



Investor Presentation – July 2026

NASDAQ:PPTA

TSX:PPTA

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, disclosure regarding the review process, anticipated timing and potential outcome of the Company’s U.S. EXIM financing application and approval process; the amount of potential financing available to the Company through U.S. EXIM or otherwise; timing of anticipated milestones related to the Project and financing; our ability to comply with, obtain and defend permits related to the Project; the expected outcomes of the Project, including our mineral reserves and mineral resources; environmental clean-up actions by us and our contractors; the expected commercial demand for antimony and the Company’s ability to supply it; our ability to successfully implement and fund the Project; the occurrence of the expected benefits from the Project, including contributions to national security; timing of anticipated milestones related to the Project and financing; the realization of benefits from strategic partnerships, including the partnership with Idaho National Laboratory; planned exploration and development of properties and the results thereof; 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; success of environmental protection, closure and remediation activities; permitting time lines and requirements; the timing and results of future exploration and material sampling by the Company, including with respect to antimony and tungsten; anticipated timing and results of ongoing engineering and contracting activities; plans for the design and construction of the Project; the viability of the Project; expected construction, development and operating costs in the event that a final construction decision is made; and development of any additional resources and reserves and the permitting requirements with respect to any such additional resources and reserves. Statements concerning mineral resource and mineral reserve estimates may also be deemed to constitute Forward-Looking Information to the extent that such statements involve estimates of the mineralization that may be encountered if the Project is developed and are subject to the assumptions and analysis in the Technical Report Summary (as defined herein).

In preparing the Forward-Looking Information herein, the Company has applied several material assumptions, including, but not limited to, certain assumptions that the U.S. EXIM financing application will close and fund within the expected timeframe; that the U.S. EXIM board will approve the proposed loan on substantially the terms initially indicated by the U.S. EXIM board and that the Company will be able to satisfy the conditions to signing and closing of the U.S. EXIM loan and to receive committed funds when needed; that the Company’s proposed financing 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 no pending or future litigation will result in the loss of any material 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 permitting, construction and operations costs will not materially increase; that the Company will satisfy or will continue to satisfy the requirements of applicable permits and the requirements of various governmental approvals; and 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.

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, delays in the review, negotiation, board approval and closing of the U.S. EXIM loan or material changes to the anticipated size or terms of the loan; delays in, or inability to satisfy the conditions to signing, closing or funding of the U.S. EXIM loan, if approved; risks related to unforeseen delays in the review and permitting process, including as a result of legal challenges to the ROD or other permits; risks related to opposition to the Project; risks related to increased or unexpected costs in development, construction, operations or the permitting process; risks that necessary financing will be unavailable when needed on acceptable terms, or at all; as well as those factors discussed in the Company’s public filings with the U.S. Securities and Exchange Commission (the “SEC”) and its Canadian 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

Investors should be aware that the U.S. EXIM notification to Congress does not represent a financing commitment from U.S. EXIM and is subject to approval of the proposed loan by the U.S. EXIM board following the 25-day notice period. There can be no assurance that the board of U.S. EXIM will approve the proposed loan after the notice period, or at all, that we will be able to successfully negotiate definitive loan documents to close the loan or that, if closed, any funding provided by U.S. EXIM will be sufficient for us to construct 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.

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.

Cautionary Statement Regarding Reserve and Technical Information

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, S-K 1300 Technical Report Summary, Valley County, Idaho, USA" (the "Technical Report Summary") dated as of December 31, 2025, developed for the Stibnite Gold Project in accordance with the mining property disclosure rules specified in Regulation S-K subpart 1300 ("S-K 1300") promulgated by the U.S. Securities and Exchange Commission (the "SEC").

Any mineral reserves and mineral resources reported in the Technical Report Summary by the Company in accordance with S-K 1300 may not qualify as such under, or may differ from, those prepared in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101"). Accordingly, information included or incorporated by reference in this presentation concerning descriptions of mineralization and estimates of mineral reserves and mineral resources under U.S. standards may not be comparable to similar information made public by Canadian companies in accordance with the reporting and disclosure requirements of NI 43-101.

The Technical Report Summary was compiled by the Company in compliance with S-K 1300 under the direction of independent "qualified persons" (as defined in Subpart 1300) ("QPs"). QPs for the Technical Report Summary include: Christopher Dail, AIPG CPG #10596, Exploration Manager for Perpetua Resources Idaho, Inc.; James Norine, P.E., Senior Vice President, Projects for Perpetua Resources Idaho, Inc.; and BBA Consultants International LP (previously known as Tierra Group International), a third-party firm independent from the issuer comprised of mining professionals who specialize in geological and geotechnical engineering. James Norine and Chris Dail are not independent of the Company and are each an employee of a wholly owned subsidiary of the Company.

Information of a scientific or technical nature in this presentation have been approved by Christopher Dail, AIPG CPG #10596, Exploration Manager for Perpetua Resources Idaho, Inc. and James Norine, P.E., Senior Vice President, Projects for Perpetua Resources Idaho, Inc. and each meet the qualifications to be a "qualified person" as defined in S-K 1300.

For a description of the key assumptions, parameters and methods used to estimate mineral reserves and mineral resources included in this presentation, as well as data verification procedures and a general discussion of the extent to which the estimates may be affected by any known environmental, permitting, legal, title, taxation, sociopolitical, marketing or other relevant factors, please review the Technical Report Summary, which is included as Exhibit 96.1 to the Company's Annual Report filed on Form 10-K with the SEC on March 31, 2026. The cost estimates and assumptions contained in the Technical Report Summary are dated as of December 31, 2025, and use cost estimate and commodity pricing that are current as of December 31, 2025. Engineering, contracting and early works construction activities are ongoing, and may result in revisions to the costs, figures, methods and assumptions presented in the Technical Report Summary as they progress. 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 Technical Report Summary. The Technical Report Summary is intended to be read as a whole and sections should not be read or relied upon out of context.

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.

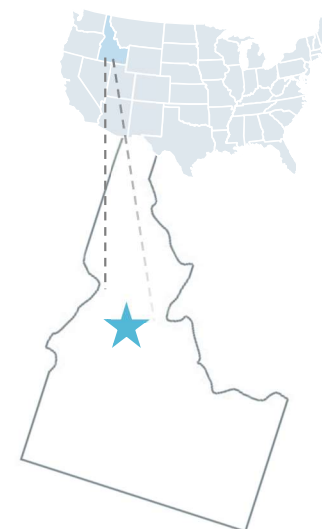


PERPETUA RESOURCES POISED FOR SUCCESS

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

Superb Economics¹ High grade open-pit & large gold reserve in U.S. Attractive production and AISC cost profiles	Exploration Upside 4.8 Moz gold reserves 1.5 Moz gold M&I resources; 1.6 Moz gold Inferred resources Significant exploration upside	Critical Minerals Only U.S. reserve of antimony (149 Mlbs)² Antimony is critical to national defense and clean energy future Historical tungsten production
Idaho Premier U.S. mining jurisdiction Excellent infrastructure Partnership with Idaho National Laboratory to advance Critical Mineral Pilot Plant	Government Supported +\$80 million DoW Awards³ \$2.9 billion U.S EXIM approved on May 21, 2026⁴ Listed as priority project by White House	Restoring Brownfield Site Environmental restoration integrated into plan of operations Re-establish fish migration and improve habitat conditions

Idaho: A Premier Mining Jurisdiction



¹ Based on a comprehensive list of gold projects in the United States, Canada and Australia with over 150,000 ounces of gold production expected in 2026 from Wood Mackenzie as of January 2026.

² Source: U.S. Geological Survey, Mineral Commodity Report Summaries, January 2026.

³ 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.

⁴ A funding commitment, if any, is conditional upon the satisfaction of certain conditions, including approval by the U.S. EXIM board and execution of definitive loan documentation.

