

TSX: AUG | NYSE American: AUG

Homestake Ridge – PEA Summary



Cautionary Notes



Forward Looking Information and Additional Cautionary Language

This document has been prepared by Auryn Resources Inc. (the "Company") to summarize the Company's preliminary economic assessment for its Homestake Ridge Project. Because it is a high level summary presentation, the information contained herein cannot contain all the information that should be reviewed before making an investment decision. As noted below, the information herein is qualified by the more detailed information contained in the Company's continuous disclosure record found at www.sedar.com and at www.sec.gov. No securities regulatory authority has in any way passed on the merits of this presentation nor any securities referred herein.

The Company cautions that the PEA is preliminary in nature in that it includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be characterized as mineral reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The PEA was prepared in accordance with National Instrument 43-101 ("NI 43-101") by MineFill Services Inc. of Seattle, WA with other contributors including Roscoe Postle Associates Inc. (RPA), now part of SLR Consulting Ltd. (SLR), (QP for updated mineral resource estimate) and One-Eighty Consulting Group (environmental, permitting and social). The Company plans to file the PEA on SEDAR at www.sedar.com within 45 days in accordance with NI 43-101.

Certain information contained in this presentation constitutes forward-looking information or forward-looking statements within the meaning of Canadian or U.S. securities laws ("forward-looking statements"). All statements in this presentation, other than statements of historical fact, which address events, results, outcomes or developments that the Company expects to occur are forward-looking statements. Forward-looking statements include statements that are predictive in nature, depend upon or refer to future events or conditions, or include words such as "expects", "anticipates", "plans", "believes", "estimates", "considers", "intends", "targets", or negative versions thereof and other similar expressions, or future or conditional verbs such as "may", "will", "should", "would" and "could". More particularly and without restriction, this presentation contains forward-looking statements and information about the economic analyses for the Homestake Ridge Gold Project and its potential for development and expansion, the anticipated IRR and NPV for the project, capital and operating costs, processing and recovery estimates and strategies, proposed mining method and development plans, mineral resource estimates and statements as to management's expectations with respect to, among other things, the matters and activities contemplated in this presentation.

Such forward looking statements are necessarily based upon a number of factors and assumptions that, while considered reasonable by the Company as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. The assumptions made by the Company in preparing the forward looking statements contained in this presentation, which may prove to be incorrect, include, but are not limited to: the specific assumptions set forth above and in the Technical Report; that the Company is able to develop the property in the manner set out in the Technical Report; that the Company is able to advance the property through to feasibility; that if viable, the Company is able to obtain all necessary permits to develop the mine on the property; that the Company is able to complete the consultation with the Indigenous people in the area of that Homestake Ridge Gold Project; that the exchange rate between the Canadian dollar, and the United States dollar remain consistent with current levels or as set out in this presentation; that prices for gold and silver remain consistent with the Company's expectations; that prices for key mining supplies, including labour costs and consumables, remain consistent with the Company's current expectations; that Company's current estimates of mineral resources, mineral grades and mineral recovery are accurate; and that there are no material variations in the current tax and regulatory environment. Many factors, known and unknown, could cause the actual results to be materially different from those expressed or implied.

By its nature, this information is subject to inherent risks and uncertainties that may be general or specific and which give rise to the possibility that expectations, forecasts, predictions, projections or conclusions will not prove to be accurate, that assumptions may not be correct and that objectives, strategic goals and priorities will not be achieved. Factors that could cause future results or events to differ materially from current expectations expressed or implied by the forward-looking statements include: availability of financing to fund the Company's exploration and development activities, the ability of the Company's exploration program to identify and expand mineral resources, operational risks in exploration and development for gold and silver, the Company's ability to realize the PEA, delays or changes in plans with respect to exploration or development projects or capital expenditures, uncertainty as to calculation of mineral resources, changes in commodity and power prices, changes in interest and currency exchange rates, the ability to attract and retain qualified personnel, inaccurate geological and metallurgical assumptions (including with respect to the size, grade and recoverability of mineral resources), changes in development or mining plans due to changes in logistical, technical or other factors, title defects, government approvals and permits, cost escalation, changes in general economic conditions or conditions in the financial markets, environmental regulation, operating hazards and risks, delays, taxation rules, competition, public health crises such as the COVID-19 pandemic and other uninsurable risks, liquidity risk, share price volatility, dilution and future sales of common shares, aboriginal claims and consultation, cybersecurity threats, climate change, delays and other risks described in the Company's documents filed with Canadian and U.S. securities regulatory authorities.

Cautionary Notes (continued)



Readers should refer to the risks discussed in the Company's Annual Information Form and MD&A for the year ended December 31, 2019 and subsequent continuous disclosure filings with the Canadian Securities Administrators available at www.sedar.com and the Company's registration statement on Form 40-F filed with the United States Securities and Exchange Commission and available at www.sec.gov. Readers should not place undue reliance on forward looking statements.

Michael Henrichsen (Chief Operating Officer), P. Geo is the QP who assumes responsibility for the technical contents of this Presentation.

