

Perpetua Resources

Responsible Mining.
Critical Resources.
Clean Future.



FORWARD-LOOKING STATEMENTS

Information and statements contained in this presentation that are not historical facts are “forward-looking information” or “forward-looking statements” (collectively, “Forward-Looking Information”) within the meaning of applicable Canadian securities legislation and the United States Private Securities Litigation Reform Act of 1995. We use words such as “may,” “would,” “could,” “should,” “will,” “likely,” “expect,” “anticipate,” “believe,” “intend,” “plan,” “potential,” “forecast,” “outlook,” “project,” “estimate” and similar expressions suggesting future outcomes or events to identify forward-looking statements or forward-looking information. Forward-Looking Information includes, but is not limited to, information concerning the business of Perpetua Resources Corp. (the “Company”), the Stibnite Gold Project (the “Project”), including but not limited to statements with respect to results of the FS (as defined below) and the Financial Update (as defined below); the assumptions, qualifications and limitations of the results of the FS and the Financial Update, including the economic results and the sensitivity analysis of the variables included therein; other assumptions underlying the FS and the Financial Update, including regarding inflation, labor, regulatory and permitting outcomes and timing, construction timing, production capacity and expectations, LOM estimates, expected mining methods; the expected outcomes of the Project, including our reserves and resources; the financial projections and illustrative equity valuation presented herein (see “Financial Projections” at the end of this presentation) disclosure regarding possible events, conditions or financial performance that is based on assumptions about future economic conditions and courses of action; next steps and courses of action including the prospects and timing of successfully securing project financing on acceptable terms, or at all; disclosure regarding the EXIM review process and potential outcome of the Company’s EXIM financing application; disclosure regarding the review process, anticipated timing and potential outcome of the Company’s EXIM financing application; the amount of potential debt financing available to the Company; the eligibility of the Project for funding under the MMIA and CTEP initiatives; environmental clean up actions by us and our contractors; ongoing funding and anticipated liquidity; our ability to comply with, obtain and defend permits related to the Project; our ability to successfully implement and fund the Project and the occurrence of the expected benefits from the Project; timing of anticipated milestones related to the Project and financing; the realization of benefits from strategic partnerships; expected commercial demand for antimony and the Company’s ability to supply it; predictions regarding improvements to water quality, water temperature, and fish habitats and other environmental conditions at the site, including with respect to process and timing of such improvements; reduction of the Project footprint and the anticipated benefits and other effects thereof; our ability to successfully implement the Project and the occurrence of the expected benefits from the Project, including contributions to the workforce, national security and clean energy transition; the anticipated economic, environmental and other benefits of the Project; the viability of the Project; development and operating costs in the event that a production decision is made; success of exploration, development and environmental protection, closure and remediation activities; permitting time lines and requirements; requirements for additional water rights and the potential effect of proposed notices of environmental conditions relating to mineral claims; risks and opportunities associated with the Project; planned exploration and development of properties and the results thereof; development of any additional resources and reserves and the permitting requirements with respect to any such additional resources and reserves; planned expenditures, production schedules and budgets and the execution thereof. Statements concerning mineral resource and mineral reserve estimates may also constitute Forward-Looking Information to the extent that they involve estimates of the mineralization that may be encountered if the Project is developed. In preparing the Forward-Looking Information herein, the Company has applied several material assumptions, including, but not limited to, assumptions that the conclusions and findings from the FS and basic engineering work, and the technical, geologic, engineering, production and reserve assumptions underlying such work, are reliable to form the basis for the Financial Update; that the EXIM application will be reviewed and approved within the expected timeframe at the amount equal to or higher than the amount indicated in the LOI and preliminary, non-binding indicative financing term sheet received from U.S. EXIM as part of a Preliminary Project Letter (“PPL”); that the Company will be able to satisfy the conditions to obtain a funding commitment from EXIM and to receive committed funds when needed; that the Company will be able to satisfy ongoing financial assurance requirements applicable under applicable federal and state law; that the Company’s proposed financing package will be sufficient to finance permitting, pre-construction and construction of the Project or that the company will be able to secure alternate financing if necessary; that the Company will be able to maintain compliance with covenants contained in its financing agreements or that may be contained in future financing agreements; that the Company will be able to satisfy additional bonding or financial assurance requirements in the future; that we will be able to obtain sufficient funding to finance permitting, pre-construction and construction of the Project and that all requisite information will be available in a timely manner; that the current exploration, development, environmental and other objectives concerning the Project can be achieved and that its other corporate activities will proceed as expected; that the current price and demand for gold and antimony will be sustained or will improve; that no pending or future litigation will result in the loss of any permits or material delay to the Project schedule or a material increase to Project costs; that the current exploration, development, environmental and other objectives concerning the Project can be achieved and that the Company’s other corporate activities will proceed as expected; that general business and economic conditions will not change in a materially adverse manner and that all necessary governmental approvals for planned activities on the Project will be obtained in a timely manner and on acceptable terms; that permitting and operations costs will not materially increase; that certain assumptions as to production rates, operating costs, recovery and metal costs will prove to be accurate; that any additional financing needed will be available when needed on reasonable terms; that all requisite information will be available in a timely manner; that the Company will satisfy or will continue to satisfy the requirements of applicable federal and state law and the requirements of various governmental approvals; that the Company or applicable governmental agencies will be able to successfully defend against any challenges to governmental approvals for the planned exploration, construction, development, operation and environmental protection activities on the Project; the continuity of the price of gold and antimony, economic and political conditions and operations; and the assumptions set out in the FS and Financial Update and in the Company’s public filings with the U.S. Securities and Exchange Commission (the “SEC”) and its Canadian disclosure record. Forward-Looking Information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the Forward-Looking Information. Such risks and other factors include, among others, the industry-wide risks and project-specific risks identified in the Technical Reports (as defined below) and the Company’s public filings; operations and contractual obligations; changes in exploration programs based upon results of exploration; failure of mining methods or processes to operate as anticipated; changes in estimated mineral reserves or mineral resources or unexpected variations in quantity of mineralized material, grade, or recovery rates; changes in commodity prices, exchange rates, interest rates, tax rates, operating or production costs; availability of personnel and equipment; plant, equipment or process failure; accidents, effects of weather and other natural phenomena and other risks associated with the mineral exploration industry; delays in the EXIM application review process; any approved amount of EXIM financing may not be sufficient to commence construction of the Project; environmental risks, including environmental matters under US federal and Idaho rules and regulations; impact of environmental remediation requirements and the terms of existing and potential consent decrees on the Company’s planned exploration and development activities on the Project; certainty of mineral title; community relations; the impact on the Company’s business, results of operations and financial condition from delays in obtaining governmental approvals or financing; the Company’s dependence on one mineral project; the nature of mineral exploration and mining and the uncertain commercial viability; the Company’s ability to meet expectations regarding its financial resources and future prospects; the Company’s lack of operating revenues; governmental regulations and the ability to obtain necessary licenses and permits; risks related to prior unregistered agreements, transfers or claims and other defects in title to mineral projects; currency fluctuations; changes in environmental laws and regulations and changes in the application of standards pursuant to existing laws and regulations; risks related to dependence on key personnel; risks to employee health and safety; estimates used in budgeting and financial statements proving to be incorrect; risks related to unforeseen delays in the permitting process; risks related to opposition to the Project; risks related to increased or unexpected costs in operations or the permitting process; risks that necessary financing will be unavailable when needed on acceptable terms, or at all; risks related to the outcome of litigation and potential for delay of the Project, as well as those factors discussed in the Company’s public disclosure record. Although the Company has attempted to identify important factors that could affect the Company and may cause actual actions, events or results to differ materially from those described in Forward-Looking Information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that Forward-Looking Information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Because it is not possible to predict or identify all such factors, this list cannot be considered a complete set of all potential risks or uncertainties. Accordingly, readers should not place undue reliance on Forward-Looking Information. For further information on these and other risks and uncertainties that may affect the Company’s business and liquidity, see the “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of the Company’s filings with the SEC, which are available at www.sec.gov and with the Canadian securities regulators, which are available at www.sedar.com. Except as required by law, the Company expressly disclaims any obligation to update the Forward-Looking Information herein.



CAUTIONARY NOTE & TECHNICAL DISCLOSURE

The presentation has been prepared by Perpetua Resources management and does not represent a recommendation to buy or sell these securities. Investors should always consult their investment advisors prior to making any investment decisions. All references to “dollars” or “\$” shall mean United States dollars unless otherwise specified.

The material scientific and technical information in respect of the Stibnite Gold Project in this presentation, unless otherwise indicated, is based upon information contained in the technical report titled “Stibnite Gold Project, Feasibility Study Technical Report, Valley County, Idaho” dated effective December 22, 2020, and issued January 27, 2021 (the “FS” or “2020 Feasibility Study”). The 2020 Feasibility Study was prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the mining property disclosure rules specified in Subpart 1300 of Regulation S-K under the United States Securities Act of 1933 (“Subpart 1300”) promulgated by the SEC. Accordingly, information concerning mineral deposits from the 2020 Feasibility Study set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

The Company has issued a Technical Report Summary (the “TRS”), dated as of December 31, 2021, and amended as of June 6, 2022, developed for the Stibnite Gold Project in accordance with the mining property disclosure rules specified in Subpart 1300 promulgated by the SEC. The TRS summarizes, in accordance with the mining property disclosure rules specified in Subpart 1300, the FS, which was completed under NI 43-101, with the following notable differences between the FS and the TRS:

- The TRS Mineral Resource estimates were developed based on a gold price of \$1,500/oz versus the \$1,250/oz gold price assumed for the FS. The change in gold price results from higher trailing average gold prices at the date of preparation for the respective reports.
- The Measured Mineral Resources in the FS were reclassified to Indicated Mineral Resources in the TRS due to differences in Subpart 1300 versus NI 43-101 Mineral Resources classification guidelines.
- The Proven Mineral Reserves from the FS were reclassified as Probable Mineral Reserves for the TRS resulting from the reclassification of the Measured Mineral Resources to Indicated Mineral Resources due to differences in Subpart 1300 versus NI 43-101 Mineral Resources classification guidelines.
- The TRS is classified as a Preliminary Feasibility level study whereas the FS was classified as a Feasibility level study. This change was driven by the Subpart 1300 requirement that a compliant Feasibility level TRS include a capital cost contingency allowance no greater than 10%, whereas the initial capital cost estimate for the FS included a more conservative allowance at approximately 15%.

All other technical analyses, design information, capital and operating cost information, economic analyses, permitting and legal assumptions, conclusions and recommendations are consistent between the TRS and the FS.

Financial data in the FS and TRS are based on cost estimates as of December 31, 2020, as set forth in the FS. On February 13, 2025, the Company released an updated cash flow model for the Project (the “Financial Update”). The Financial Update was prepared by the

Company and is based, in part, on the basic engineering work completed by Ausenco Engineering USA South Inc. (“Ausenco”) in January 2025, and with contributions from other mining engineers and consultants, utilities and financial advisors. It is intended to be read as a supplemental financial update to the cash flow forecast included in the FS with respect to economic information regarding the Project. Using the scientific and technical information presented in the FS, the Financial Update reflects the progression of the Project plan to a Basic Engineering level, including applying fourth quarter 2024 cost estimates for construction and operations and current and consensus commodity pricing for sales. Neither the Financial Update nor the studies or data underlying such update modifies the Mineral Resources and Mineral Reserves reported in the FS and the TRS or the material assumptions and information pertaining to such disclosure. The information contained in the Financial Update is subject to the assumptions, exclusions and qualifications set forth in the Company’s Current Report on Form 8-K filed with the SEC on February 13, 2025 and included in the Company’s Annual Report on Form 10-K filed with the SEC on March 19, 2025, as well as those contained in the FS and the TRS, except to the extent explicitly updated by the Financial Update. The FS, TRS and Financial Update have not been updated to reflect developments in engineering, contracting, financing, permitting and other developments during 2025, which, when finalized, may result in material changes to the estimated cash flows, timing projections and other information in the Financial Update. Furthermore, the Financial Update does not provide for debt service requirements, which will not be determinable until the Company enters into definitive agreements with EXIM or other providers, but will be a substantial cost.

Readers are encouraged to read the Financial Update and the Company’s Current Report on Form 8-K filed with the SEC on February 13, 2025, which is available under the Company’s profile on EDGAR. Readers are encouraged to read the TRS and the Company’s Current Report on Form 8-K filed with the SEC on January 3, 2021, as amended by the Company’s Current Report on Form 8-K/A filed with the SEC on June 8, 2022, which are available under the Company’s profile on EDGAR. Readers are also encouraged to read the FS, which is available on the Company’s website and under the Company’s profile on SEDAR, for detailed information concerning the Project. The FS, the TRS and the Financial Update are intended to be read as a whole, and sections should not be read or relied upon out of context.

References to the “Technical Reports” in this presentation refer to the FS, the TRS and the Financial Update, as applicable. See also “Regulatory Information” at the end of this presentation.

This presentation contains certain mineral reserve, production, costs, valuation, capitalization, trading data and similar information regarding certain other mineral projects and peer companies. Such data was derived from publicly available reports by such companies and other trade and industry sources. While the company believes such sources to be reliable, the company has not independently verified such information. Furthermore, information regarding mineral reserves, production and similar mineral project information for each company is based on estimates, assumptions and reporting standards applied to available data by each company and their reserve engineers in their respective reports, which may differ materially from the estimates, assumptions and reporting standards applied by us, and therefore may not be comparable among the companies presented. As a result, comparisons of such data made in this presentation, while considered reasonable at the time they are made, are subject to a variety of risks and uncertainties which could cause actual events or results of each company to differ materially from those reflected and there can be no assurance that we will be able to achieve similar results at similar stages of development.