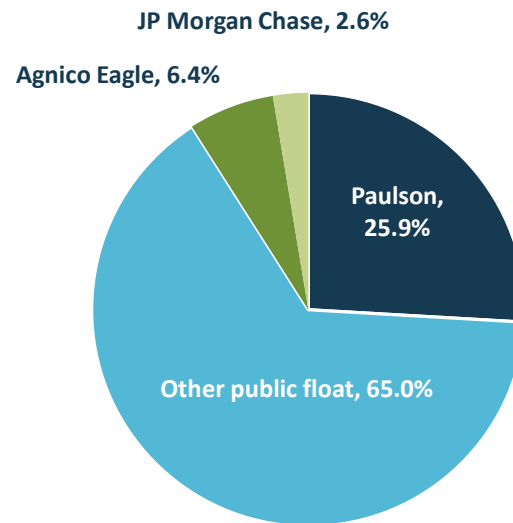


SUPPORTIVE SHAREHOLDER BASE

CAPITAL STRUCTURE ¹

- ❖ **Issued & Outstanding** 125.1 Million
- ❖ **Share Units** 1.1 Million
- ❖ **Warrants** 4.8 Million
- ❖ **Fully Diluted** 131.2 Million
- ❖ **Cash Balance** \$670 Million

SHAREHOLDERS ²



**Perpetua
Resources**

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 – Harrison Reynolds

¹ Issued and outstanding shares and share units as of July 2026,, and reported cash balance as of March 31, 2026.

² Based on most recent shareholder filings. Share units and warrants are not included.



IDAHO: A PREMIER MINING JURISDICTION

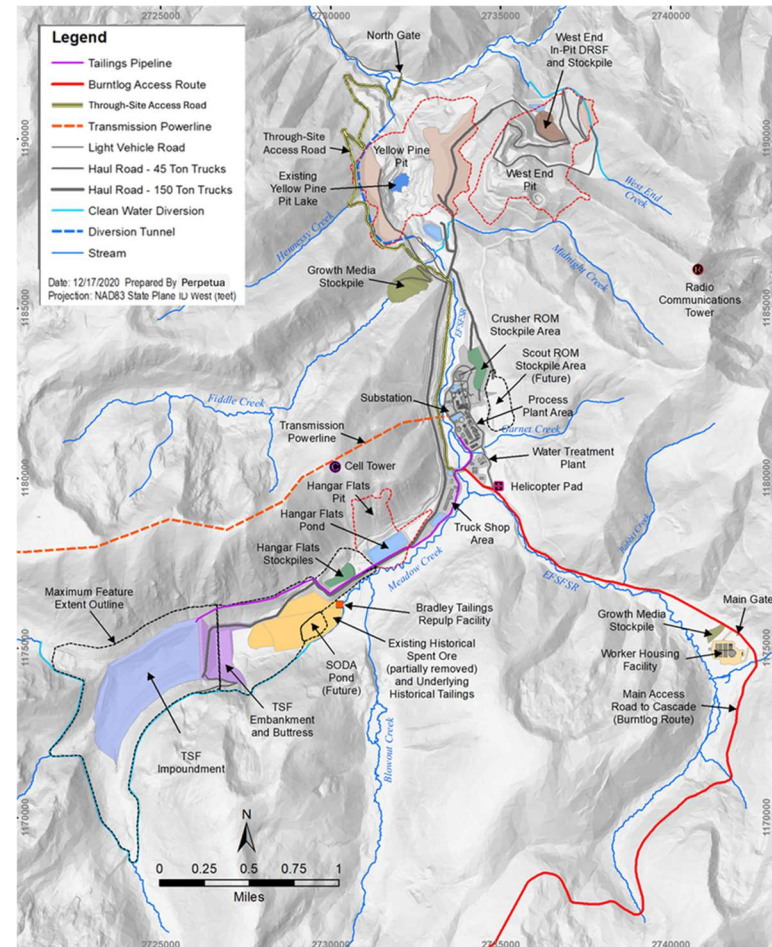
- ✓ Tier 1 Jurisdiction with low geopolitical risk
- ✓ Well-defined permitting process
- ✓ Strong community and political support
- ✓ Excellent infrastructure including roads and low-cost, clean hydro power to site
- ✓ Talented & experienced local workforce
- ✓ Highly prospective geology and long history 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-lined 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



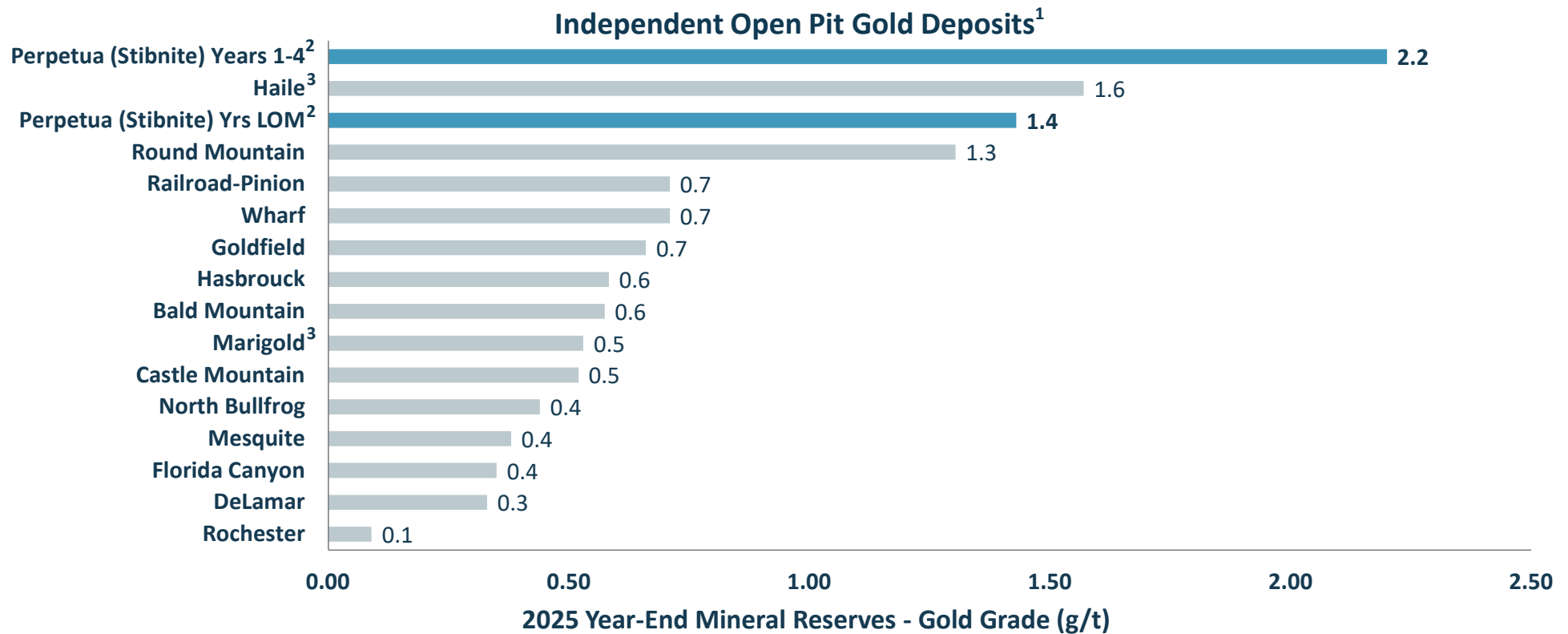
1. Peer data based on latest available company materials as of March 2026. Independent refers to gold projects as not owned by Barrick or Newmont; Independent projects shown are from the lower 48 states in the U.S.

2. Perpetua data based on Technical Report Summary.

3. Open Pit Reserves only.



HIGHEST GRADE OPEN PIT GOLD DEPOSIT¹



1. Peer data based on latest available company materials as of March 2026. 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.

