources combined. *CAPEX numbers adjusted for inflation

Long Term Value Creation



Commercial Phase 1 Funding Strategy



See Company Press Release date May 11, 2023.

CAPEX (US\$) \$373 million **BORIC ACID** ANNUAL 90.000 short tons **PRODUCTION** LITHIUM CARBONATE 1,100 short tons Full Year 1 (US\$) \$101.2 million EBITA¹ **PHASE 2 ECONOMICS** CAPEX (US\$) \$553 million **BORIC ACID ANNUAL** 180,000 short tons **PRODUCTION** LITHIUM CARBONATE 1,100 short tons Full Year 3 (US\$) \$360.9 million EBITA¹ **PHASE 3 ECONOMICS** CAPEX (US\$) \$783 million* **BORIC ACID** 450,000 short tons **ANNUAL** LITHIUM CARBONATE **PRODUCTION** 5,500 short tons Full Year 6 (US\$) \$621.9 million EBITA¹

PHASE 1 ECONOMICS

^{*} Note: Total CAPEX required for all phases 1-3 is \$1.709 billion.

Robust Forecast Economics





Global Market Support







Inflation Reduction Act



Defense Production Act, DPA Title III

- Commercial strategy & partners to underpin the case for government funding support
- ✓ Strong Sell-Side coverage in the US Looking to expand in 2024
- ✓ University research partners to develop a suite of boron advanced materials































Our Strategic Advantages



OPERATIONAL

FEAM - Solution Mining



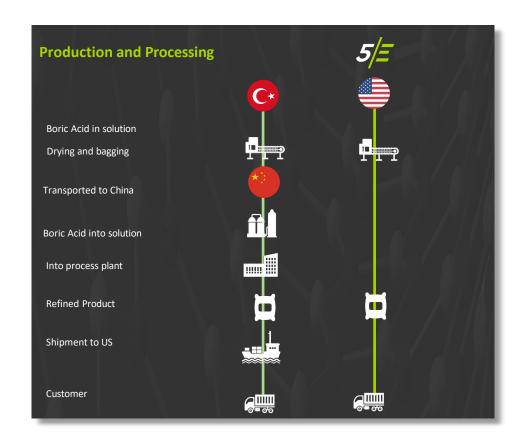
- Low land disturbance
- No tailings dam storage
- Cheaper to run
- Low operating emissions

Vs.

Hard Rock Mining

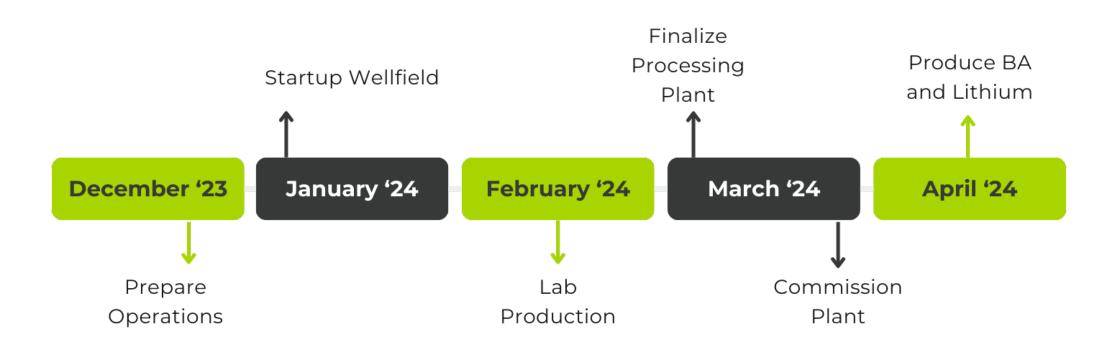


GEOGRAPHICAL





Production provides design basis for the commercial plant and product to be qualified by strategic customers



Commercial Project Timeline



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Phase 1

| CY Indicative Schedule | 1H23 | 2H23 | 1H24 | 2H24 | 1H25 | 2H25 | 1H26 | 2H26 |
|--|------|------|------|------|------|------|------|------|
| EPA Authorization to Inject | | 0 | | | | | | |
| Wellfield Commissioning | | 0 | | | | | | |
| Boric Acid/Gypsum Commissioning | | | | | | | | |
| Initial Plant Operation / Data Collection | | | | | | | | |
| FEL-2 Study | | | | | | | | |
| FEL-3 Study | | | | | | | | |
| Detailed Engineering & Construction | | | | | | | | |
| Commission of Phase 1 - 90ktpa Boric Acid | | | | | | | | |
| Start Up Plant for Phase 1 | | | | | | | | |

The Team to Deliver



Leadership Team









Board of Directors













David J. Salisbury NON-EXECUTIVE CHAIR BSc, MBA

Graham van't Hoff NON-EXECUTIVE DIRECTOR BA, MChem, MBA

NON-EXECUTIVE DIRECTOR





Stephen Hunt

BBus, MAICD

Jimmy Lim

BA, MBA



Stefan Selig NON-EXECUTIVE DIRECTOR BA, MBA

NON-EXECUTIVE DIRECTOR

RioTinto











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Building a globally significant business with forecasted annual US\$682M¹ EBITDA profile in full production



Corporate Overview



As of December 1, 2023





| Ticker | FEAM | 5EA |
|----------------------------------|----------|---------|
| Share Price | \$2.15 | A\$0.31 |
| Common Shares / CDIs1 | 44.2M | 442.4M |
| Dilutive Securities ² | 51.3M | |
| Enterprise Value ³ | \$146.8M | |
| Cash (9/30/23) | \$11.8M | |

Analyst Coverage



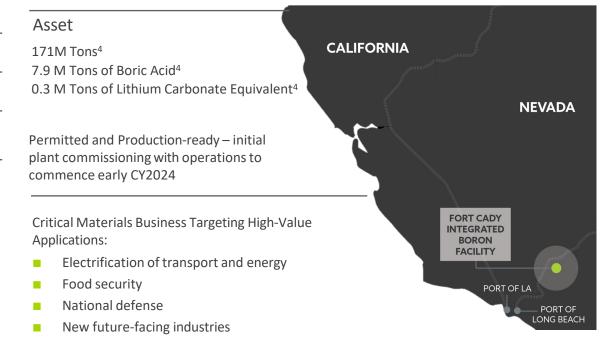








5E ADVANCED MATERIALS, INC.



¹ Common shares and CDIs are fully fungible and convert at the rate of 1 common share for 10 CDIs. Basic share count figures as of December 1, 2023.

² Includes Convertible Notes, Options, RSUs, DSUs and PSUs as of December 1, 2023.

³ Calculated using the treasury stock method and is equal to market capitalization (using in-the-money dilutive securities) plus net debt. Net debt equal to BlueScape's \$63.6 million convertible note (treated as debt given it is out of the money) less \$11.8 million in cash & equivalents (9/30/23).

⁴ Regulation S-K 1300 Initial Assessment Report with a revised report date of October 27, 2023 (using 2% cut-off grade) prepared by Qualified Persons. Figures presented reflect total estimated measured, indicated and inferred resources combined.