Investors should be aware that the U.S. EXIM Letter of Interest (“LOI”), PPL and indicative term sheet are non-binding and conditional, and do not represent a financing commitment. A funding commitment, if any, is conditional upon successfully completing the due diligence and underwriting process, which may not be completed on the expected timeline, or at all. If the Company’s application is approved, there can be no assurance that the U.S. EXIM financing will be for the full amount indicated in the LOI or the increased amount requested in the application, or that the approved U.S. EXIM financing will be sufficient for the Company to commence construction of the Project. Further, release of funding under any such commitment would be subject to the satisfaction of certain conditions and covenants by the Company.

Investors should be aware that there can be no assurance that the that exploration activities will result in the discovery of additional resources or reserves. Exploration results are inherently uncertain and subject to numerous risks and uncertainties, including geological factors, market conditions, and regulatory changes. Furthermore, development of any additional resources and reserves discovered would be subject to any applicable NEPA and permitting requirements.

Investors should be aware that the Project’s inclusion as a Transparency Project on the Permitting Dashboard does not imply endorsement or support for the project by the federal government, or create a presumption that the Project will be approved, favorably reviewed by any agency, or receive federal funding. The inclusion of a project on the Permitting Dashboard may be reconsidered based on updated information. Additionally, investors should be aware that the Executive Order does not indicate any commitments on part of the government or any government agency with regard to the applicability of any programs to the Project, or the timing or outcome of any such initiative that may be applicable to the Project.

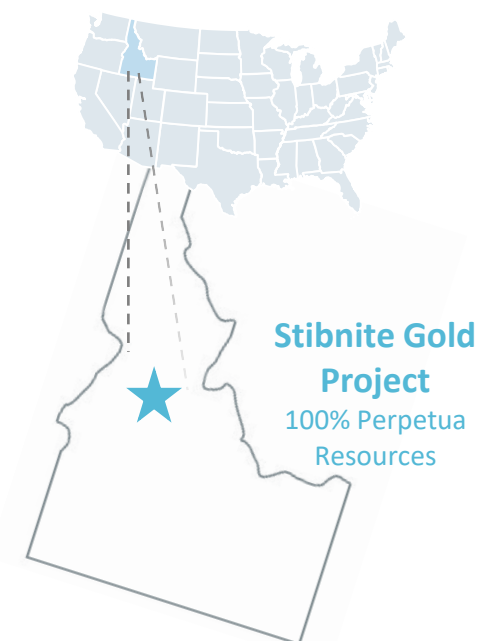


PERPETUA RESOURCES POISED FOR SUCCESS

World class gold-antimony project and national strategic asset with robust investor support

| | | |
|--|---|---|
| <p>Superb Economics^{1,2}</p> <p>High grade open-pit & large gold reserve in U.S.</p> <p>Attractive production and AISC cost profiles</p> | <p>Exploration Upside¹</p> <p>4.8 Moz gold reserves</p> <p>1.2 Moz gold M&I resources</p> <p>1.2 Moz gold Inferred resources</p> <p>Significant Exploration Upside</p> | <p>Critical Mineral</p> <p>Only U.S. reserve of antimony (148 Mlbs)³</p> <p>Antimony is critical to national defense and clean energy future</p> |
| <p>Idaho</p> <p>Premier U.S. mining jurisdiction</p> <p>Excellent infrastructure</p> <p>Rich history of gold & antimony mining</p> | <p>Government Endorsed</p> <p>+\$80 million DoW Awards⁴</p> <p>~\$2.0 billion application for U.S EXIM financing⁵</p> <p>Listed as priority project by White House</p> | <p>Restoring Brownfield Site</p> <p>Environmental restoration integrated into plan of operations</p> <p>Re-establish fish migration and improve habitat conditions</p> |

Idaho: A Premier Mining Jurisdiction



¹Based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.

²Based on the latest global all-in sustaining cost information available on the World Gold Council website, www.worldgoldcouncil.org (Source: Metals Focus Gold Mine Cost Service).

³Source: U.S. Geological Survey, Mineral Commodity Report Summaries, January 2024. Antimony reserves are based on the 2020 Feasibility Study.

⁴Includes Small Business Innovation Research Grants of \$200K, Defense Ordnance Technology Consortium Agreement of up to \$22.4 million and Defense Production Act Title III funding of \$59.2 million. See Cautionary Note.

⁵Based on formal application submitted for up to \$2 billion (see Perpetua's press release dated May 23, 2025). Any final commitment will be dependent on meeting EXIM's underwriting criteria, authorization process, finalization and satisfaction of terms and conditions. All final commitments must comply with EXIM policies as well as program, legal and eligibility requirements. See Cautionary Note.

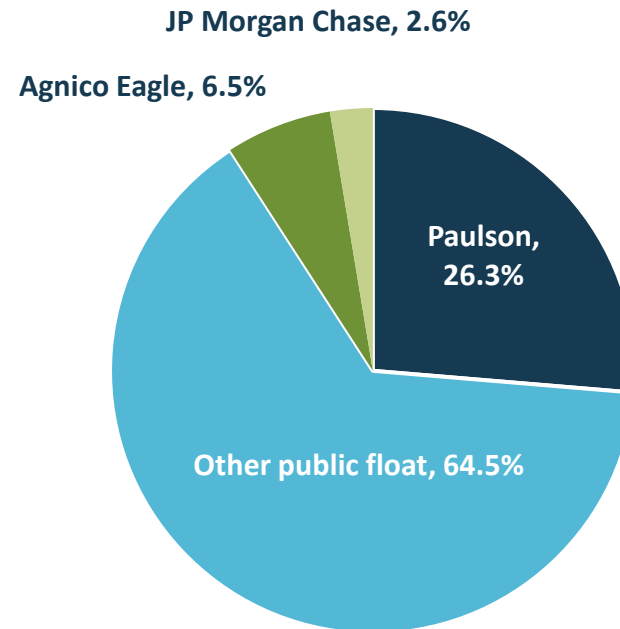


SUPPORTIVE SHAREHOLDER BASE

CAPITAL STRUCTURE ¹

- ❖ **Issued & Outstanding** 122.9 Million
- ❖ **Options** 0.3 Million
- ❖ **Share Units** 1.6 Million
- ❖ **Warrants** 4.4 Million
- ❖ **Fully Diluted** 129.3 Million
- ❖ **Cash Balance** ~\$720 Million

SHAREHOLDERS ²



RESEARCH COVERAGE

- ❖ BMO – Brian Quast
- ❖ B. Riley Financial – Nick Giles
- ❖ Cantor Fitzgerald – Mike Kozak
- ❖ H.C. Wainwright – Heiko Ihle
- ❖ National Bank Financial – Rabi Nizami
- ❖ Roth Capital – Mike Niehuser
- ❖ RBC – Mike Siperco

¹ Issued and outstanding shares and share units as of November 19, 2025 and estimated cash balance as of October 31, 2025.

² Based on most recent shareholder filings, and pro forma for the equity transactions and private placements through November 19, 2025. Unexercised options, share units and warrants are not included.



**Perpetua
Resources**



IDAHO: A PREMIER MINING JURISDICTION

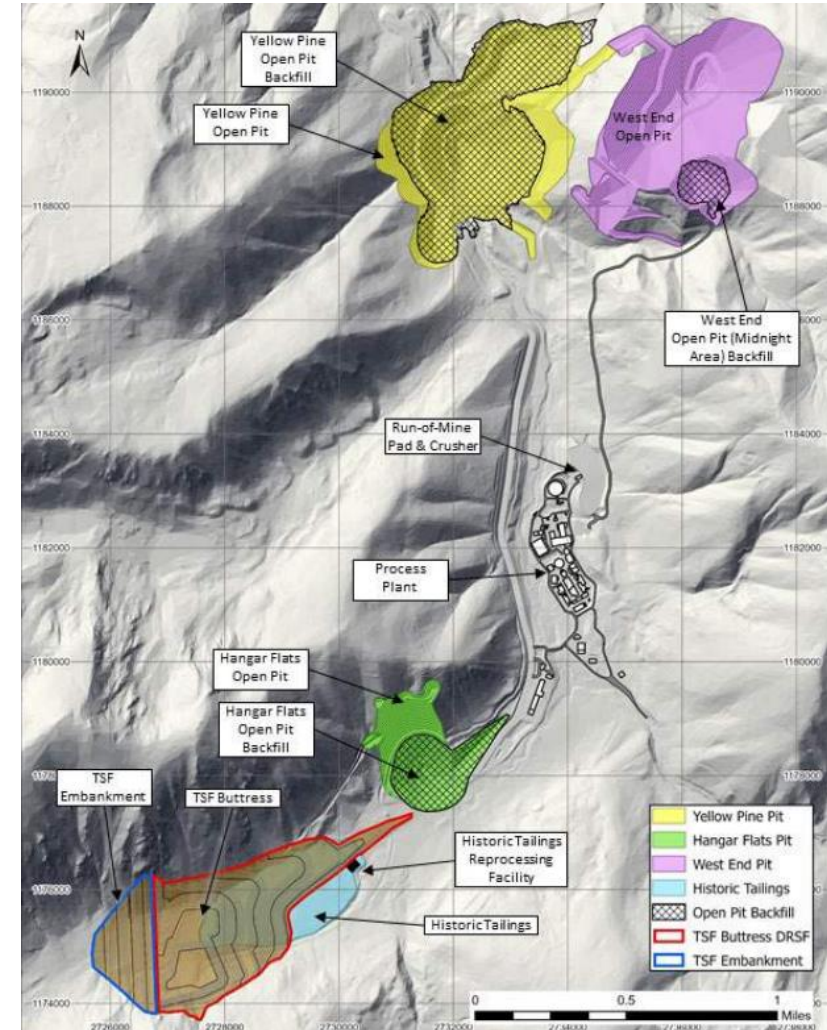
- ✓ Tier 1 Jurisdiction with low geopolitical risk
- ✓ Well-defined permitting process
- ✓ Robust community and political support
- ✓ Excellent infrastructure including roads and low-cost, clean hydro power to site
- ✓ Talented & experienced local workforce
- ✓ Highly prospective geology and extensive history of gold, antimony & tungsten mining





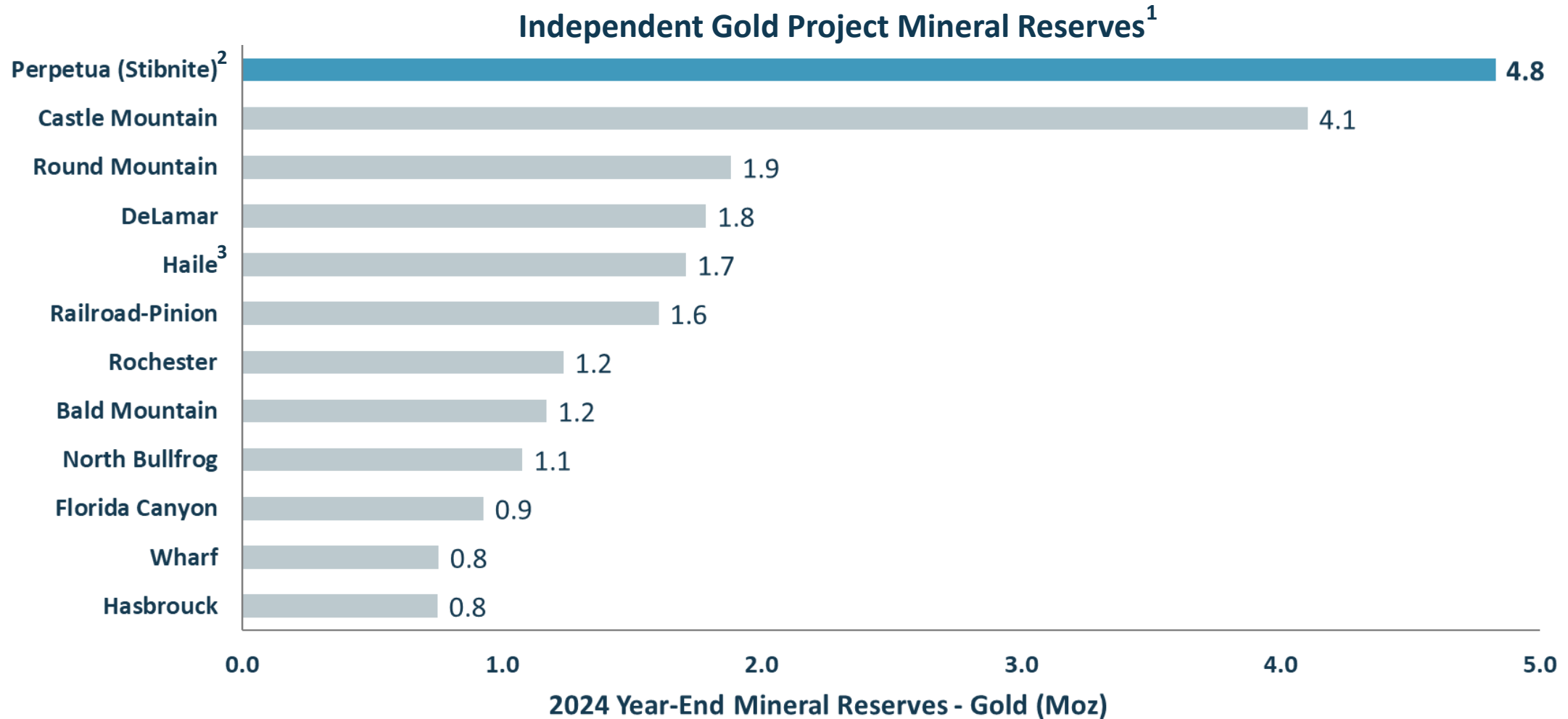
STIBNITE GOLD PROJECT SITE LAYOUT

- Three open pits (Yellow Pine, Hangar Flats, West End) and reprocessing of historical tailings
- Highest grades sequenced at beginning of mine plan to boost project economics
- Centrally located ore processing plant
- Geosynthetic-line tailings storage facility with rockfill embankment and buttress
- Backfilling of Yellow Pine pit to restore river and provide permanent fish passage on closure
- Worker housing facility for construction and operations





LARGEST INDEPENDENT U.S. GOLD RESERVE¹



Source: Latest available company materials as of June 2025.