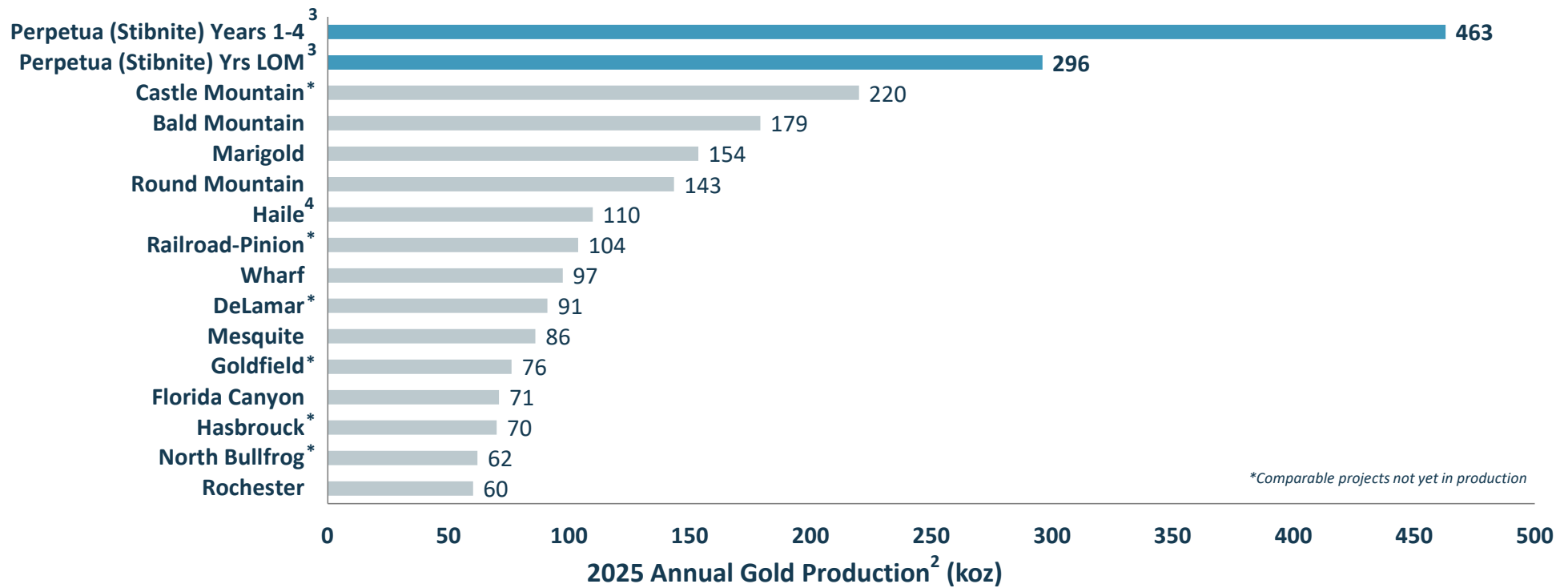
2. Perpetua data based on Technical Report Summary.

3. Open Pit Reserves only.

POISED TO BE LARGEST INDEPENDENT U.S. GOLD PRODUCER¹



Independent Projects and Producing Gold Mines¹



1. Peer data based on latest available company materials as of March 2026. 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.

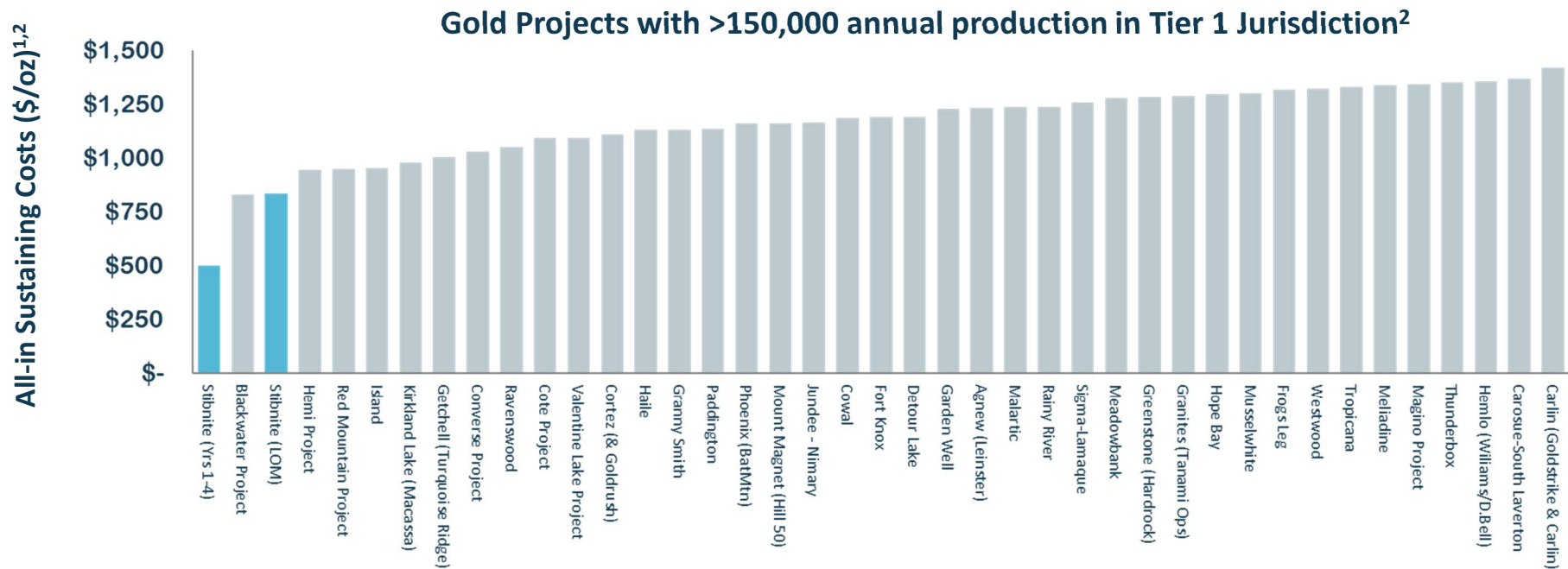
2. 2025 annual gold production for the peer group producing mines; future life-of-mine average annual production for the Castle Mountain, Railroad-Pinion, Goldfield, DeLamar, and North Bullfrog projects based on the most recent technical studies available.

3. Perpetua (Stibnite) is based on estimated future production from the Technical Report Summary.

4. Open Pit part of the project only.



LOWEST ALL-IN SUSTAINING COSTS¹



Valuable antimony by-product credit of \$222/oz over life of mine (assumes \$10/lb antimony)

Source: Peer data based on latest available company materials as of March 2026. Base case model in Technical Report Summary, which is based on consensus commodity pricing as of December 31, 2025..

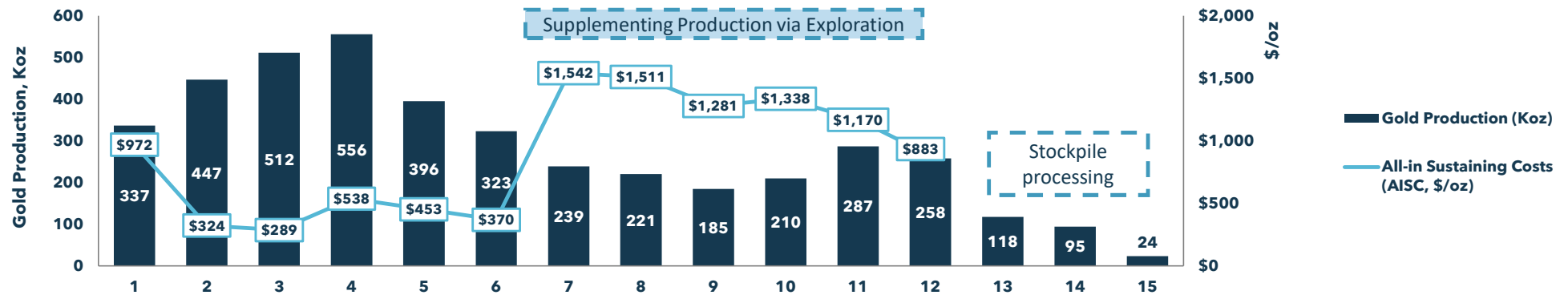
1. All-in Sustaining Cost ("AISC") is a non-GAAP measure. See "Non-GAAP measures" at the end of this presentation.

2. Based on a comprehensive list of gold projects in the United States, Canada and Australia with over 150,000 ounces of gold production expected in 2026 from Wood Mackenzie as of January 2026, net of by-product credits.

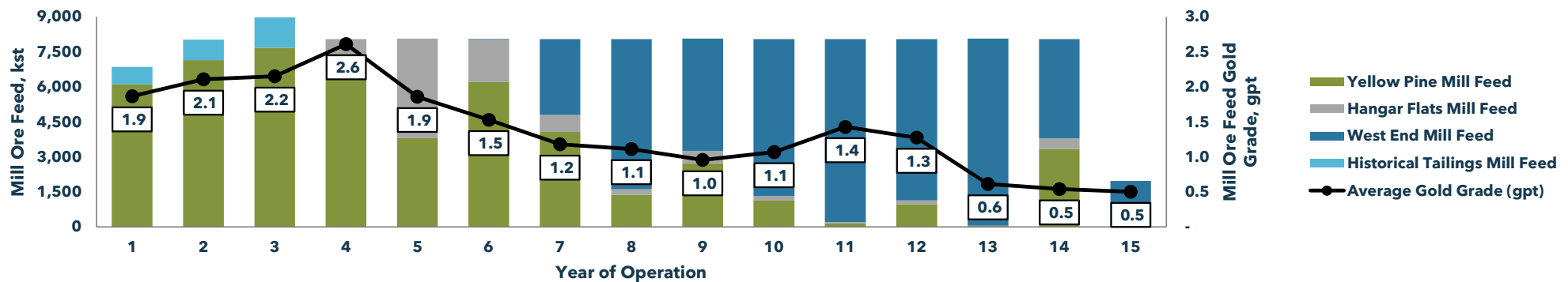


MINE SEQUENCING AND PRODUCTION PROFILE

Gold Production and All-in Sustaining Costs



Mill Feed & Gold Grade by Deposit



Note: Based on base case model in Technical Report Summary, which is based on consensus commodity pricing as of December 31, 2025. Consensus prices are defined as \$3,250/oz gold, \$10/lb antimony, and \$40/oz silver, based on long-term forecasts from major investment banks as of December 31, 2025.



