

# 5E ADVANCED MATERIALS TO PRESENT AT THE 15th ANNUAL LD MICRO INVITATIONAL CONFERENCE

**HESPERIA, CA., April 2, 2025 (ACCESSWIRE)** - 5E Advanced Materials, Inc. (Nasdaq: FEAM) (ASX: 5EA), a boron and lithium company with U.S. government Critical Infrastructure designation for its 5E Boron Americas (Fort Cady) Complex announced today that Chief Executive Officer Paul Weibel will be presenting at the 15<sup>th</sup> Annual LD Micro Invitational Conference on April 9 - 10, 2025, at the Westin Grand Central in New York City. Management will also host one-on-one and group meetings with interested investors who are registered to attend the event.

Access the live webcast of the company's presentation on April 10 at 3:00 PM EDT (April 11 at 5:00 AM AEDT) here: https://event.summitcast.com/view/Rv8BqVhT6JpoAvJwfhYEsK/7Bxh88vXJirxYpAGEkckYE

Presentation materials for the event are included in the subsequent pages of this announcement and can also be accessed through the investor section of the Company's website at <a href="https://investors.5eadvancedmaterials.com/events-presentations">https://investors.5eadvancedmaterials.com/events-presentations</a>.

#### About 5E Advanced Materials, Inc.

5E Advanced Materials, Inc. (ASX:5EA) is focused on becoming a vertically integrated global leader and supplier of boron specialty and advanced materials, complemented by lithium co-product production. The Company's mission is to become a supplier of these critical materials to industries addressing global decarbonization, food and domestic security. Boron and lithium products will target applications in the fields of electric transportation, clean energy infrastructure, such as solar and wind power, fertilizers, and domestic security. The business strategy and objectives are to develop capabilities ranging from upstream extraction and product sales of boric acid, lithium carbonate and potentially other co-products, to downstream boron advanced material processing and development. The business is based on our large domestic boron and lithium resource, which is located in Southern California and designated as Critical Infrastructure by the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency.

#### For further information contact:

Nathan Skown or Joseph Caminiti Alpha IR Group FEAM@alpha-ir.com Ph: +1 (312) 445-2864



## 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, the words "believe," "project," "expect," "anticipate," "strategy," "plan," "guidance," "outlook," "intent," "may," "should," "couldo," "intent," "strategy," "plan," "guidance," "outlook," "intent," "may," "strategy," "plan," "guidance," "outlook," "intent," "may," "strategy," "plan," "guidance," "outlook," "intent," "may," "should," "couldo," "could," "could," "will," expect," "anticipate," "expect," "anticipate," "intend," "budget," "articipate," "aim," "strategy," "plan," "guidance," "outlook," "intend," "may," "should," "couldo," "couldo," "could," "will," "would," "could," "will," "

#### NON-GAAP FINANCIAL MEASURES

which are expressly qualified by the statements in this section, to reflect events or circumstances after the date of this Presentation.

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'(). EBITDA is defined as net income before interest expenses, income tax expenses, and depreciation. The Company has not provided a reconciliation of Full Year 1 EBITDA, Full Year 3 EBITDA, Full Year 6 EBITDA, Full Year 6 EBITDA to the Company's future net income, the most comparable on a forward-looking basis without unreasonable effort. Specifically, the Company could not calculate interest, income taxes, depreciation or the effect of rectain 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.

#### 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 1933, as amended (the "Securities Act of 1933, as amended (the "Securities Act of 1934), and the Securities Act of 1934, and the Securities Act of 1934, as a securities and succordingly, 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 Resources" and "Probable Mineral Resources" and Securities and S



# **Project Overview**

- Largest known (colemanite) boron deposit globally outside of Turkey
- Initial mine life of 31 years containing 13.97M tons of boric acid<sup>1</sup>
- Pilot Plant Operational Delivering on-spec product to customers
- Simplified by-product strategy reducing OPEX and CAPEX into pre-FEED Engineering (FEL-2)
- Commercial production fully permitted (90ktpa) with phased expansion plans
- LOI received from US EXIM Bank to support development, significantly de-risking finance
- Expressions of interest received from customers for 100% of 90ktpa production





Regulation S-K 1300 Initial Assessment Report with a revised report date of February 2, 2024 (using 2% cut off grade) prepared by Qualified Person. Figures presented reflect total estimated measured, indicated and inferred resources combined.