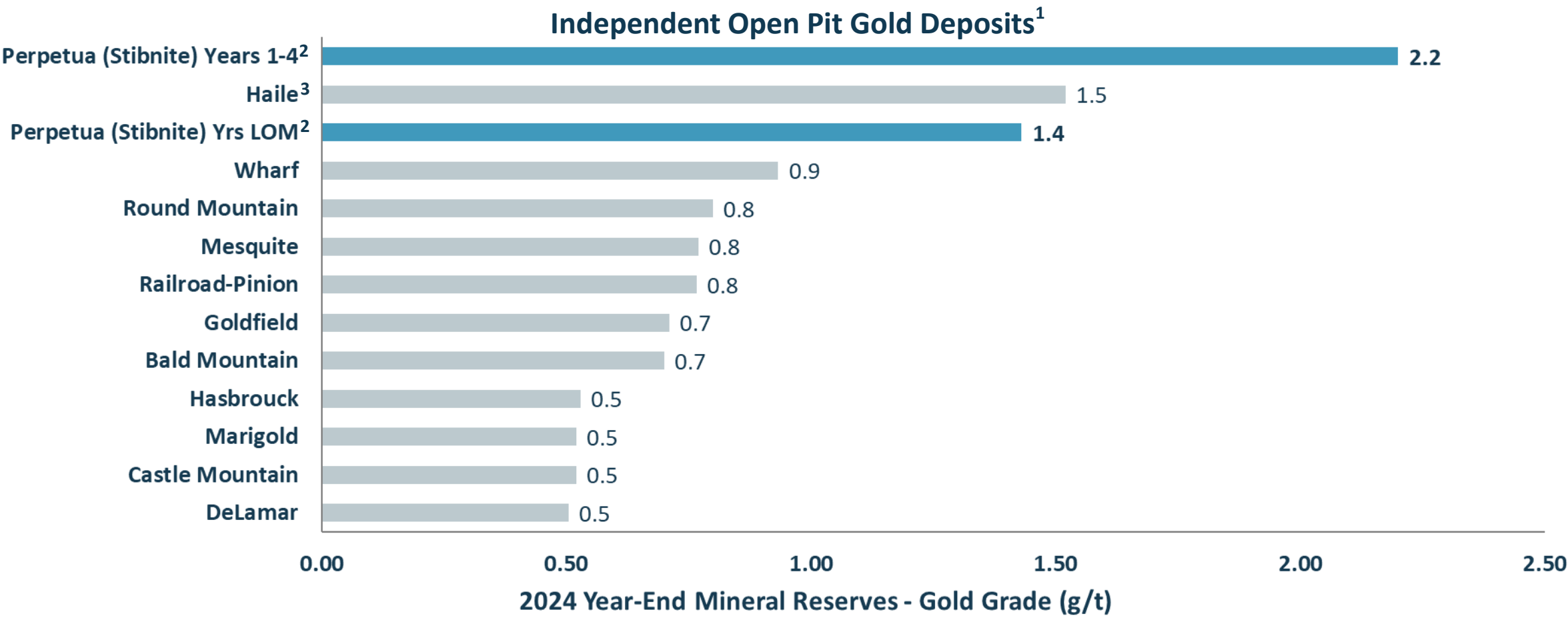
1. Independent refers to gold projects as not owned by Barrick or Newmont; Independent projects shown are from the lower 48 states in the U.S.

2. Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.

3. Open Pit Reserves only.



HIGHEST GRADE OPEN PIT GOLD DEPOSIT*



Source: Latest available company materials as of June 2025.

*Based on Independent open pit gold project in lower 48 U.S.

1. Independent refers to gold projects as not owned by Barrick or Newmont; Independent projects shown are from the lower 48 states in the U.S.

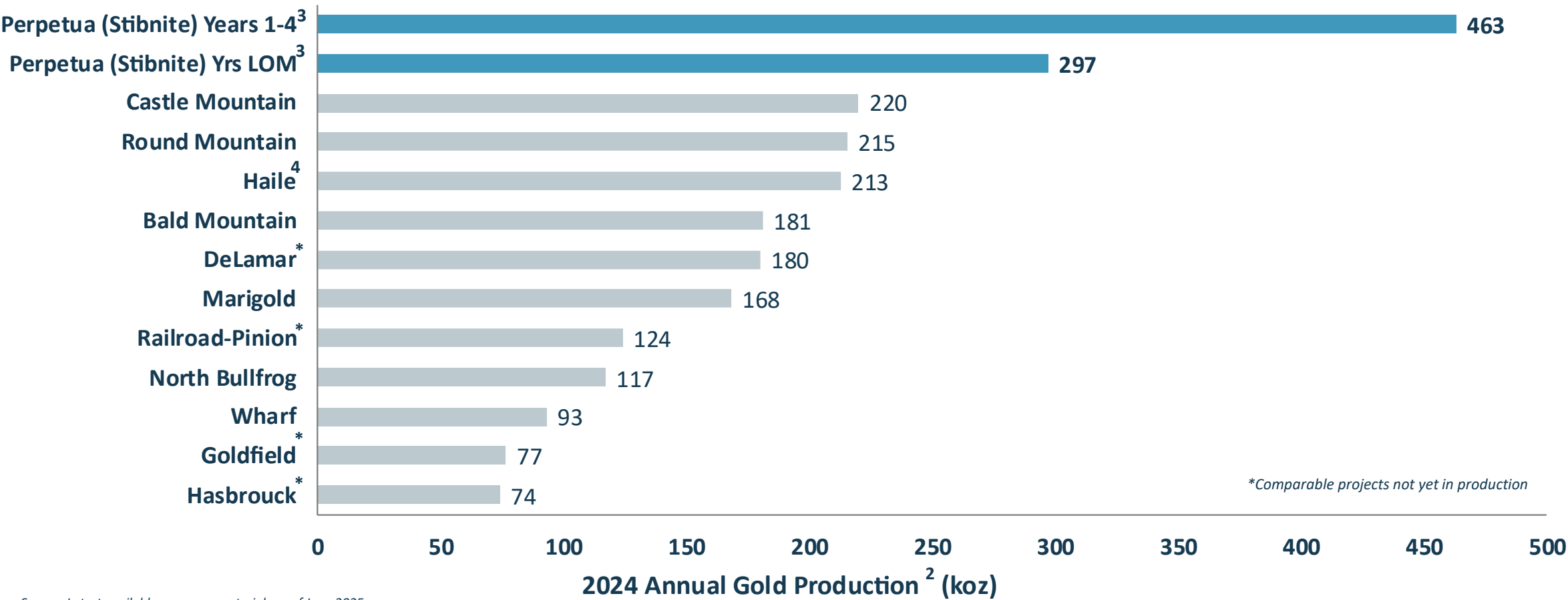
2. Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.

3. Open Pit Reserves only.

POISED TO BE LARGEST INDEPENDENT U.S. GOLD PRODUCER¹



Independent Projects and Producing Gold Mines¹



Source: Latest available company materials as of June 2025.

1. Independent refers to gold projects as not owned by Barrick or Newmont; Independent projects shown are from the lower 48 states in the U.S.

2. 2024 annual gold production for the peer group producing mines; future life-of-mine average annual production for the Railroad-Pinion, Goldfield, DeLamar, and Hasbrouck projects based on the most recent technical studies available; Perpetua (Stibnite) is based on estimated future production from the 2020 Feasibility Study.

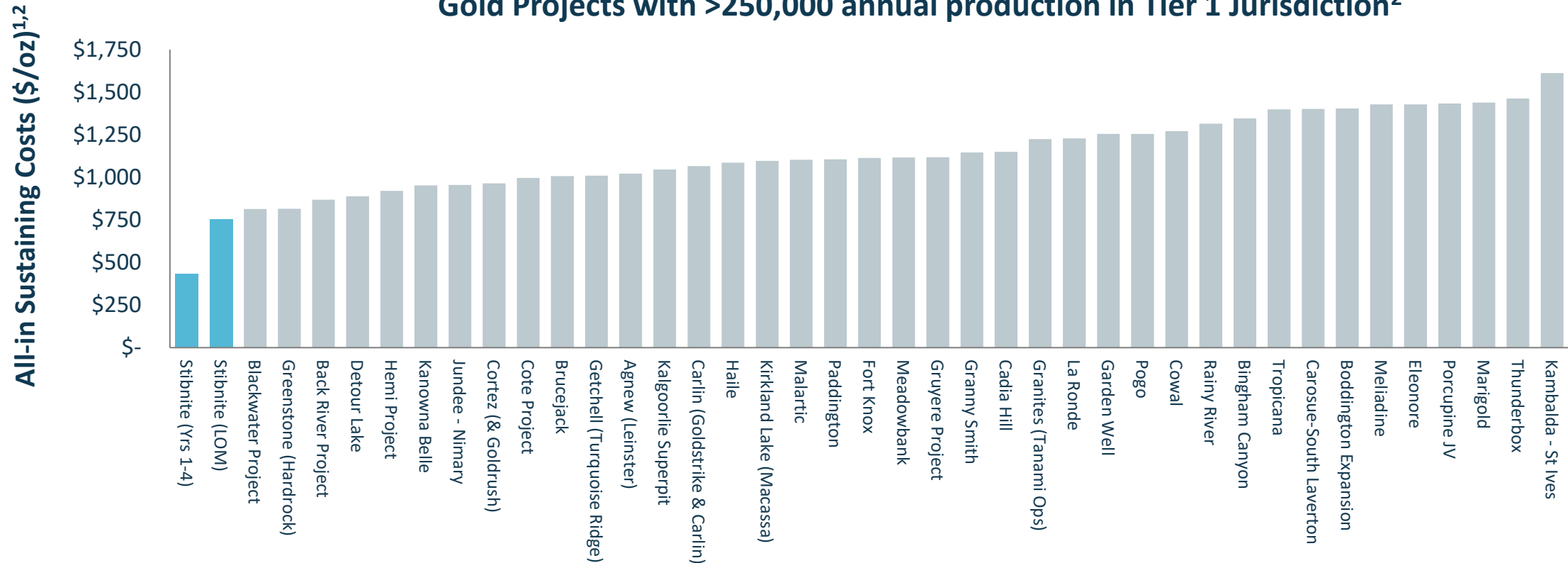
3. Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.

4. Open Pit part of the project only.



LOWEST ALL-IN SUSTAINING COSTS¹

Gold Projects with >250,000 annual production in Tier 1 Jurisdiction²



Valuable antimony by-product credit of \$220/oz over life of mine (assumes \$10/lb antimony)³

1. All-in Sustaining Cost ("AISC") is a non-GAAP measure. See "Non-GAAP measures" at the end of this presentation.

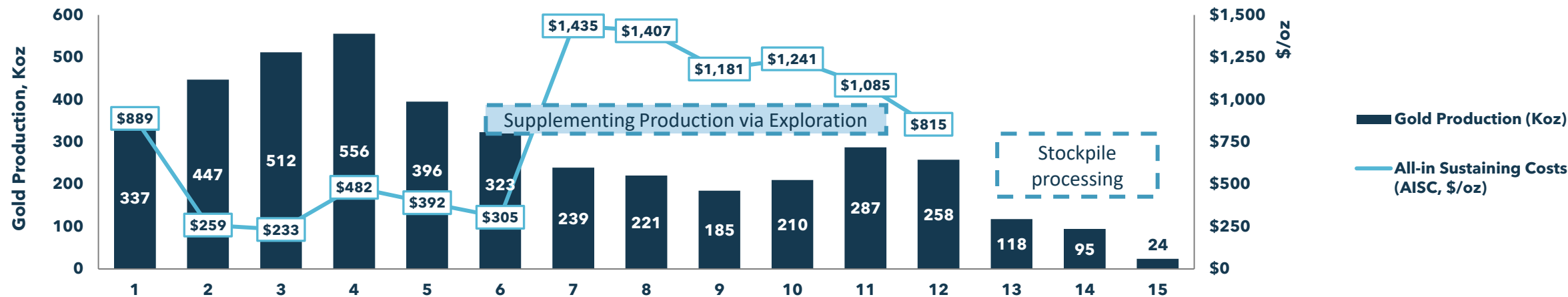
2. Based on a comprehensive list of gold projects in the United States, Canada and Australia with over 250,000 ounces of gold production expected in 2025 from Wood Mackenzie as of June 30 2025.

3. Based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation. Antimony by-product credit is calculated using antimony price of \$10.00/lb.