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	106 Mlbs
Average Annual Recovered Gold	463 koz/yr	296 koz/yr
Cash Costs Net of By-Product Credits ⁴ (\$/oz gold)	\$250/koz	\$581/koz
Total Cash Costs Net of By-Product Credits ⁵ (\$/oz gold)	\$311/koz	\$650/koz
All-In Sustaining Costs (AISC) Net of By-Product Credits ⁶ (\$/oz gold)	\$498/koz	\$833/koz
Initial Capital including Contingency ⁷	\$2,576 million	
\$3,250/oz gold - \$40/oz silver - \$10/lb antimony ⁸		
After-Tax Net Present Value (NPV) at 5% Discount Rate ⁹	\$3,457 million	
Annual Average EBITDA ¹⁰	\$1,347 million	\$766 million
Annual Average After-Tax Free Cash Flow ¹¹	\$1,111 million	\$607 million
After-Tax Internal Rate of Return ¹²	23.5%	
After-Tax Payback Period	2.4 years	
\$4,500/oz gold - \$40/oz silver - \$10/lb antimony ¹³		
After-Tax Net Present Value at 5% Discount Rate ⁹	\$6,045 million	
Annual Average EBITDA ¹⁰	\$1,910 million	\$1,128 million
Annual Average After-Tax Free Cash Flow ¹¹	\$1,547 million	\$887 million
After-Tax Internal Rate of Return ¹²	32.3%	
After-Tax Payback Period	1.9 years	

- For additional information regarding the Technical Report Summary, including underlying assumptions and risks, see the Technical Report Summary and Form 10-K filed on March 31, 2026.
 - The economic analysis 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 presentation.
 - 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 presentation.
 - 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 presentation.
 - Initial Capital reflects estimated total capital expenditures of \$2,576 million, including a contingency of \$191.9 million.
 - Consensus prices are defined as \$3,250/oz gold, \$10/lb antimony, and \$40/oz silver, based on long-term forecasts from major investment banks as of December 31, 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 economic analysis assumed a combined state and federal effective tax rate of approximately 25.5%.
 - EBITDA consists of total revenue minus operating costs, offsite charges and royalties. EBTIDA is a non-GAAP measure. See Non-GAAP Measures at the end of this presentation.
 - 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 presentation.
 - 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 economic analysis assumed a combined state and federal effective tax rate of approximately 25.5%.
 - Sensitivity analysis as shown in Technical Report Summary.
- Based on the Technical Report Summary, which is intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2025 as set forth in the Technical Report Summary. The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Report Summary. 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\$/st milled	US\$/oz Au	US\$/st milled	US\$/oz Au
Mining	\$14.13	\$248	\$10.78	\$295
Processing	\$14.15	\$249	\$14.00	\$383
G&A	\$4.55	\$77	\$4.55	\$125
By-Product Credits	(\$18.47)	(\$324)	(\$8.07)	(\$222)
Cash Cost Net of By-Products¹	\$14.36	\$250	\$21.25	\$581
Offsite Charges	\$0.27	\$5	\$0.15	\$4
Royalties	\$3.24	\$56	\$2.36	\$65
Total Cash Cost Net of By-Products¹	\$17.86	\$311	\$23.76	\$650
Sustaining Capital Costs	\$10.68	\$188	\$6.67	\$184
All-in Sustaining Cost (AISC)¹	\$28.54	\$498	\$30.42	\$833

Capital Costs	Initial CAPEX ² (US\$M)	Sustaining CAPEX (US\$M)	Closure CAPEX ³ (US\$M)	Total CAPEX (US\$M)
Direct Costs - Mine Costs	\$184	\$211	--	\$395
Direct Costs - Processing Plant	\$814	\$93	--	\$907
Direct Costs - On-Site Infrastructure	\$336	\$305	--	\$641
Direct Costs - Off-Site Infrastructure	\$396	--	--	\$396
Indirect Costs and Project Delivery	\$414	--	--	\$414
Project Owner Team Costs	\$232	\$112	\$118	\$462
Contingency and Sales Tax	\$201	\$44	--	\$245
Sub-total CAPEX	\$2,576	\$767	\$118	\$3,461
Pre-Production Revenue	(\$52)	--	--	(\$52)
Total CAPEX	\$2,524	\$767	\$118	\$3,409

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 \$3,250/oz gold.
3. Defined as non-sustaining reclamation and closure costs in the post-operations period.

Based on the Technical Report Summary, which is intended to be read as a whole, and sections should not be read or relied upon out of context. Financial data as of Q4 2025 as set forth in the Technical Report Summary. 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 and financial assurance costs.

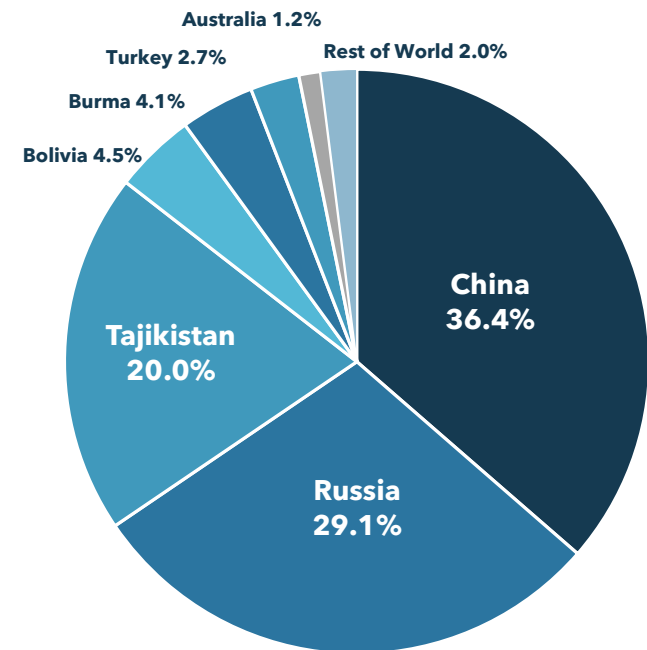
ONLY U.S. RESERVE OF ANTIMONY, WITH 149 Mlbs¹



ANTIMONY - IT'S CRITICAL

- ✓ Antimony is essential to industrial and national defense
- ✓ The United States has no large-scale domestic mined production
- ✓ China & Russia dominate the world supply (~65%)¹
- ✓ China began antimony export controls in 2024
- ✓ Perpetua has received +\$80M in government grants since 2022 and is constructing antimony pilot plant with U.S. Dept of War
- ✓ Company currently engaged with 3rd parties to review antimony offtake opportunities
- ✓ Perpetua has partnered with Idaho National Laboratory to host, commission, and operate a flexible, modular pilot plant

World Antimony 2025 Production (USGS)²



¹ Source: U.S. Geological Survey, Mineral Commodity Report Summaries, January 2026.

² 2025 world production estimates by the USGS are rounded, and as such the percentages shown may not add to 100%.



PROVEN DOMESTIC SOURCE OF ANTIMONY AND TUNGSTEN FOR THE U.S. GOVERNMENT

- During World War II, tungsten mined at Stibnite in 1942 was critical to the Allied war effort and the production of ammunition
- According to testimony in the 1956 Congressional Record, the Munitions Board believed the discovery of tungsten **shortened WWII by at least one year**
- Historic tungsten reserves at Stibnite have been depleted, but exploration potential remains at the site
- Tungsten is designated as a U.S. government critical mineral due to its importance in national defense applications, where its ability to retain strength at high temperatures and extreme hardness make it irreplaceable for military and aerospace uses
- **Stibnite demonstrates proven geology for critical minerals, having historically produced both tungsten and antimony**



* 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.