### The Team to Deliver

#### Leadership Team

















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





**Lonnie Bailey VICE PRESIDENT OPERATIONS** 

BSChE, MSChE, MBA

**CHIEF FINANCIAL OFFICER** BSc, MSc, CPA

Josh Malm

Mark Zamek **VP COMMERCIAL PRODUCTS** BSc, ChE

**Rod MacLaine VP ENGINEERING &** CONSTRUCTIOON BSc Eng









**OFFICER** 

BSc, CPA















**Barry Dick** NON-EXECUTIVE DIRECTOR BS, MBA





**Curtis Hébert** NON-EXECUTIVE DIRECTOR JD, BS





## **Resource & Mineral Tenure**

#### Mineral Tenure

- Company owns six real parcels (mineral rights conveyed with real property)
- BLM land surrounds six parcels

#### Permitted Operations in California

- Federal, State and local permits
- Air Permit
- Access to Water (650 gallons per minute)

#### Attractive Geographic Location

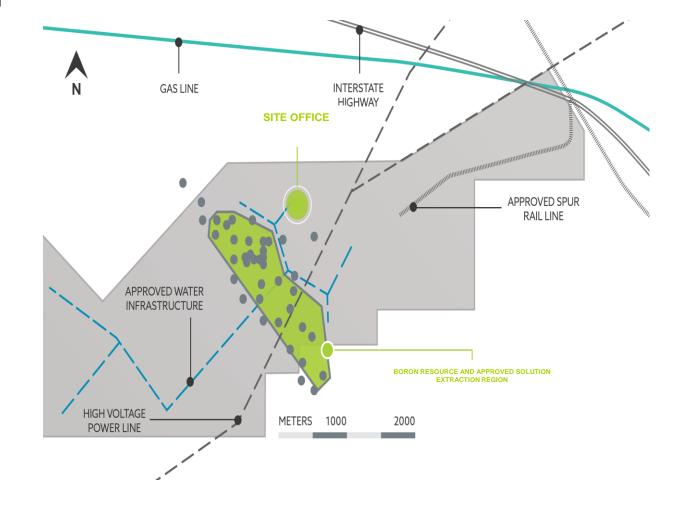
- 118 miles northeast of Los Angeles, CA and approximately half-way between LA and Las Vegas, NV
- Designated Critical Infrastructure by U.S. Department of Homeland Security

#### High-Quality Resource

- Rare colemanite deposit, quality ore grades: 13.97 million short tons H<sub>3</sub>BO<sub>3</sub>, 300k short tons LCE
- Production occurred in 1980's, 1990's and now 2024

#### Excellent Infrastructure

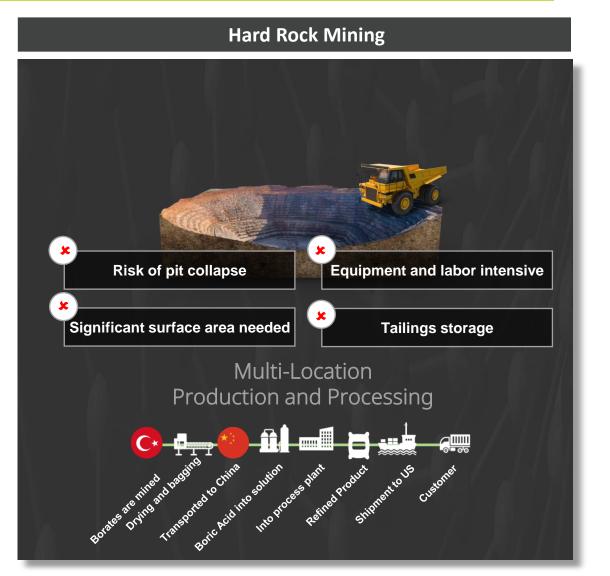
- Natural gas transmission lines (x3) and power corridor
- BNSF Rail and Interstate 40