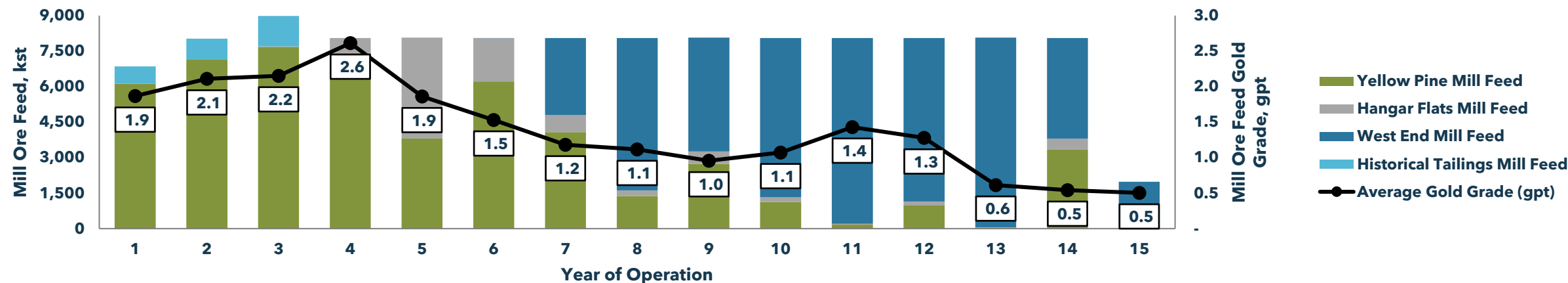


MINE SEQUENCING AND PRODUCTION PROFILE

Gold Production and All-in Sustaining Costs



Mill Feed & Gold Grade by Deposit



Note: Based on the 2020 Feasibility Study (FS) and the 2024 Financial Update, which are intended to be read as a whole and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the FS. See "Regulatory Information" at the end of this presentation. For a summary of differences between the FS and TRS, see "Cautionary Note and Technical Disclosure" at the beginning of this presentation.



FINANCIAL HIGHLIGHTS^{1,2}

| | Early Production Years 1-4 | Life-of-Mine Years 1-15 |
|---|-------------------------------|----------------------------|
| Recovered Gold Total | 1,852 koz | 4,223 koz |
| Recovered Antimony ³ Total | 69 Mlbs | 107 Mlbs |
| Average Annual Recovered Gold | 463 koz/yr | 296 koz/yr |
| Cash Costs Net of By-Product Credits ⁴ (\$/oz gold) | \$217/koz | \$537/koz |
| Total Cash Costs Net of By-Product Credits ⁵ (\$/oz gold) | \$258/koz | \$583/koz |
| All-In Sustaining Costs (AISC) Net of By-Product Credits ⁶ (\$/oz gold) | \$435/koz | \$756/koz |
| Initial Capital including Contingency ⁷ | \$2,215 million | |
| \$2,900/oz gold - \$31.50/oz silver - \$21.00/lb antimony ⁸ | | |
| After-Tax Net Present Value (NPV) at 5% Discount Rate ⁹ | \$3,650 million | |
| Annual Average EBITDA ¹⁰ | \$1,366 million | \$745 million |
| Annual Average After-Tax Free Cash Flow ¹¹ | \$1,117 million | \$590 million |
| After-Tax Internal Rate of Return ¹² | 27.1% | |
| After-Tax Payback Period | 2.2 years | |
| \$3,100/oz gold - \$35/oz silver - \$22.00/lb antimony ¹³ | | |
| After-Tax Net Present Value at 5% Discount Rate ⁹ | \$4,117 million | |
| Annual Average EBITDA ¹⁰ | \$1,471 million | \$809 million |
| Annual Average After-Tax Free Cash Flow ¹¹ | \$1,199 million | \$640 million |
| After-Tax Internal Rate of Return ¹² | 29% | |
| After-Tax Payback Period | 2.1 years | |

- For additional information regarding the Financial Update, including underlying assumptions and risks, see the Financial Update included in the Current Report.
- The Financial Update assumes 100% equity financing.
- Antimony is a chemical element included on the U.S. Interior Department's list of Critical Minerals.
- Cash Costs consist of mining costs, processing costs, mine-level G&A and by-product credits. By-product credits calculated based on consensus pricing. Cash Costs is a non-GAAP measure. See Non-GAAP Measures at the end of this release.
- Total Cash Costs consist of Cash Costs, royalty costs, treatment costs, refining costs, and transportation costs. By-product credits calculated based on consensus pricing. Total Cash Costs is a non-GAAP measure. See Non-GAAP Measures at the end of this release.
- AISC includes Total Cash Costs plus sustaining capital costs. By-product credits calculated based on consensus pricing. AISC is a non-GAAP measure. See Non-GAAP Measures at the end of this release.
- Initial Capital, net, reflects estimated total capital expenditures of \$2,215 million, including a contingency of \$191.9 million, net of \$33.6 million of pre-production revenue.
- Spot prices are defined as \$2,900/oz gold, \$21.00/lb antimony, and \$31.50/oz silver. The precious metals prices selected for this scenario were based on the NYMEX gold and silver settlement prices of \$2,887.60/oz and \$32.44/oz, respectively, on February 7, 2025. The antimony price selected for the spot scenario was based on Rotterdam antimony price as of February 7, 2025.
- Net Present Value (NPV) is defined as the present value of future after-tax cash flows of the project discounted at an annual rate of 5%. The Financial Update assumed a combined state and federal effective tax rate of 26.45%.
- EBITDA consists of total revenue minus operating costs, offsite charges and royalties. EBITDA is a non-GAAP measure. See Non-GAAP Measures at the end of this release.
- After-Tax Free Cash Flow consists of EBITDA as adjusted for changes in net working capital, all capital expenditures (initial, sustaining, and closure capital expenditures), and salvage value, less taxes payable. Free Cash Flow is a non-GAAP measure. See Non-GAAP Measures at the end of this release.
- Internal rate of return (IRR) is defined as the after-tax discount rate at which the net-present value of the project reaches zero. The Financial Update assumed a combined state and federal effective tax rate of 26.45%.
- Sensitivity analysis as shown in 2025 Financial Update.

Based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.



STIBNITE GOLD PROJECT COST SUMMARY¹

| Operating Costs | Early Production Years 1-4 | | Life of Mine Years 1-15 | |
|---|----------------------------|----------------|-------------------------|----------------|
| | US\$/t milled | US\$/oz Au | US\$/t milled | US\$/oz Au |
| Mining | \$13.3 | \$234.2 | \$10.2 | \$278.5 |
| Processing | \$13.4 | \$234.7 | \$13.2 | \$362.0 |
| G&A | \$4.3 | \$72.4 | \$4.3 | \$117.0 |
| By-Product Credits | (\$18.5) | (\$324.1) | (\$8.0) | (\$220.4) |
| Cash Cost Net of By-Products¹ | \$12.5 | \$217.2 | \$19.7 | \$537.1 |
| Offsite Charges | \$0.3 | \$4.7 | \$0.1 | \$4.0 |
| Royalties | \$2.1 | \$36.5 | \$1.5 | \$42.1 |
| Total Cash Cost Net of By-Products¹ | \$14.9 | \$258.3 | \$21.3 | \$583.2 |
| Sustaining Capital Costs | \$10.1 | \$177.0 | \$6.3 | \$173.1 |
| All-in Sustaining Cost (AISC)¹ | \$24.9 | \$435.3 | \$27.6 | \$756.3 |

| Capital Costs | Initial CAPEX ² (US\$M) | Sustaining CAPEX (US\$M) | Closure CAPEX ³ (US\$M) | Total CAPEX (US\$M) |
|--|------------------------------------|--------------------------|------------------------------------|---------------------|
| Direct Costs - Mine Costs | 183.6 | 215.4 | -- | 399.0 |
| Direct Costs - Processing Plant | 643.7 | 88.1 | -- | 731.8 |
| Direct Costs - On-Site Infrastructure | 336.3 | 287.8 | -- | 624.1 |
| Direct Costs - Off-Site Infrastructure | 295.5 | 0.4 | -- | 295.9 |
| Indirect Costs and Project Delivery | 348.8 | -- | -- | 348.8 |
| Mitigation, Monitoring and Closure | 11.5 | 106.0 | 118.1 | 235.5 |
| Owner's Costs | 227.9 | -- | -- | 227.9 |
| Contingency and Sales Tax | 201.1 | 25.8 | -- | 226.9 |
| Sub-total CAPEX | 2,248.5 | 723.5 | 118.1 | 3,090.0 |
| Pre-Production Revenue | (33.6) | -- | -- | (33.6) |
| Total CAPEX | 2,214.8 | 723.5 | 118.1 | 3,056.4 |

Notes:

1. Cash costs, Total Cash Costs, and All-in Sustaining Costs are non-GAAP measures. See "Non-GAAP measures" at the end of this presentation.
2. Initial Capital ("Initial CAPEX") includes capitalized preproduction and is presented net of pre-production revenue assuming a price of \$2,100/oz gold.
3. Defined as non-sustaining reclamation and closure costs in the post-operations period.

Based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation. Operating costs and capital costs do not provide for debt service requirements.

ONLY U.S. RESERVE OF ANTIMONY WITH 148 MIbs^{1,2}



ANTIMONY - IT'S CRITICAL

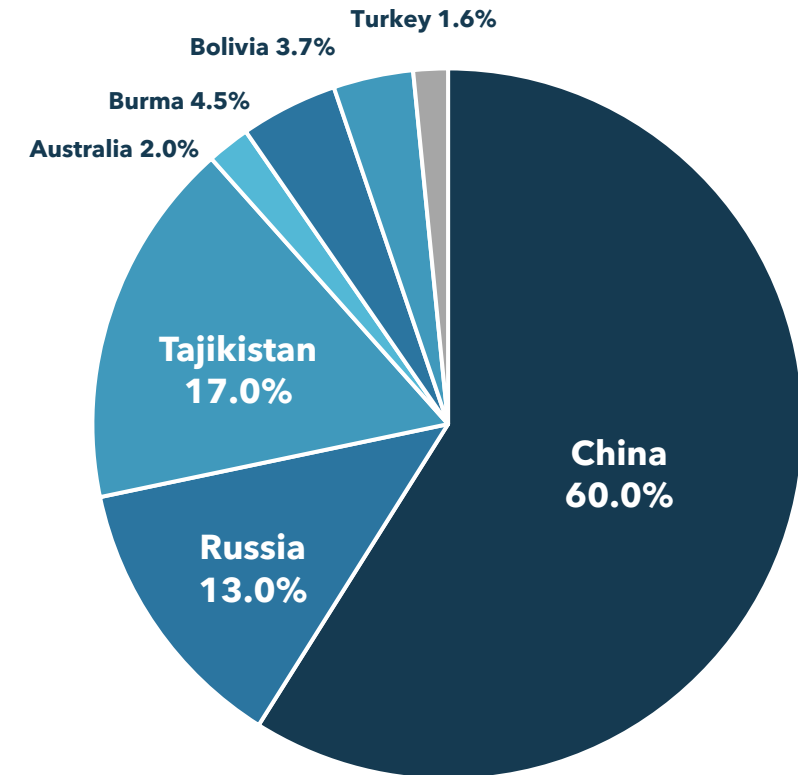
- ✓ Antimony is essential to industrial and national defense
- ✓ The United States has no domestic mined production
- ✓ China & Russia dominate the world supply (>70%)
- ✓ China began antimony export controls in 2024
- ✓ Perpetua has received >\$80M in government grants since 2022 and constructing antimony pilot plant with U.S. Dept of War
- ✓ Company currently engaged with 3rd parties to review antimony offtake opportunities



¹Source: U.S. Geological Survey, Mineral Commodity Report Summaries, January 2024.

² Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" and "Regulatory Information" at the beginning and end of this presentation, respectively.

World Antimony 2024 Production (USGS)



Note: 2024 world production estimates by the USGS are rounded, and as such the percentages shown may not add to 100%.



ANTIMONY: VALUABLE BY-PRODUCT CREDIT PROVIDES FURTHER OPTIONALITY TO HIGHER PRICES

| Stibnite Gold Project Cash Flow Model Sensitivities ¹ | | | | Base Case Price Assumption | Spot Price ² | | |
|---|--|--|--|-------------------------------|-------------------------|-------|-------|
| Antimony price (\$/lb) | | | | \$10 | \$15 | \$20 | \$25 |
| By-Product Credit (\$ per gold ounce) | | | | \$220 | \$329 | \$437 | \$545 |
| Illustrative after-tax net present value (NPV 5%) impact of antimony by-product production (\$M) | | | | - | \$318 | \$631 | \$943 |

\$943M incremental NPV at Spot Antimony Prices compared to Base Case assumptions^{1,2}

¹ Illustrative Net Present Values (5%) as of year 1 of operations (assumes sunk initial capital costs) with a valuation date as of commencement of operations. Commodity price assumptions include gold price of \$2,100/oz, silver price of \$27/oz and Antimony prices as presented. Other than commodity price assumptions, the Net Present Value calculation is consistent with the information in the Financial Update starting in year 1 of operations. Net Present Value (5%) based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" and "Forward Looking Statements" at the beginning of this presentation, and "Financial Projections" at the end of this presentation.

² Spot Price for antimony is defined as \$25.00/lb antimony and is based on Rotterdam antimony price as of June 18, 2025.