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

Stibnite Gold Project Cash Flow Model Sensitivities*		Base Case Price Assumption			
Antimony price (\$/lb)		\$10	\$15	\$20	\$25
By-Product Credit (\$ per gold ounce)		\$222	\$331	\$439	\$547
Illustrative after-tax net present value (NPV 5%) impact of antimony by-product production (\$M)		-	\$324	\$649	\$973

* 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. Base Case Commodity price assumptions include gold price of \$3,250/oz, silver price of \$40/oz and Antimony prices as presented. Other than commodity price assumptions, the Net Present Value calculation is consistent with the information in the Technical Report Summary starting in year 1 of operations.



EXTENSIVE EXPLORATION UPSIDE^{1,3}

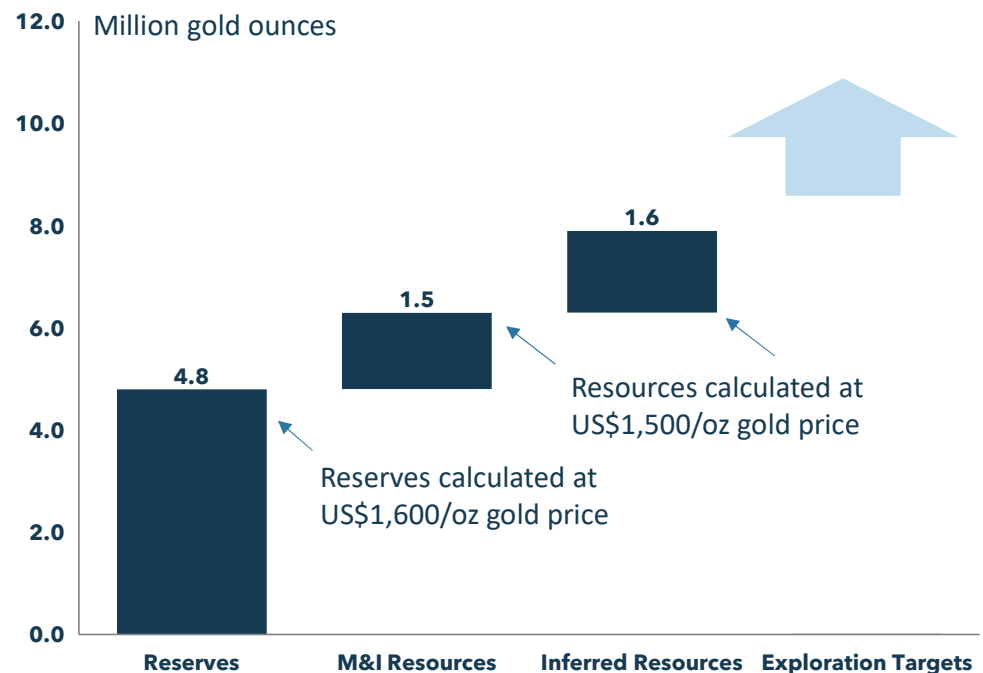
WITHIN EXISTING DEPOSITS:

- 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 ENDOWMENT²

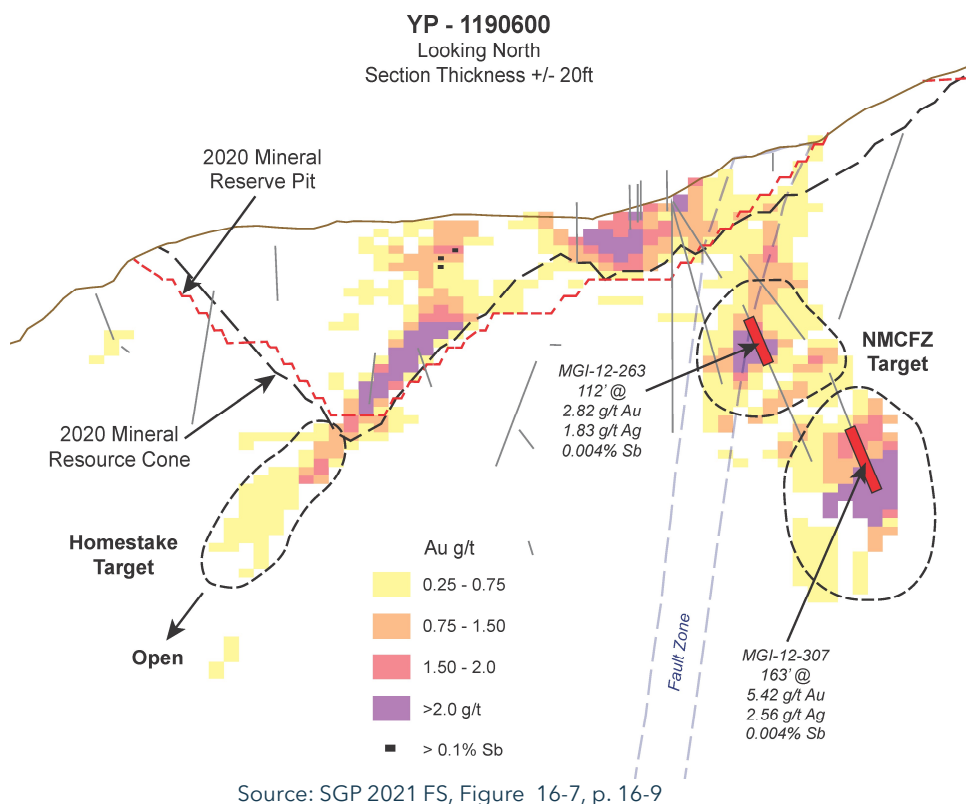


¹Some of the prospects are conceptual in nature, there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. See the section titled "Forward-Looking Statements" at the beginning of this presentation.

²Based on the Technical Report Summary. Mineral Reserves were calculated using an Au price of \$1,600/oz and an average cut off grade of 0.48 g/t Au. Mineral Resources were calculated using a \$1,500/oz Au price and sulfide cut off grade of 0.45 g/t Au and oxide COG of 0.4 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. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.

³Development of any additional resources and reserves discovered would be subject to any applicable NEPA and permitting requirements.

KNOWN HIGH GRADE MINERALIZATION NEAR YELLOW PINE PIT

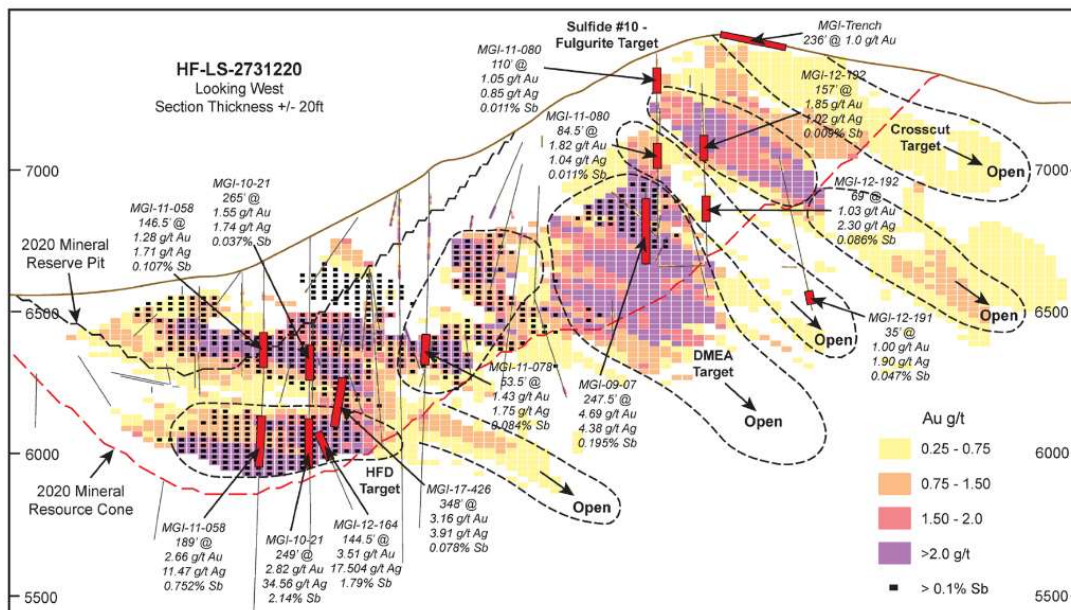


- Yellow Pine deposit open* to northeast;
- Intercepts outside pit include:
163ft (49m) @5.42g/t Au
112ft (34m) @2.82g/t Au
- Step out drilling will continue to test these broad, high grade structures in 2026 exploration program
- Focus on expanding mineralized envelope to add high grade feed to front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