Cautionary note to United States investors concerning estimates of measured, indicated and inferred resources estimates

This presentation uses the terms "indicated mineral resource" and "inferred mineral resource", which are Canadian mining terms as defined in and required to be disclosed in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects, which references the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") – CIM Definition Standards on Mineral Resources and Mineral Reserves ("CIM Standards"), adopted by the CIM Council, as amended. However, these terms are not defined terms under Industry Guide 7 ("Industry Guide 7") under the United States Securities Act of 1933, as amended, and, until recently, have not been permitted to be used in reports and registration statements filed with the U.S. Securities and Exchange Commission (the "SEC"). The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act. These amendments became effective February 25, 2019 (the "SEC Modernization Rules") with compliance required for the first fiscal year beginning on or after January 1, 2021. The SEC Modernization Rules replace the historical disclosure requirements for mining registrants that were included in SEC Industry Guide 7.

United States investors are cautioned that there are differences in the definitions under the SEC Modernization Rules and the CIM Standards. Accordingly, there is no assurance any mineral reserves or mineral resources that the Company may report as "indicated mineral resources" and "inferred mineral resources" under NI 43-101 would be the same had the Company prepared the reserve or resource estimates under the standards adopted under the SEC Modernization Rules. United States investors are also cautioned that while the SEC will now recognize "indicated mineral resources" and "inferred mineral resources", investors should not assume that any part or all of the mineralization in these categories will ever be converted into a higher category of mineral resources or into mineral reserves. Mineralization described using these terms has a greater amount of uncertainty as to their existence and feasibility than mineralization that has been characterized as reserves. Accordingly, investors are cautioned not to assume that any "indicated mineral resources" or "inferred mineral resources" that the Company reports are or will be economically or legally mineable. Further, "inferred mineral resources" have a greater amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, United States investors are also cautioned not to assume that all or any part of the "inferred mineral resources" exist. In accordance with Canadian securities laws, estimates of "inferred mineral resources" cannot form the basis of feasibility or other economic studies, except in limited circumstances where permitted under NI 43-101. In addition, United States investors are cautioned that a preliminary economic assessment cannot support an estimate of either "proven mineral reserves" or "probably mineral reserves" and that no feasibility studies have been completed on the Company's mineral properties.

Accordingly, information contained in this presentation describing the Company's mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

Updated Resource Estimate Based on Revised Geological Model



Total 2017

Classification	Tonnage Mt	Gold g/t	Silver g/t	Copper %	Gold Oz	Silver Moz	Copper Mlb
Indicated	0.624	6.25	47.9	0.18	125,000	1.00	2.4
Inferred	7.245	4.00	90.9	0.10	932,000	21.14	16.9

Total 2019

Classification	Tonnage Mt	Gold g/t	Silver g/t	Copper %	Gold Oz	Silver Moz	Copper Mlb
Indicated	0.736	7.02	74.8	0.18	165,993	1.77	2.87
Inferred	5.545	4.58	100.0	0.13	816,719	17.83	15.87

Resource Reporting to Mine Plan

Tonnes	3,424,775
Au Grade	5.41 g/t
Ag Grade	84.31 g/t
Cu Grade	0.13 %
Pb Grade	0.12 %

Contained Metal			
Au oz	595,857		
Ag oz	9,284,188		
Cu lbs	9,842,633		
Pb lbs	8,756,640		

Homestake Ridge Project PEA Summary Mine Plan Completed at \$1,300 Au - 900 Tonnes per Day



NPV 5%

US\$108M

after-tax at \$1,350/oz gold

US\$173M

after-tax at \$1,620/oz gold

LOM Production13 Year Mine Life

590K oz AuEq **IRR**

23.6%

after-tax at \$1,350/oz gold

32%

after-tax at \$1,620/oz gold

Average LOM Production/yr

45,400 AuEq oz

Peak Production year 3 88,660 oz of AuEq ounces

Pre-Production CAPEX

US\$88M

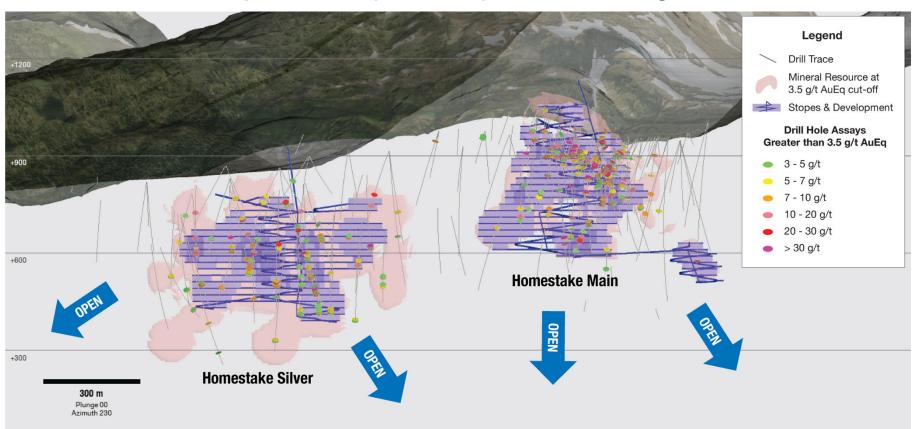
Average Diluted Head Grade

6.42 g/t AuEq

Exploration Potential and Resource Expansion



Deposit Currently Defined by Limited of Drilling



Additional exploration drilling has potential to positively impact project economics and ounces produced