# Mining & Environmental Advantage



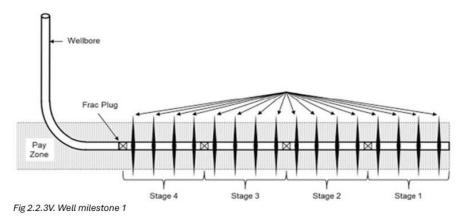




<sup>&</sup>lt;sup>1</sup> https://www.visualcapitalist.com/sp/everything-you-need-to-know-about-in-situmining/#:~:text=Advantages%20of%20In%2DSitu%20Mining,operate%20without%20moving%20a%20rock

# **Small-Scale Facility Current Operations**





# ADVANCED MATERIALS

## Technology de-risked at scale:

- Commissioned Small Scale Boron Facility in April now fully operational
  - Progressively ramped up to higher production rates
  - Successfully achieved necessary production quality
- Identifying critical operational improvements for FEL-2

### **Production Updates:**

- <u>Production rates</u>: One short ton per day, on specification
  - Sufficient rates to cost optimize and progress customer qualification
- <u>Head grade</u>: Reached 5.5 6.5%, and 10K ppm of Boron

## **Continued Project Execution:**

- Further optimization of wellfield and processing operations
- Byproduct strategy significant value-add
- Positions business to secure offtake agreements

# Small-Scale Facility – Outcomes and Path Forward



#### I. Optimize CAPEX and OPEX:

- o Well-field and process optimization
- o Developed power solutions
- o Simplified Process
- o Value-added byproducts



#### 2. Data Collection and Ramp-up:

- o Production quality achieved
- o Deliver product to key customers
- Test higher production rate wellfield completions



### 3. FEL-2 Engineering Inputs:

- o Complete Pre-feasibility report PDC
- o +/-25% CAPEX and OPEX estimates<sup>1</sup>
- o Foundation for debt financing



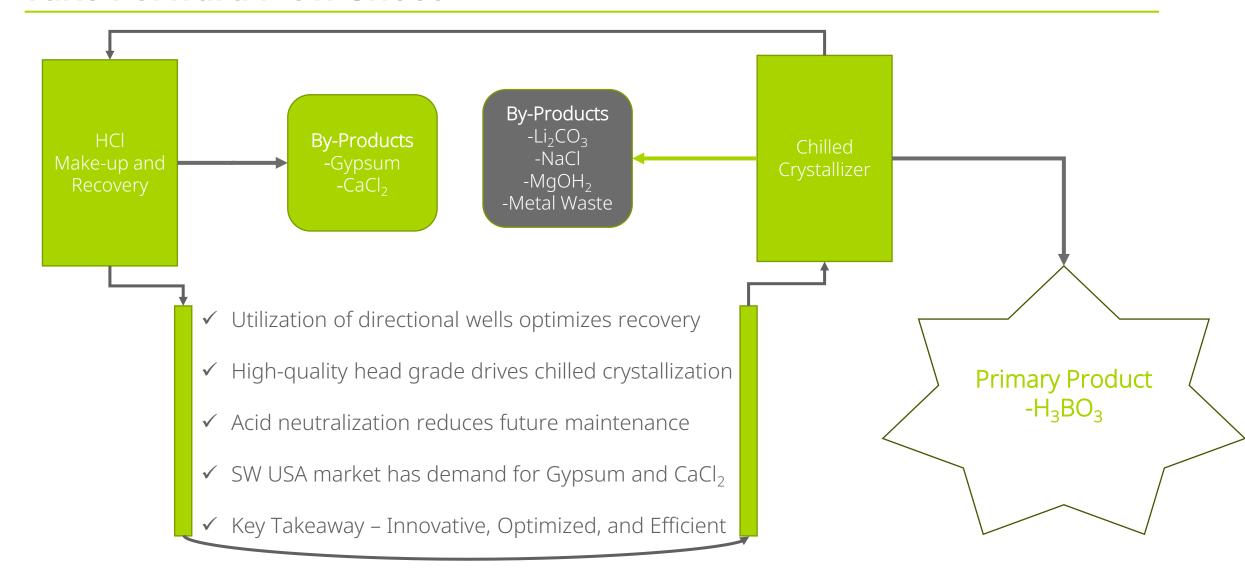
#### 4. Customer Qualification and Off-Take:

- o Complete customer qualification
- o Negotiate off-take agreements
- Customer debt/investment financing

Catalysts expected to Increase NPV, IRR and Lower Commercial Cash Costs



## **Take Forward Flow Sheet**





## Modular Approach to Production Scaling & Capital Needs

**Development Phase** 

**Capacity** 

**Capital Needs** 

Result(s)

Pilot
Operations
Current

2k ST BA

Operating one short ton per day

**Currently in Operation** 

- Optimized design
- Customer off-take
- Position to scale

2 Commercial
Phase 1
2027-2028

136.5k ST BA

165.4k tons of calcium-based product

US \$390-430M Across years 2027-28 Target \$285M EXIM

- \$100M run-rate EBITDA;
- 18-22% unlevered IRR; \$650-715m project NPV
- Plan to progress to Phase 2

Commercial
Phase 2
2029-2031

Capacity and Capital Needs currently being reevaluated following the announced upsizing and improved economics of Commercial Phase 1

- Improved economics from initial Phase 2 forecast
- Optionality to scale
- Borate derivative potential

Values in USD-M



<sup>1</sup> Commercial Phase 1, Commercial Phase 2, Capital Needs, and EBITDA are forward-looking non-GAAP financial measures. For more information, see "Non-GAAP Financial Measures" above.

<sup>2</sup> Capital and EBITDA are referenced from 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. Phase I Capital is adjusted based on management's best estimate available as Phase 1 is capital is expected to be reduced for production of calcium chloride.

# Next Steps – Towards FID

# Project Optimization:

- Complete pre-FEED (FEL-2) engineering
- Optimize commercial byproduct arrangements, including off-taking
- Wellfield optimization study
- Improved CAPEX and OPEX estimates for project scaling
- Deliver pre-feasibility study (PFS)

# Project Finance:

- EXIM diligence for loan guarantee of \$285M
- Off-take in place for byproducts
- Offtake in place for ~85% of Boric Acid product – high demand
- Potential for customer finance to fund required working capital

# Detailed Engineering:

- Complete FEED (FEL-3) engineering
- EPC construction contract
- Supply chain agreements
- Deliver BFS
- FID







# **Boron Market Segments**

#### **Electric Vehicles and Permanent Magnets**

- Widely used (and largely not substitutable) across Electrification of Transport
- Key driver of demand in magnets needed for electric motor permanents



# **Traditional Applications**

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

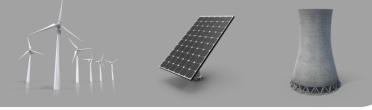






#### Global Energy Transition

- Critical material used in wide range of decarbonization technologies (wind, solar, and nuclear)



### **Food Security**

- Up to 40 % of Earth's land is degraded, threatens roughly half of global GDP (US\$44 trillion)<sup>1</sup>
- Boron is an essential micronutrient for crop health and to increase crop yields
- Boron based fertilizers are widely used commercially







**\$2.15b** global market 2023<sup>2</sup>

Global Boric Acid Demand CAGR of 5.4%<sup>2</sup>

1.9M tons of new demand expected by 2031<sup>3</sup>



- Chronic land degradation: UN offers stark warnings and practical remedies in Global Land Outlook
- Global Market Insights, Boron Market Industry Analysis & Forecast (2024-2030)
- <sup>3</sup> Kline Market Report