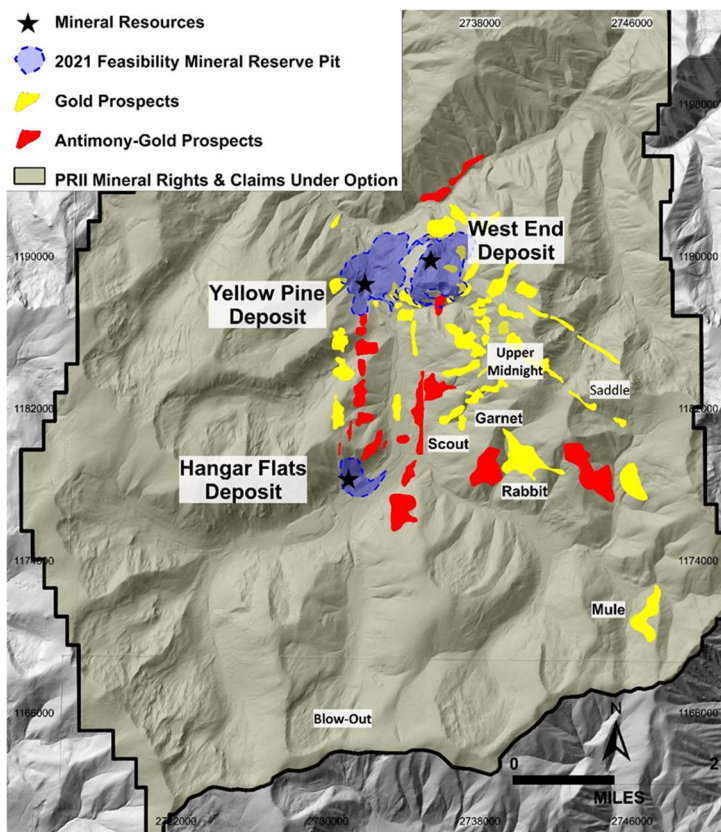
- Hangar Flats remains open at depth and along strike*
- Intercepts outside pit include:
 - 348ft (106m) at 3.16g/t Au and 0.08% Sb**
 - 249ft (75m) at 2.82g/t Au and 2.14% Sb**
 - 247ft (75m) at 4.69g/t Au and 0.2% Sb**
 - 144ft (43m) at 3.51g/t Au and 1.8% Sb**
- Upcoming drilling focused on defining 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 Technical Report Summary.*

*** 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	Cash ¹	Strategic Investments Incl. Agnico Eagle and JP Morgan Chase	U.S. EXIM Senior Secured Loan
Amount	\$670M	\$172M ²	\$2.9B ³ Approved
Status	✓ On-hand as of March 31, 2026	• Outstanding Warrants • Various exercise prices	• U.S. EXIM Board Approval Received on May 21, 2026 • Loan subject to execution of definitive documentation
Capital Availability Outlined	Up to \$3.6B of available capital ⁴		

1. Includes approximately \$670 million in cash and equivalents as of March 31, 2026.

2. Includes warrants to purchase common shares priced at 35%, 50% and 65% premiums over one, two and three years, issued in Q4 2025. Total proceeds of up to \$172 million if exercised in full. There can be no assurances that the warrants will be exercised.

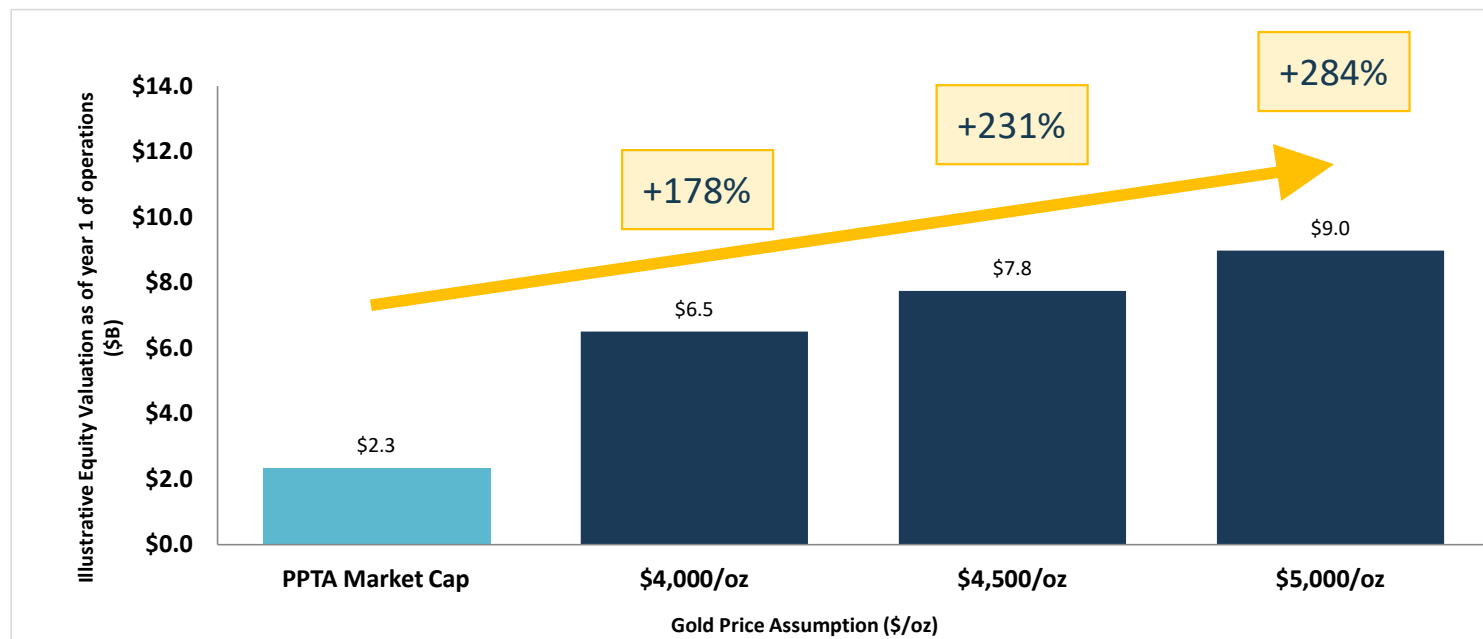
3. The \$2.9 billion figure is comprised of a \$2.4 billion direct loan for construction of the Project, financial assurance and certain discretionary corporation and exploration costs and the remainder for capitalized interest and fees. There can be no assurance that the Company will be able to successfully negotiate definitive loan documents to close the loan or that, if closed, the Company will be able to satisfy the conditions precedent to funding when expected or at all.

4. The approximate capital available for project development includes the full exercise of the outstanding warrants and the full \$2.9 billion debt funding of the EXIM loan. There can be no assurance that the EXIM funding will be for the full amount of the approved loan. 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*



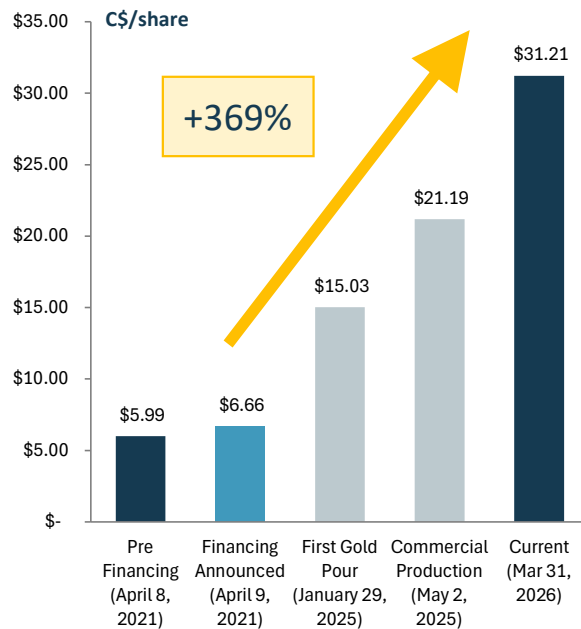
**Illustrative Net Present Values (5%) as of year 1 of operations (assumes sunk initial capital costs) with a valuation date as of commencement of operations, less approximately \$2.2 billion of debt, \$500 million of interest, and \$150 million Corporate G&A. Commodity price assumptions include Antimony price of \$10/lb and Silver of \$40/oz and Gold price as presented. Other than commodity price assumptions, the Net Present Value calculation consistent with the information in the Technical Report Summary starting in year 1 of operations. Net Present Value (5%) based on the financial data as of Q4 2025 as set forth in the Technical Report Summary announced on March 31, 2026. See "Cautionary Note and Technical Disclosure" and "Forward Looking Statements" at the beginning of this presentation.*

Perpetua Resources market cap based on fully diluted market cap using closing price as of July 23, 2026 (US\$17.86 share price) and fully diluted shares of 131.0 million, including issued and outstanding shares, share units and warrants as of July 23, 2026.