EXTENSIVE EXPLORATION UPSIDE

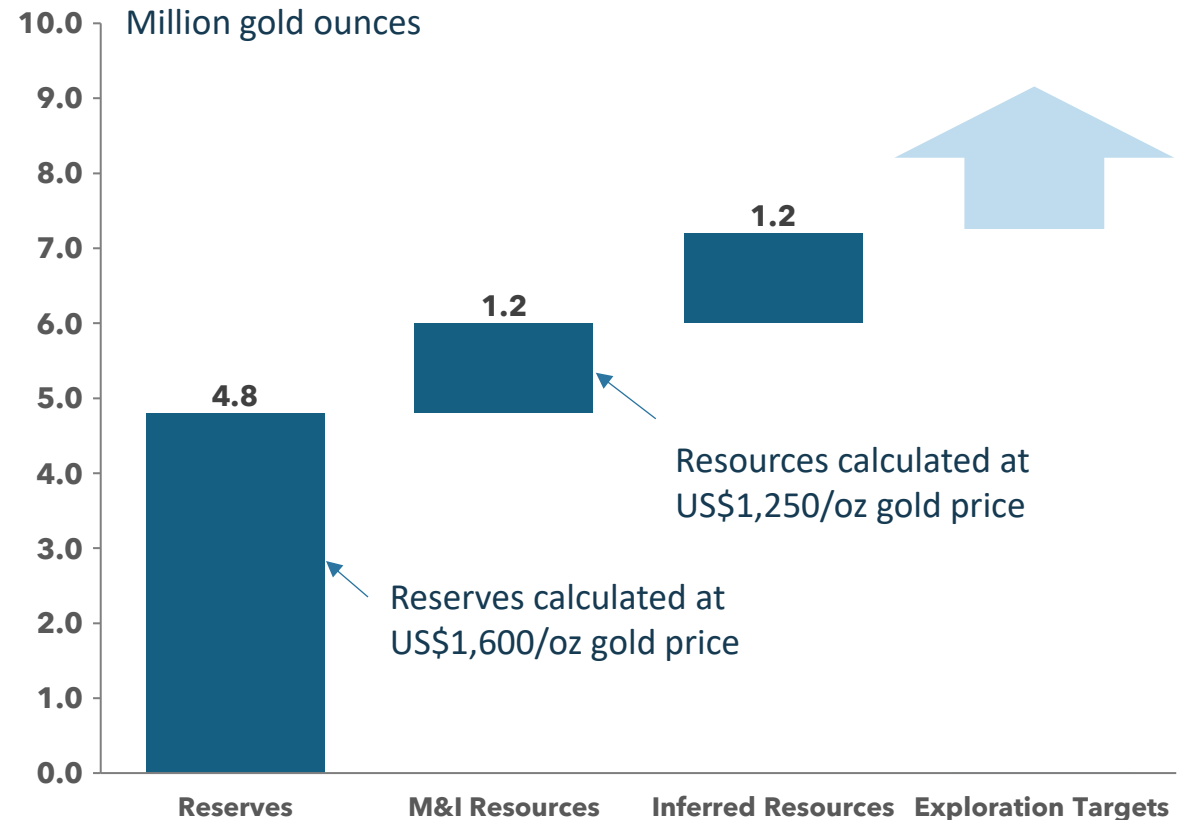
WITHIN EXISTING DEPOSITS:

- Northeast of Yellow Pine Deposit
- Below Hangar Flats pit & Old Defense Minerals Exploration Act (DMEA) working area
- West End along strike and at depth

PRIORITY EXPLORATION TARGETS:

- High grade targets (Garnet, Scout, Upper Midnight)
- Bulk tonnage targets (Cinnamid-Ridgetop, Saddle-Fern, Rabbit)
- Undefined airborne targets (Mule, Salt & Pepper, Blow-out)

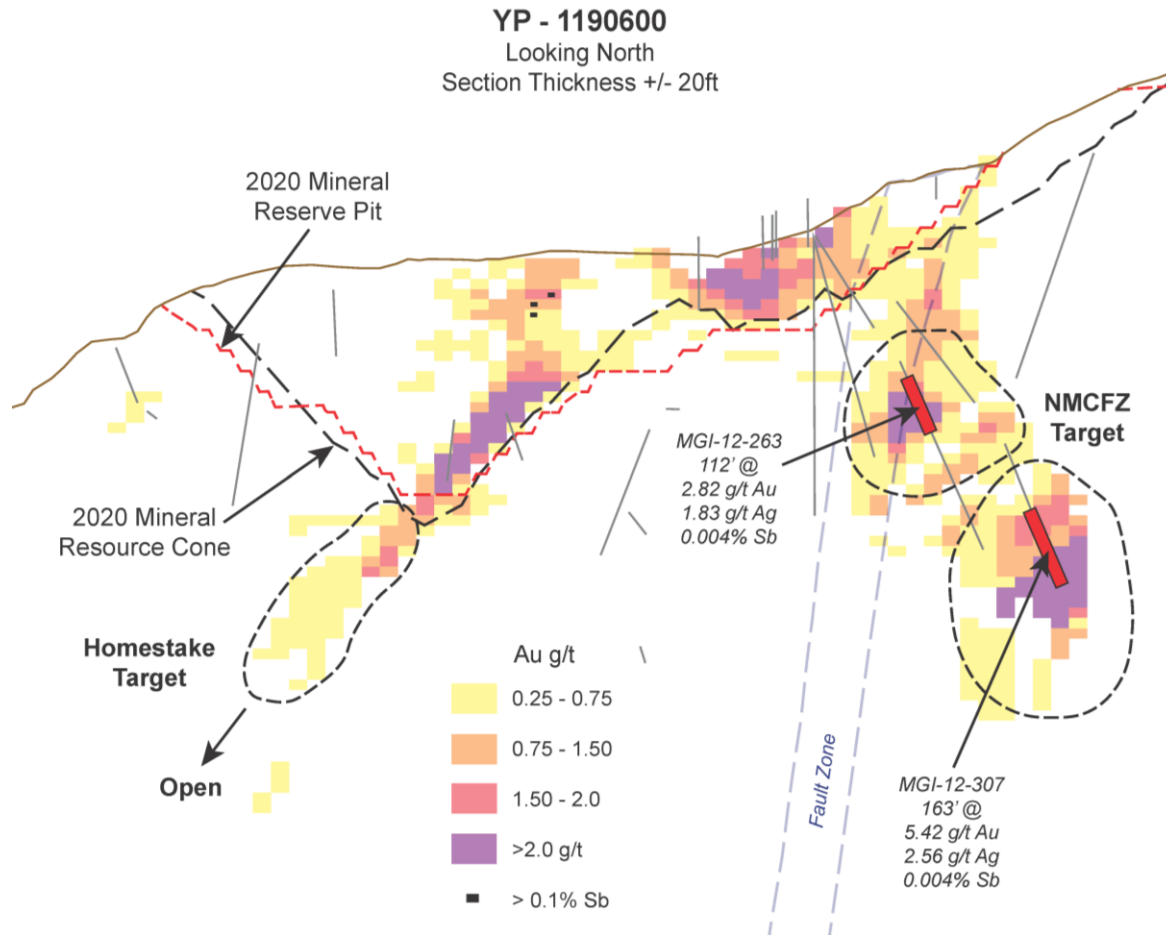
STIBNITE GOLD PROJECT MINERAL ENDOWMENT**



**Some of the prospects are conceptual in nature, there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. See the section titled "Forward-Looking Statements" at the beginning of this presentation.*

***Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" and "Regulatory Information" at the beginning and end of this presentation, respectively. Mineral Reserves were calculated using an Au price of \$1600/oz and Sb price of \$3.50/lb and variable cut off grade of 0.39-0.49 g/t Au. Mineral Resources were calculated using a \$1250/oz Au price and sulfide cut off grade of 0.45 g/t Au and oxide COG of 0.4 g/t Au based on the 2020 Feasibility Study. Based on a gold price of \$1,500/oz in the TRS, Mineral Resources increased to 6.3 Mozs @1.33 g/t using a sulfide cut off grade of 0.40 g/t Au and oxide cut off grade of 0.35 g/t Au. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves.*

KNOWN HIGH GRADE MINERALIZATION NEAR YELLOW PINE PIT



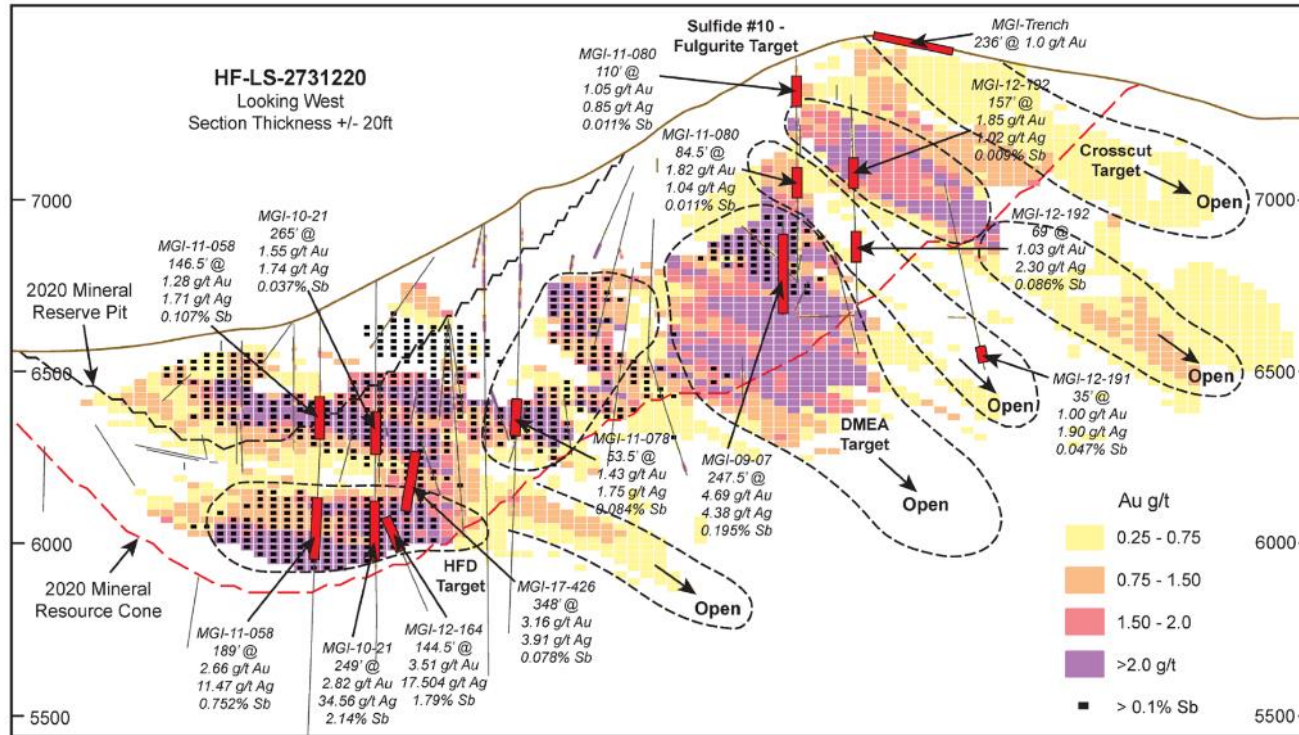
Source: SGP 2021 FS, Figure 16-7, p. 16-9

- Yellow Pine deposit open* to northeast;
- Intercepts outside pit include:
 - 163ft (49m) @5.42g/t Au**
 - 112ft (34m) @2.82g/t Au**
- Step out drilling will continue to test these broad, high grade structures in 2026 exploration program
- Focus on expanding mineralized envelope to add high grade feed to front end of mine plan and supplement later production years

*Some of the prospects are conceptual in nature, there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. See the section titled "Forward-Looking Statements" at the beginning of this presentation.

** Development of any additional resources and reserves discovered would be subject to any applicable NEPA and permitting requirements.

ADDITIONAL HIGH-GRADE RESOURCES NEAR HANGAR FLATS PIT



Source: SGP 2021 FS, Figure 9-17, p. 9-23

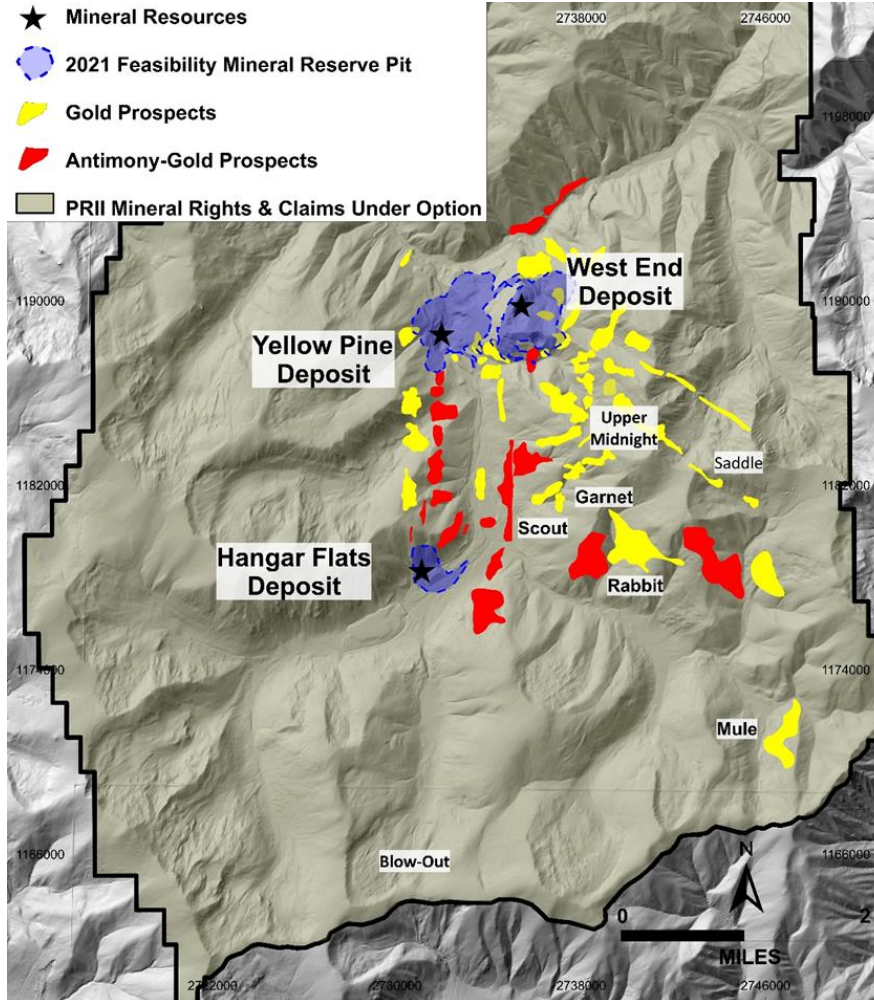
- Hangar Flats remains open at depth and along strike*
- Intercepts outside pit include:
 - 348ft (106m) at 3.16g/t Au and 0.08% Sb**
 - 249ft (75m) at 2.82g/t Au and 2.14% Sb**
 - 247ft (75m) at 4.69g/t Au and 0.2% Sb**
 - 144ft (43m) at 3.51g/t Au and 1.8% Sb**
- Upcoming drilling focused on defining higher-grade mill feed to supplement later years of mine plan

*Some of the prospects are conceptual in nature, there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. See the section titled "Forward-Looking Statements" at the beginning of this presentation.

** Development of any additional resources and reserves discovered would be subject to any applicable NEPA and permitting requirements.



PREVIOUSLY DRILLED HOLES VALIDATE PRIORITY EXPLORATION TARGETS OUTSIDE OF RESOURCES



- **Scout:**
 - 396ft (120m) at 1.2g/t Au and 0.5% Sb
 - 20ft (6m) at 6.0 g/t Au and 6.0% Sb
 - 247ft (75m) at 4.69g/t Au and 0.2% Sb
 - 144ft (43m) at 3.51g/t Au and 1.8% Sb
- **Garnet:**
 - 26ft (7m) at 10.7g/t Au
- **Upper Midnight:**
 - 100ft (30m) at 6.72g/t Au
 - 75ft (22m) at 14.7g/t Au

**Some of the prospects are conceptual in nature, there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. See the section titled "Forward-Looking Statements" at the beginning of this presentation. Select intercepts sourced from the company's prior filings.*

*** Development of any additional resources and reserves discovered would be subject to any applicable NEPA and permitting requirements.*



STIBNITE GOLD PROJECT FINANCING

Stibnite Gold Project Anticipated Capital Sources

| Financing Component | Equity | Strategic Equity Investments Incl. Agnico Eagle and JP Morgan Chase | | U.S. EXIM Loan | |
|-------------------------------|---|---|----------------------|--|---------------------------|
| Amount | \$527M ¹ | \$286M ² | \$156M ³ | Up to \$2B ⁴ | |
| Status | ✓ Equity Complete | ✓ Equity Complete | Outstanding Warrants | ✓ Application Submitted ✓ Preliminary Project Letter & Indicative Term Sheet Received | Due Diligence In progress |
| Capital Availability Outlined | Up to \$3.0 Billion of available capital ⁵ | | | | |

1. Includes \$459 million proceeds from June/July public offering and private placement, net, and \$67.9 million net proceeds from the October public offering.

2. Based on agreements entered into as of October 27 to raise \$255 million in equity investments from Agnico Eagle and JPMorganChase through a private placement, and an exercise of a related private placement rights agreement amounting to \$6.8 million in proceeds, and a private placement which closed on November 19, 2025 for proceeds of \$24.3 million.

3. Includes warrants to purchase common shares priced at 35%, 50% and 65% premiums over one, two and three years, respectively related to the Agnico Eagle and JPMorganChase private placements. See the Company's press release dated October 27, 2025. Also includes proceeds from the 400,000 warrants issued in connection with the November 2025 private placement for proceeds of up to approximately \$14 million if exercised in full. There can be no assurances that the warrants will be exercised.

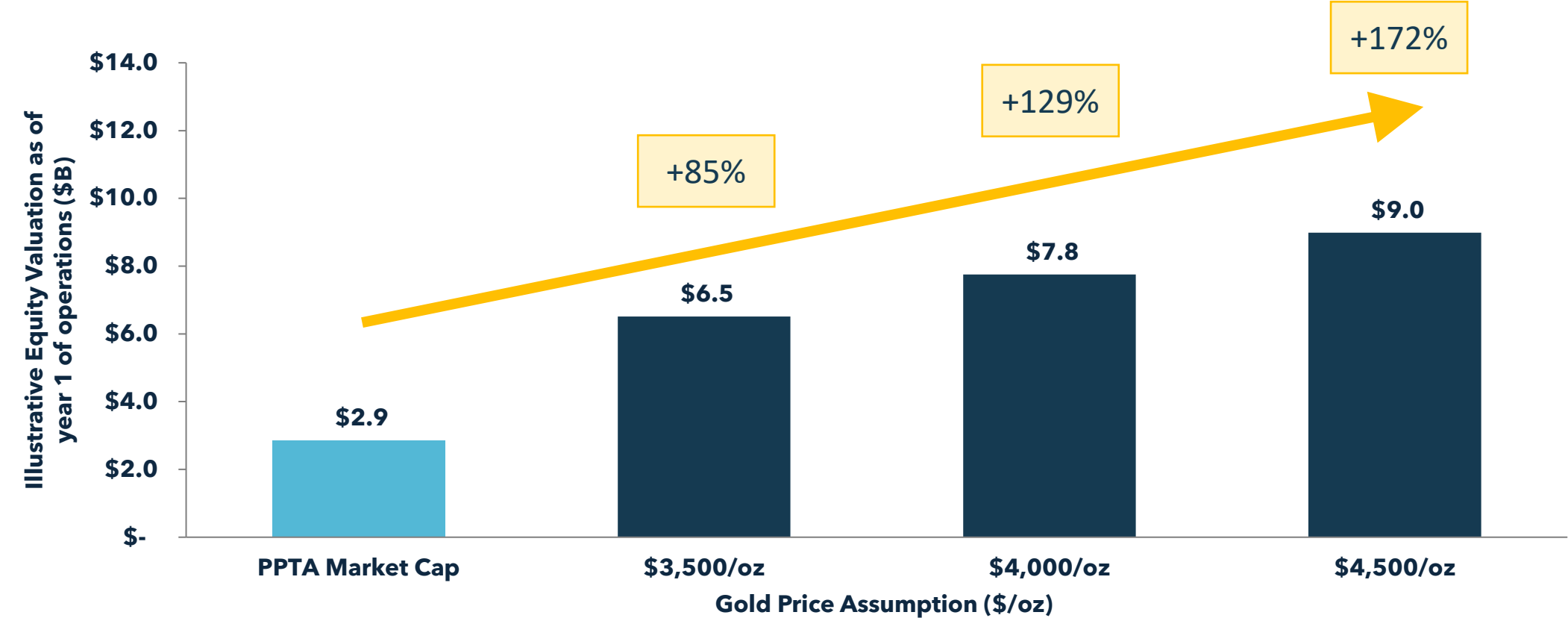
4. Based on the Preliminary Project Letter and Indicative Term Sheet (see press release dated September 8, 2025). Also Based on formal application submitted for up to \$2 billion, an increase from the \$1.8 billion Letter of Interest, reflecting a higher estimated number of job-years (see Perpetua's press release dated May 23, 2025). Any final commitment will be dependent on meeting EXIM's underwriting criteria, authorization process, finalization and satisfaction of terms and conditions. See "Cautionary Note & Technical Disclosure" at the beginning of this presentation.

5. The approximate capital available for project development includes the full exercise of the warrants included from the October 27, 2025 and November 19, 2025 announced transactions and the full \$2 billion debt funding of the EXIM loan. There can be no assurances that the warrants will be exercised. Additionally, there can be no assurance that the EXIM funding will be for the full amount of the application. Any final commitment will be dependent on meeting EXIM's underwriting criteria, authorization process, finalization and satisfaction of terms and conditions. See "Forward-Looking Statements" and "Cautionary Note & Technical Disclosure" at the beginning of this presentation.



ILLUSTRATIVE EQUITY VALUATION ONCE IN PRODUCTION

Illustrative Equity Valuation as of Year 1 of Operations*



**Illustrative Net Present Values (5%) as of year 1 of operations (assumes sunk initial capital costs) with a valuation date as of commencement of operations, less approximately \$2 billion of debt, \$200 million of interest, and \$150 million Corporate G&A. Commodity price assumptions include Antimony price of \$10/lb and Silver of \$27/oz and Gold price as presented. Other than commodity price assumptions, the Net Present Value calculation consistent with the information in the Financial Update starting in year 1 of operations.*

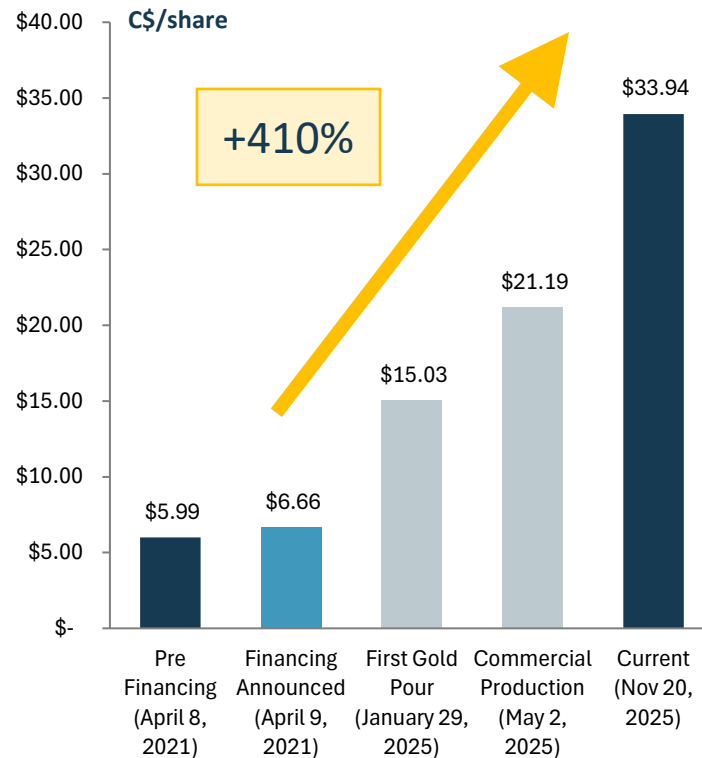
Net Present Value (5%) based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" and "Forward Looking Statements" at the beginning of this presentation, and "Financial Projections" at the end of this presentation.

Perpetua Resources market cap based on fully diluted market cap using closing price as of November 20, 2025 (US\$22.05 share price) and fully diluted shares of 129.3 million, including issued and outstanding shares, share units and warrants as of November 19, 2025.

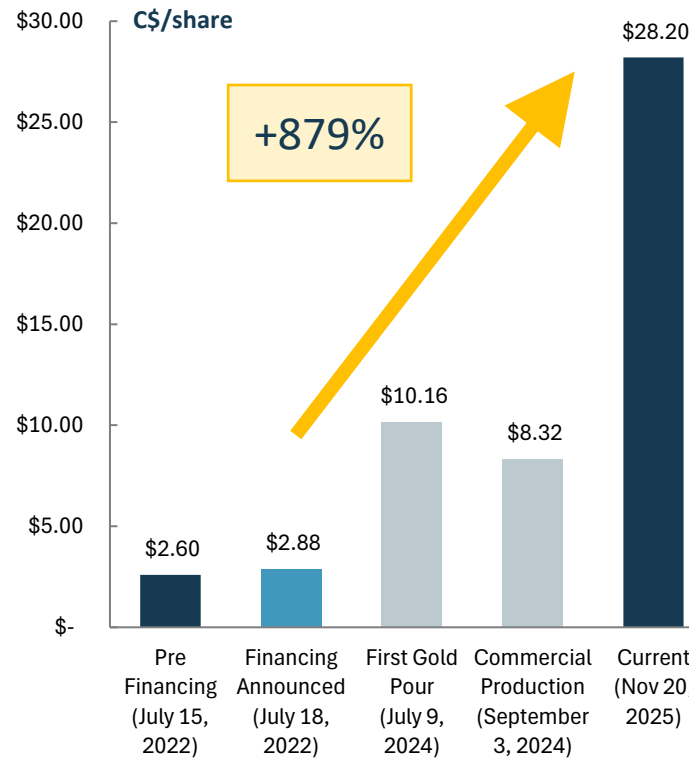


UNLOCKING VALUE THROUGH DEVELOPMENT

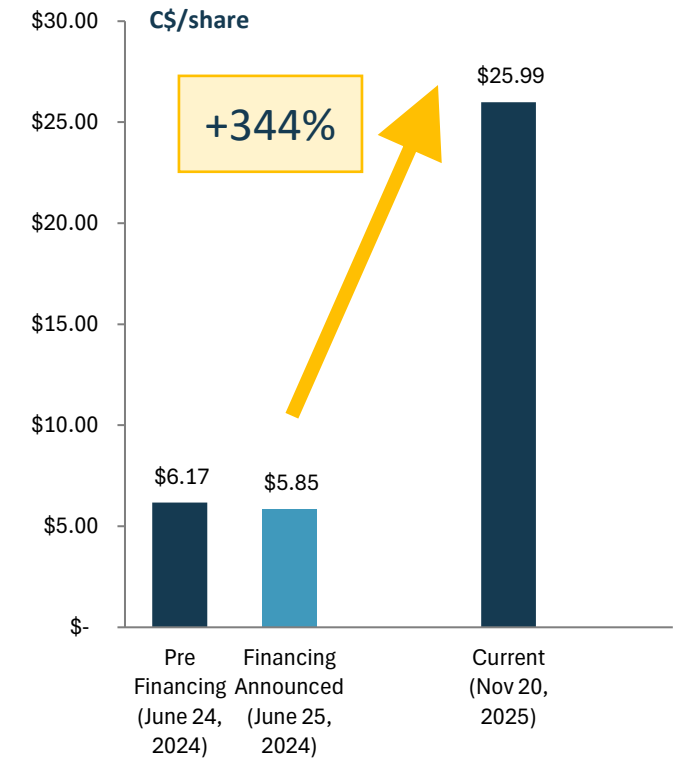
ARTEMIS SHARE PRICE PERFORMANCE



G MINING SHARE PRICE PERFORMANCE



SKEENA SHARE PRICE PERFORMANCE



+544% average value accretion across comparable single asset companies*

*Note: The information presented on this slide is derived from publicly available sources, including press releases and related public disclosures. Percent changes represent the stock price appreciation from financing announcement to current price. Share price performance may not be comparable due to various factors, including but not limited to, market conditions, project-specific factors and financing strategies.