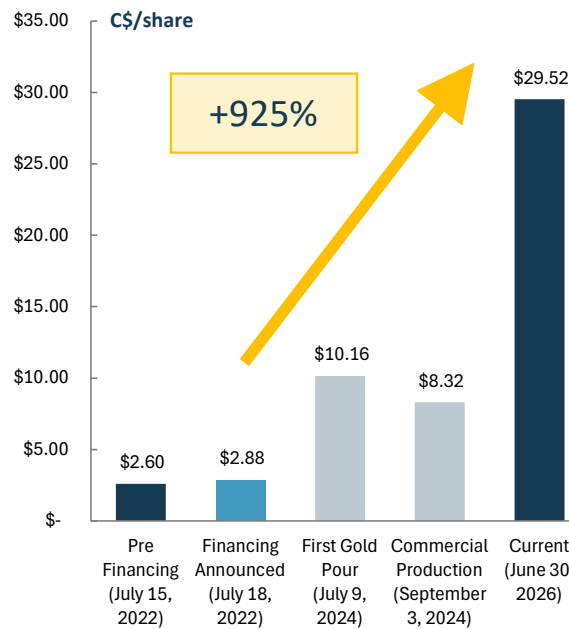


UNLOCKING VALUE THROUGH DEVELOPMENT

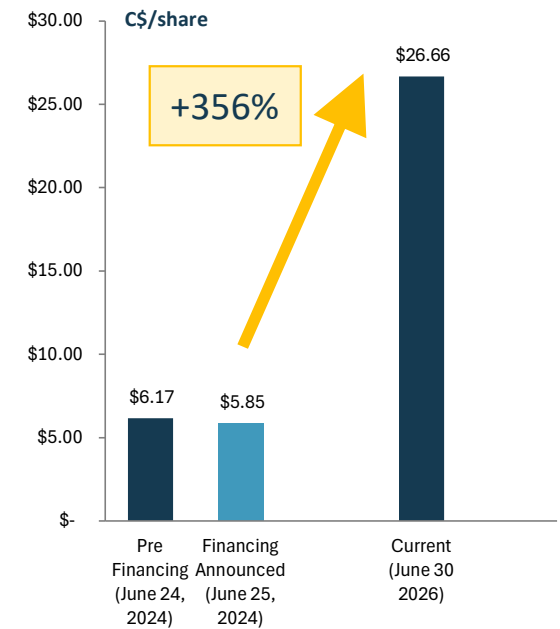
ARTEMIS SHARE PRICE PERFORMANCE



G MINING SHARE PRICE PERFORMANCE



SKEENA SHARE PRICE PERFORMANCE



+550% 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 RECENT CATALYSTS^{1,2}

RECENT HIGHLIGHTS:

- ✓ Completed basic engineering, power contract (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)
- ✓ Announced \$317 million strategic equity investments and private placements, including Agnico Eagle and JPMorganChase; Completed additional \$527 million net equity financing (Jun-Dec 2025)
- ✓ Announced partnership with Idaho National Labs on antimony pilot plant (Dec 2025)
- ✓ Filed updated Technical Report Summary (Mar 2026)

Key Company Catalysts:

- ✓ Final Record of Decision (Jan 2025) and Final Federal Permit (May 2025)
- ✓ Posted construction phase financial assurance and began early works construction (Oct 2025)
- ✓ Selected Hatch as EPCM contractor – a global expert on process plant construction (Dec 2025)
- ✓ Notification to Congress of EXIM debt financing commencing 25-day period (March 30, 2026)
- ✓ EXIM debt financing Approval (2026), subject to execution of definitive documentation
- ❑ Commissioning of Idaho National Labs antimony pilot plant (2026)
- ❑ Ongoing Exploration Activities of gold and critical minerals (2026)
- ❑ Final Investment Decision (2026)
- ❑ Ongoing construction updates (2026-2029)
- ❑ 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.

Appendix



LEADING PERPETUA FORWARD

Leader	Biography	Experience & Expertise
Jon Cherry President, CEO & Director	• 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.	✓ U.S. Permitting ✓ Stakeholder Relations ✓ Project Development
Mark Murchison Chief Financial Officer	• 25+ years of finance, mining and capital project experience. • Former CFO, Alacer Gold; prior experience with U.S. Vanadium and Rio Tinto.	✓ Finance leadership ✓ Project Financing ✓ Capital Allocation
Mckinsey Lyon Sr. VP, External Affairs	• 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.	✓ Communications ✓ Government Affairs ✓ Stakeholder Relations
Ryan Vogt VP, Finance	• 20+ years of experience in finance, accounting, compliance, and strategic planning • Prior experience as Corporate Controller and Executive Officer at PolyMet Mining, playing a key role in the closing and integration of major joint ventures and corporate transactions	✓ Accounting ✓ Finance ✓ Project Financing
Joe Fazzini VP, Investor Relations	• 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.	✓ Investor Relations ✓ Stakeholder Relations ✓ Corporate Development
Dustin Rissmiller VP, Human Resources	• Leader in talent acquisition and building and managing teams. • Industry experience in mining and energy projects and corporate growth strategies.	✓ Human Resources ✓ Talent Acquisition ✓ Growth Strategies



KEY DEVELOPMENT TEAM LEADERS

Team lead	Prior Experience	Experience & Expertise
Jim Norine Sr. VP, Projects	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.	✓ Project Development ✓ Engineering ✓ Project Execution
Tim Kahl Sr. VP, Technical Services	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.	✓ Project Development ✓ Complex ore processing ✓ Mill commissioning
Travis Walker Project Director	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.	✓ Mine operations ✓ Mill commissioning ✓ Mineral processing
Gene Bosley Sr. Manager, Non-Process Engineering & Construction	25 years of engineering experience, joined Perpetua in 2016, leading tailings/water design on U.S. and international projects	✓ Tailings management ✓ Engineering
Ryan McCluskey Technical Services Superintendent	Newmont, Kinross, SSR, Albermarle and 25+ years of experience in mining engineering, operations, and project development	✓ 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	✓ Geology ✓ Mine planning



EXPERIENCED BOARD OF DIRECTORS

Board of Directors	Prior Experience	Experience & Expertise
Marcelo Kim Chairman	• 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.	✓ Executive Leadership ✓ Financial Experience ✓ Industry Experience
Chris Robison Director	• 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.	✓ Executive Leadership ✓ Operations & Project Leadership ✓ Processing Experience
Robert Dean Director	• 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.	✓ Executive & Financial Leadership ✓ Accounting & Auditing ✓ Risk Management
Laura Dove Director	• 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.	✓ Executive Leadership ✓ Public Policy & Permitting ✓ Government Affairs
Andrew Cole Director	• 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.	✓ Operations & Project Leadership ✓ Processing Experience ✓ Permitting & Risk Management
Richie Haddock Director	• Former General Counsel, Barrick Gold Corporation. • Extensive experience in mining industry permitting, stakeholder engagement, M&A and litigation.	✓ Executive Leadership ✓ Risk Management ✓ Government Affairs
Jeffrey Malmen Director	• 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.	✓ Executive Leadership ✓ Government Affairs ✓ Human Resource Management
Alexander Sternhell Director	• 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.	✓ Government Affairs ✓ Financial Experience ✓ Accounting & Auditing

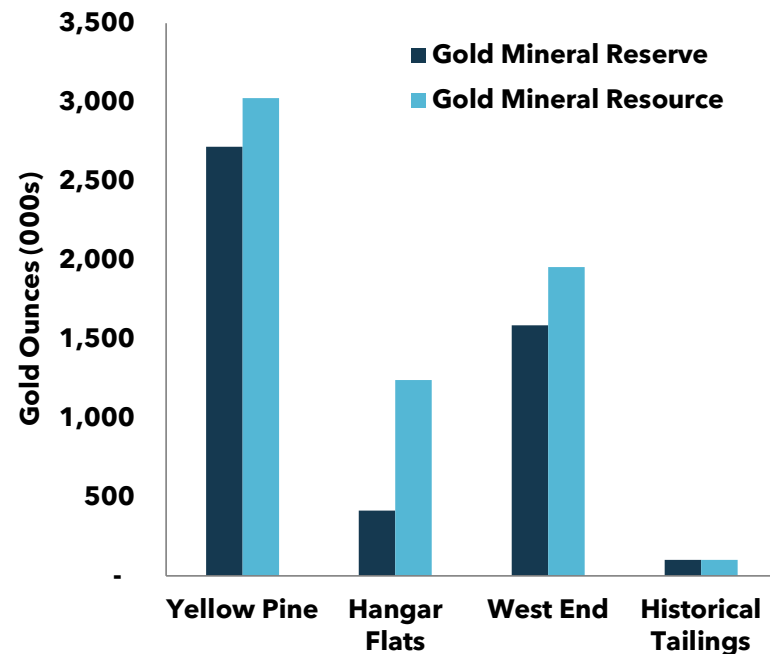


MINERAL RESOURCES & RESERVES¹

Mineral Reserves²:

4.8 Mozs Gold @1.43 g/t

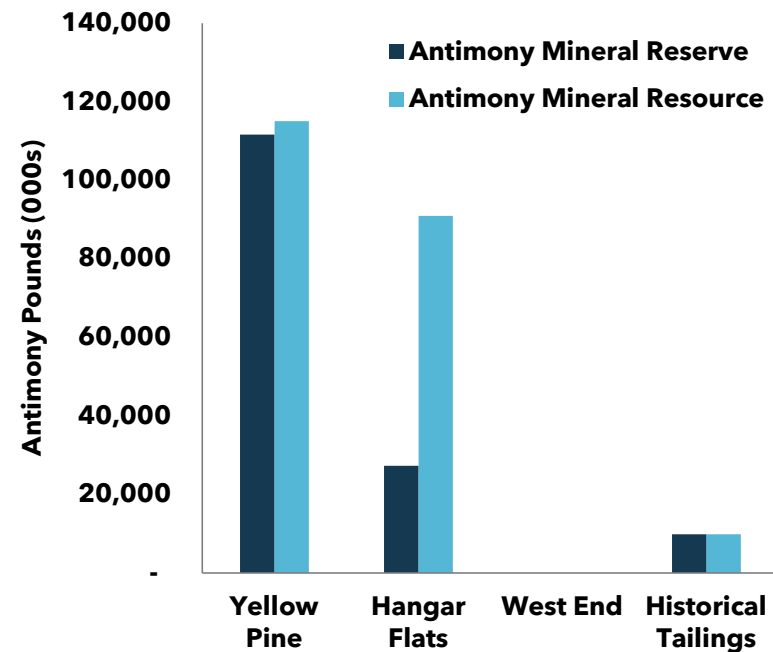
149 Mlbs antimony at 0.06% contained in 105 Mt



Mineral Resources²:

6.3 Mozs Gold @1.33g/t

216 Mlbs antimony at 0.07% contained in 148 Mt



¹ Based on the Technical Report Summary, 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 Report Summary. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.

² The Mineral Reserves are contained within the Mineral Resources. Mineral Reserves were calculated using an Au price of \$1,600/oz and life-of-mine (LOM) average gold cut-off grade of 0.48 g/t for open-pit mining. Mineral Resources were calculated using a \$1,500/oz Au price and sulfide cut off grade of 0.40 g/t Au and oxide COG 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. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.



IMPROVING A LEGACY

PLAN DESIGNED WITH POST MINING RESTORATION GOALS IN MIND

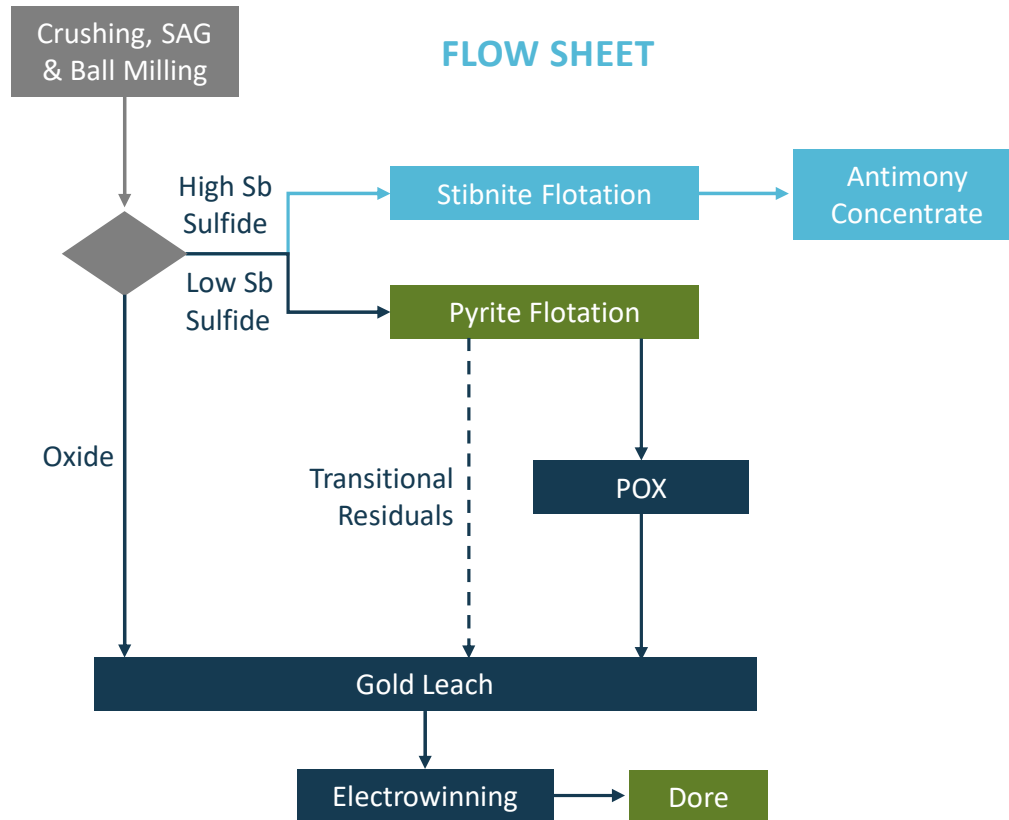
- Address historical impacts from legacy mining incl. sedimentation repair and reprocessing 10.5M tons of tailings
- Support a self-sustaining natural environment
- Reinvigorate fish and wildlife population
- Revegetation, reforestation & wetland mitigation
- 10+ year post-operations closure period
-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



Based on the Technical Report Summary. Financial data as of Q4 2025 as set forth in the Technical Report Summary. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.



ORE PROCESSING



The information in this presentation is subject to the assumptions, exclusions and qualifications contained in the Technical Report Summary. See "Cautionary Note and Technical Disclosure" at the beginning of this presentation.





DEPARTMENT OF WAR 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



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), All-In Costs (AIC), Average Annual EBITDA and Average Annual Free Cash Flow (FCF) with respect to the expected results of the Project as presented in the Technical Report Summary. 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 Technical Report Summary 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.

To provide investors with additional information in connection with our economic analysis as determined in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), we disclose certain projected non-GAAP financial measures. The projected non-GAAP financial measures include expected Cash Costs, Total Cash Costs, AISC, AIC, Average Annual EBITDA and Annual Average Free Cash Flow ("FCF") with respect to the expected results of the Project as presented in the Technical Report Summary.

We define "Cash Costs" as the sum of mining costs, processing costs, mine-level G&A and by-product credits; "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 "All-In Costs" as the sum of AISC, non-sustaining capital costs, and closure and reclamation capital costs; 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 Technical Report Summary, and are subject to the assumptions, qualifications and exceptions set forth in the Technical Report Summary. See the economic model included in the Technical Report Summary, which is filed as Exhibit 96.1 included in the Company's Annual Report filed on Form 10-K, filed with the SEC and Canadian securities regulators on March 31, 2026, for additional information regarding these measures. The economic model included in the Technical Report Summary 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 pre-feasibility study level of engineering and design. As such, the projected non-GAAP measures included in this presentation cannot be reconciled to comparable U.S. GAAP measures without unreasonable effort.

The non-GAAP financial measures included in this presentation are projections based on the Technical Report Summary. 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.