GAINING MOMENTUM WITH NEAR-TERM CATALYSTS^{1,2}

2025 HIGHLIGHTS:

- ✓ Completed basic engineering, power contract, and 2024 Financial Update (Feb 2025)
- ✓ Selected as Priority Project by White House (Apr 2025)
- ✓ Received Preliminary Project Letter and Indicative Term Sheet from EXIM (Sept 2025)
- ✓ Announced Request for Proposals for antimony offtake opportunities (Sept 2025)
- ✓ Appointed Mark Murchison as CFO (Oct 2025)
- ✓ Announced groundbreaking at the Stibnite Gold Project (Oct 2025)
- ✓ Announced \$286 million strategic equity investments including Agnico Eagle and JPMorganChase (Oct 2025)
- ✓ Completed additional \$527 million net equity financing (YTD 2025)

Permitting & Development Milestones:

- ✓ Final Record of Decision (Jan 2025)
- ✓ Final Federal Permit (May 2025)
- ✓ Equity financing secured (Jun & Oct 2025)
- ✓ EXIM Preliminary project letter received (Sep 2025)
- ✓ Began Early works construction (Oct 2025)
- ☐ Ongoing Exploration Activities (2025-2026)
- ☐ Close EXIM debt financing (2026)
- ☐ Antimony Offtake (2026)
- ☐ Final Investment Decision (Spring of 2026)
- ☐ Commercial operations (2029)

¹ See forward-looking statements at the beginning of this presentation.

² Based on the latest permitting agency schedules and management expectations.



**Perpetua
Resources**
CORP.

Appendix



LEADING PERPETUA FORWARD

| Leader | Biography | Experience & Expertise |
|---|---|--|
| Jon Cherry President, CEO & Director | <ul style="list-style-type: none">• 30+ years of experience developing mining projects, including extensive U.S. permitting experience• Most recently served as Chairman, President and CEO of PolyMet, with prior senior roles at the Resolution JV and Rio Tinto. | <ul style="list-style-type: none">✓ U.S. Permitting✓ Stakeholder Relations✓ Project Development |
| Mark Murchison Chief Financial Officer | <ul style="list-style-type: none">• 25+ years of finance, mining and capital project experience.• Former CFO, Alacer Gold; prior experience with U.S. Vanadium and Rio Tinto. | <ul style="list-style-type: none">✓ Finance leadership✓ Project Financing✓ Capital Allocation |
| Jim Norine Sr. VP, Projects | <ul style="list-style-type: none">• 25+ years of project construction and engineering, delivering large-scale projects in the U.S.• Recent roles include Regional Director at Hatch (including Hermosa Project development), Ausenco, Sundt Construction & M3 Engineering. | <ul style="list-style-type: none">✓ Project Development✓ Engineering✓ Project Execution |
| Tim Kahl Sr. VP, Technical Services | <ul style="list-style-type: none">• 30+ years of design, construction, commissioning and operating complex mining operations.• Prior experience as General Manager for Peñasquito in Mexico and Process Manager for Pueblo Viejo in the Dominican Republic. | <ul style="list-style-type: none">✓ Project Development✓ Complex ore processing✓ Mill commissioning |
| Mckinsey Lyon VP, External Affairs | <ul style="list-style-type: none">• Leader of Perpetua's stakeholder engagement, social license development, government relations, advocacy, communications, and media activities.• 8+ years with Perpetua Resources; Boise-based Gallatin Public Affairs, 2006 to 2016. | <ul style="list-style-type: none">✓ Communications✓ Government Affairs✓ Stakeholder Relations |
| Joe Fazzini VP, Investor Relations | <ul style="list-style-type: none">• 15+ years experience as both corporate executive and investor-facing capital markets expert.• Recent roles in institutional equity sales, mining equity research and corporate management. | <ul style="list-style-type: none">✓ Investor Relations✓ Stakeholder Relations✓ Corporate Development |
| Dustin Rissmiller VP, Human Resources | <ul style="list-style-type: none">• Leader in talent acquisition and building and managing teams.• Industry experience in mining and energy projects and corporate growth strategies. | <ul style="list-style-type: none">✓ Human Resources✓ Talent Acquisition✓ Growth Strategies |



KEY DEVELOPMENT TEAM LEADERS

| Team lead | Prior Experience | Experience & Expertise |
|---|--|--|
| Travis Walker Operations General Manager | Kışladağ/Eldorado Gold - Process Manager, Mansourah Massarah/Ma'aden - Process Manager, Peñasquito/Newmont - Superintendent Process Operations, Pueblo Viejo/Barrick - General Supervisor Operations, Bagdad/Freeport McMoRan - Various Operational roles. | <ul style="list-style-type: none">✓ Mine operations✓ Mill commissioning✓ Mineral processing |
| Lloyd Warren Project Manager | Project Director, Dundee Precious Metals, Mining Consultant Project Execution – Josemaria, Zafranal,; Site Manager, Barrick Gold – Pueblo Viejo | <ul style="list-style-type: none">✓ Project Management✓ Project execution |
| Gene Bosley Engineering Manager | 25 years of engineering experience, joined Perpetua in 2016, leading tailings/water design on U.S. and international projects | <ul style="list-style-type: none">✓ Tailings management✓ Engineering |
| Ryan McCluskey Technical Services Superintendent | Newmont, Kinross, SSR, Albermarle and 25+ years of experience in mining engineering, operations, and project development | <ul style="list-style-type: none">✓ Mine engineering / planning✓ Mine operations✓ Project Management |
| Chris Dail Exploration Manager | 38 years of experience as an exploration geologist, joined and founded Perpetua in 2009, prior experience: Chevron, Cominco, Asarco, Electrum, Piedmont | <ul style="list-style-type: none">✓ Geology✓ Mine planning |



EXPERIENCED BOARD OF DIRECTORS

| Board of Directors | Background | Experience & Expertise |
|--|---|--|
| Marcelo Kim Chairman | <ul style="list-style-type: none">• Joined Perpetua as Director in 2016 and became Chair in 2020. Partner at Paulson & Co., Perpetua's largest investor.• Oversees Paulson & Co.'s global macro-economic and natural resource investments; extensive experience in commodities, investment analysis, capital markets and economics. | <ul style="list-style-type: none">✓ Executive Leadership✓ Financial experience✓ Industry experience |
| Chris Robison Director | <ul style="list-style-type: none">• 40+ years of mining industry experience that has spanned six commodities and five continents.• Former Fortune 500 executive (Newmont, Rio Tinto) with proven success in capital-intensive mining businesses and brings expertise in natural resources, mining, metallurgy, project development, M&A, capital investment, and permitting. | <ul style="list-style-type: none">✓ Executive Leadership✓ Operations & Project Leadership✓ Processing experience |
| Robert Dean Director | <ul style="list-style-type: none">• Former Managing Director, Allen & Company LLC, a New York-based investment banking firm.• President of Ada Sand & Gravel, Inc. (2019-2024), a southwest Idaho-based supplier of construction aggregates. | <ul style="list-style-type: none">✓ Executive & Financial Leadership✓ Accounting & Auditing✓ Risk Management |
| Laura Dove Director | <ul style="list-style-type: none">• Former Senior Director of the Ford Motor Company, from 2020 until 2022, where she led federal government relations.• Served as the U.S. Senate's Secretary for the Majority from 2013 to 2020. | <ul style="list-style-type: none">✓ Executive Leadership✓ Public policy & permitting✓ Government affairs |
| Andrew Cole Director | <ul style="list-style-type: none">• Over 35 years of experience in the mining industry including substantial expertise in the processing of refractory ore.• Previously General Manager of the Goldstrike Mine in Nevada, and General Manager of the Donlin Project in Alaska. | <ul style="list-style-type: none">✓ Operations & Project Leadership✓ Processing experience✓ Permitting & Risk Management |
| Richie Haddock Director | <ul style="list-style-type: none">• Former General Counsel, Barrick Gold Corporation.• Extensive experience in mining industry permitting, stakeholder engagement, M&A and litigation. | <ul style="list-style-type: none">✓ Executive Leadership✓ Risk Management✓ Government Affairs |
| Jeffrey Malmen Director | <ul style="list-style-type: none">• Senior Vice President of Public Affairs, IDACORP, an electricity holding company and Idaho Power, a regulated electrical power utility, where he has worked since 2007.• Former Chief-of-staff to the Governor of Idaho. | <ul style="list-style-type: none">✓ Executive Leadership✓ Government Affairs✓ Human Resource Management |
| Alexander Sternhell Director | <ul style="list-style-type: none">• Previously served as the Democratic Deputy Staff Director of and Senior Policy Advisor to the U.S. Senate Committee on Banking, Housing and Urban Affairs, and as Staff Director for the Senate Banking Subcommittee on Securities and Investments.• Experience drafting and negotiating financial services legislation. | <ul style="list-style-type: none">✓ Government Affairs✓ Financial Experience✓ Accounting & Auditing |



MINERAL RESOURCES & RESERVES¹

Proven & Probable Mineral Reserves²:

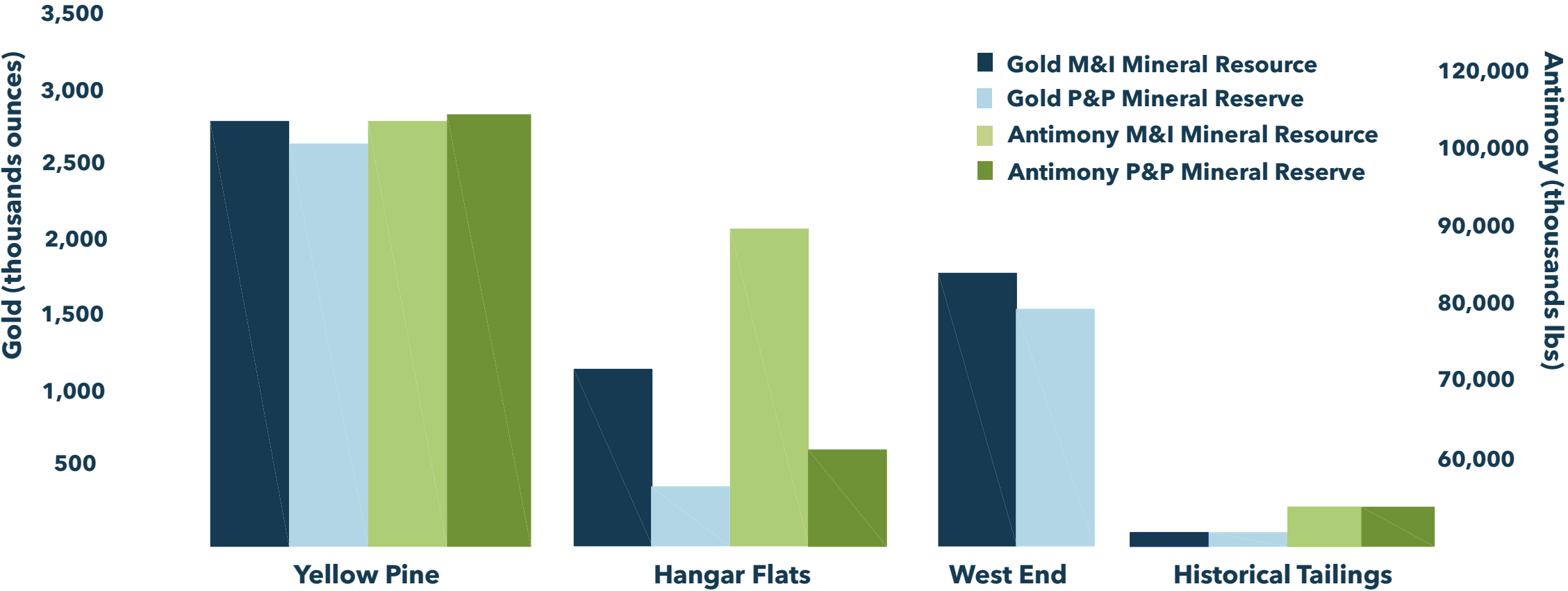
4.8 Mozs Gold @1.43 g/t

148 Mlbs antimony at 0.06% contained in 104 Mt

Measured & Indicated Mineral Resources³:

6.0 Mozs Gold @1.42g/t

206 Mlbs antimony at 0.07% contained in 132 Mt



¹ Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation. The Mineral Reserves are contained within the Mineral Resources.

² Mineral Reserves were calculated using an Au price of \$1600/oz and Sb price of \$3.50/lb and variable cut off grade of 0.39-0.49 g/t Au. The Proven Mineral Reserves from the 2020 FS were reclassified as Probable Mineral Reserves for the TRS.

³ Mineral Resources were calculated using a \$1250/oz Au price and sulfide cut off grade of 0.45 g/t Au and oxide COG of 0.4 g/t Au based on the 2020 Feasibility Study. Based on a gold price of \$1,500/oz in the TRS, Mineral Resources increased to 6.3Mozs @1.33 g/t using a sulfide cut off grade of 0.40 g/t Au and oxide cut off grade of 0.35 g/tAu. The Measured Mineral Resources from the 2020 FS were reclassified to Indicated Mineral Resources in the TRS due to differences in the S-K 1300 versus NI 43-101 Mineral Resources classification guidelines.



IMPROVING A LEGACY

PLAN DESIGNED WITH POST MINING RESTORATION GOALS IN MIND

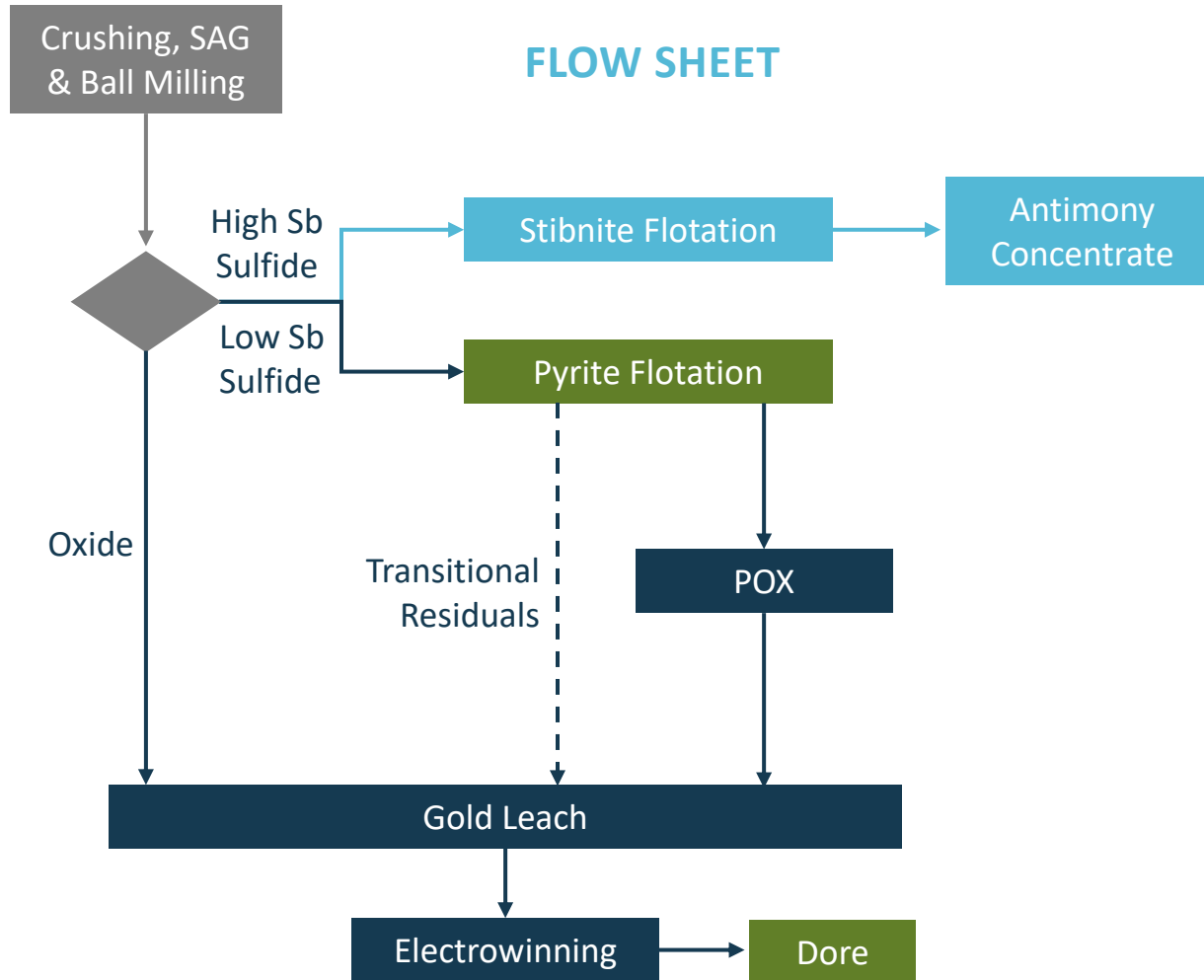
- Address historical impacts from legacy mining incl. sedimentation repair and reprocessing 10.5M tons of tailings
- Create a self-sustaining natural environment
- Support healthy fish and wildlife population
- Revegetation, reforestation & wetland mitigation
- 10+ year post-operations closure period
- 25 years of water treatment estimated



Based on the FS and Financial Update, which are intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2024 as set forth in the Financial Update. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.



ORE PROCESSING



Based on the FS, which is intended to be read as a whole, and sections should not be read or relied upon out of context. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Reports. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.





DEPARTMENT OF DEFENSE AWARDS

Critical minerals awards over \$80 million* combined to advance antimony research, construction readiness, permitting, and engineering.

| | Demonstrate mil-spec antimony trisulfide | | Advance permitting & construction readiness |
|-------------------|--|--|--|
| | SBIR | DOTC | DPA Title III |
| Program | Small Business Innovation Research Grant (SBIR) | Defense Ordnance Technology Consortium (DOTC) | Defense Production Act Title III (DPA) |
| Amount | \$200,000 (\$100,000 each) | Up to \$22.4 million | \$59.2 million |
| Scope | 1) Test existing samples of antimony trisulfide from the Project for development into military specification (“mil-spec”) 2) Study alternative processing opportunities to synthesize mil-spec from high purity antimony metal | Obtain additional core samples from the Project site, conduct a pilot plant study to produce mil-spec antimony trisulfide, design a full-scale process circuit, and deliver a modular pilot plant for Department of Defense use. | Complete environmental and engineering studies necessary to obtain a Final EIS, a Final Record of Decision, and other ancillary permits. Advance construction readiness. |
| Government Entity | Defense Logistics Agency & Small Business Innovation Research Lab | DOTC, U.S. Army | U.S. Air Force |

*Includes Small Business Innovation Research Grants of \$200K, Defense Ordnance Technology Consortium Agreement of up to \$22.4 million and Defense Production Act Title III funding of \$59.2 million. See Cautionary Note.



REGULATORY INFORMATION

The FS was compiled by M3 Engineering & Technology Corporation ("M3") in accordance with NI 43-101 under the direction of independent qualified persons (as defined in NI 43-101) ("Independent QPs"). Independent QPs for the FS include: Richard Zimmerman, SME-RM (onsite and offsite infrastructure, cost estimating and financial modeling) and Art Ibrado, P.E. (mineral processing) with M3; Garth Kirkham, P.Geo. (mineral resources) with Kirkham Geosystems Ltd.; Christopher Martin, C.Eng. (metallurgy) with Blue Coast Metallurgy Ltd.; Grenvil Dunn, C.Eng. (hydrometallurgy) with Hydromet WA (Pty) Ltd.; Chris Roos, P.E. (mineral reserves) and Scott Rosenthal P.E. (mine planning) with Value Consulting, Inc.; and Peter Kowalewski, P.E. (tailings storage facility and closure) with Tierra Group International, Ltd.

The TRS was compiled by M3 in compliance with Subpart 1300 promulgated by the SEC under the direction of Independent Qualified Persons (as defined in Subpart 1300) ("QPs"). QPs for the TRS include: Richard Zimmerman, SME-RM (onsite and offsite infrastructure, cost estimating, mineral processing, financial modeling) with M3; Garth Kirkham, P.Geo. (mineral resources) with Kirkham Geosystems Ltd.; Christopher Martin, C.Eng. (metallurgy) with Blue Coast Metallurgy Ltd.; Grenvil Dunn, C.Eng. (hydrometallurgy) with Hydromet WA (Pty) Ltd.; Scott Rosenthal P.E. (mine planning and mineral reserves) with Value Consulting, Inc.; and Peter Kowalewski, P.E. (tailings storage facility and closure) with Tierra Group International, Ltd.

The Financial Update was prepared by the Company under the direction of Christopher Dail, a qualified person (as defined in NI 43-101 and as defined in Subpart 1300), and is based, in part, on the basic engineering work completed by Ausenco, with contributions from other mining engineers and consultants, utilities and financial advisors.

The material scientific and technical information in respect of the Project in this presentation, unless otherwise indicated, is based upon information contained in the FS, with notable differences between the FS and the TRS identified. The financial information in respect of the Project in this presentation, unless otherwise indicated, is based upon information contained in the Financial Update, which should be read as a supplemental financial update to the FS with respect to economic information regarding the Project.

Readers are encouraged to read the Financial Update and the Company's Current Report on Form 8-K filed with the SEC on February 13, 2025, which is available under the Company's profile on EDGAR. Readers are encouraged to read the TRS and the Company's Current Report on Form 8-K filed with the SEC on January 3, 2021, as amended by the Company's Current Report on Form 8-K/A filed with the SEC on June 8, 2022, which are available under the Company's profile on EDGAR. Readers also are encouraged to read the FS, which is available under the Company's profile on SEDAR and on the Company's website, for detailed information concerning the Project. All disclosure contained in this presentation regarding the mineral reserves and mineral resource estimates and economic analysis on the property is fully qualified by the full disclosure contained in the FS, the TRS and the Financial Update. The FS, the TRS and the Financial Update are intended to be read as a whole and sections should not be read or relied upon out of context.

Financial data is based on cost estimates as of the fourth quarter of 2024, as set forth in the Financial Update. See the Current Report filed on Form 8-K on February 13, 2025.

Information of a scientific or technical nature in this presentation is based on information which has been approved by Christopher Dail, AIPG CPG #10596, Exploration Manager for Perpetua Resources Idaho, Inc. and a qualified person (as defined in NI 43-101 and as defined in Subpart 1300).

All mineral resources have been estimated in accordance with CIM definitions, with notable differences to Subpart 1300 identified. Mineral resources are reported in relation to a conceptual pit shell to demonstrate potential for economic viability, as required under NI 43-101; mineralization lying outside of these pit shells is not reported as a mineral resource. Mineral resources are not mineral reserves and do not have demonstrated economic viability. Mineral resource estimates include inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources.

The mineral resources and mineral reserves at the Stibnite Gold Project are contained within areas that have seen historic disturbance resulting from prior mining activities. In order for the Company to advance its interests at the Stibnite Gold Project, the Project will be subject to a number of federal, state and local laws and regulations and will require permits to conduct its activities.

OTHER

See also "Cautionary Note" at the beginning of this presentation.

Certain monetary amounts, percentages and other figures included in this presentation have been subject to rounding adjustments. Certain other amounts that appear in this presentation may not sum due to rounding.



NON-GAAP MEASURES

This presentation includes disclosure of certain non-GAAP financial measures or ratios, including expected Cash Costs, Total Cash Costs, All-In Sustaining Costs (AISC), Average Annual EBITDA and Average Annual Free Cash Flow (FCF) with respect to the expected results of the Project as presented in the Financial Update. The Company uses these measures to evaluate the Company's future operating performance and provide visibility into the economics of our future mining operations. We believe the projected non-GAAP financial measures included in this presentation provide readers with additional meaningful comparisons between the Company's Financial Update and its peer companies. These projected non-GAAP financial measures are not historical measures of financial performance and are not presented in accordance with GAAP. They may exclude items that will be significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation or as an alternative or superior to GAAP measures. You should be aware that these measures have no standardized meaning under GAAP and may not be comparable to similarly-titled measures used by other companies.

We define "Cash Costs" as the sum of mining costs, processing costs, mine-level G&A and by-product credits; we define "Total Cash Costs" as the sum of Cash Costs, royalty costs, treatment costs, refining costs, and transportation costs; we define "All-In Sustaining Costs" as the sum of Total Cash Costs and sustaining capital costs (all costs required to sustain operations); we define earnings before interest, taxes and depreciation and amortization (EBITDA) as total revenue minus operating costs, offsite charges and royalties; we define "Free Cash Flow" as EBITDA as adjusted for changes in net working capital, all capital expenditures (initial, sustaining, and closure capital expenditures), and salvage value; and we define After-Tax FCF as FCF less taxes payable. FCF does not entirely represent cash available for discretionary expenditures due to the fact that the measure does not deduct payments required for debt service and other items. Annual averages of non-GAAP measures represent the total value of the non-GAAP measure divided by the number of years during the forecast period.

As the Project is not in production, the prospective non-GAAP financial measures are based on the estimated revenues, costs and other metrics set forth in the Financial Update, and are subject to the assumptions, qualifications and exceptions set forth in the FS and the TRS, as updated by the Financial Update. See the economic model included as Exhibit 99.1 included in the Company's current report on Form 8-K, filed with the SEC and Canadian securities regulators on February 13, 2025, for additional information regarding these measures. The economic model included in the Financial Update is not a true cash flow model as defined by financial accounting standards but rather a representation of Project economics at a level of detail appropriate for a feasibility study level of engineering and design. As such, the projected non-GAAP measures included in this presentation cannot be reconciled to comparable GAAP measures without unreasonable effort.

The non-GAAP financial measures included in this presentation are projections based on the FS and Financial Update. They are forward-looking statements and remain subject to the risks and uncertainties set forth in the section titled "Forward-Looking Statements" at the beginning of this presentation.