NPV & IRR by Gold Price per Ounce – At Current Metal Prices



Robust Economics at Conservative Base Case Scenario

V ariance	Gold Price (US\$/oz)	Silver Price (US\$/oz)	NPV at 0% After Tax (US\$M)	NPV at 5% After Tax (US\$M)	IRR	Payback (Mo)
40%	\$1,890	\$16.80	\$373	\$239	39.4%	31
30%	\$1,755	\$15.60	\$326	\$206	35.8%	32
20%	\$1,620	\$14.40	\$278	\$173	32.0%	33
10%	\$1,485	\$13.20	\$231	\$141	28.0%	34
Base Case	\$1,350	\$12.00	\$184	\$108	23.6%	36
-10%	\$1,215	\$10.80	\$137	\$75	18.8%	40
-20%	\$1,080	\$9.60	\$90	\$42	13.2%	46

- Base case metal prices are based on the three-year trailing average
- Mine plan completed at \$1,300 gold higher metal prices will positively affect Life of Mine gold equivalent ounces produced

Low Capital Expenditure

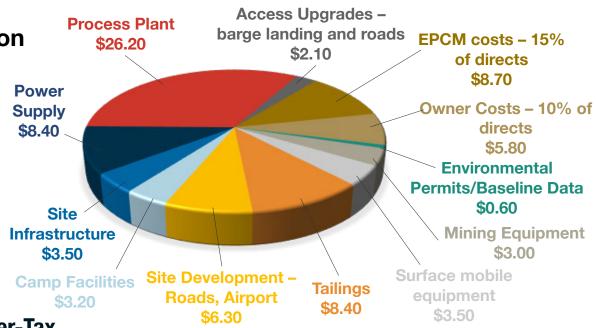


High-Grade – Small Footprint Underground Mine – 900 Tonnes/Day

Initial Expenditure (US\$M)

 Pre-production capital estimated: **US\$88 million** (CAD\$126 million)

 A contingency of 15% has been applied to all direct costs



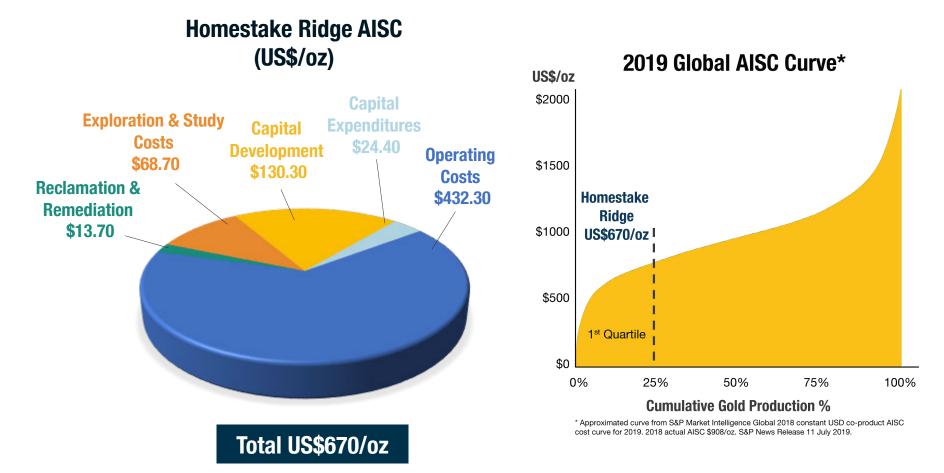
Capital Cost Sensitivity – After-Tax

	NPV at 0% (US\$M)	NPV at 5% (US\$M)	IRR	Payback (Mo)
20%	\$149	\$79	17.1%	43
10%	\$167	\$93	20.1%	40
Base Case	\$184	\$108	23.6%	36
-10%	\$201	\$128	27.7%	34
-20%	\$219	\$137	32.5%	33

All in Sustaining Cost¹ US\$670/oz Gold – 1st Quartile AISC



\$102M USD of silver, copper, and lead by-product leads to low AISC



^{1.} All-in sustaining cost ("AISC") is a Non-GAAP measure. The Company has calculated AISC using operating costs (Table 3) as a basis, and then adjusting it in accordance with the World Gold Council guidance.

Operating Expenditure Summary



OPEX Summary

Area	Unit Cost (US\$)	Life-of-Mine (US\$)
Mining (\$/t mined)	\$63.50	\$182.9 million
Processing (\$/t milled)	\$21.00	\$71.9 million
General and Administration (\$/t)	\$14.00	\$48.0 million
Environmental/Water Treatment	\$0.82	\$2.8 million
Community/Social	\$0.17	\$0.6 million
Total Operating Costs (\$/t milled)	\$89.39	\$306.2 million

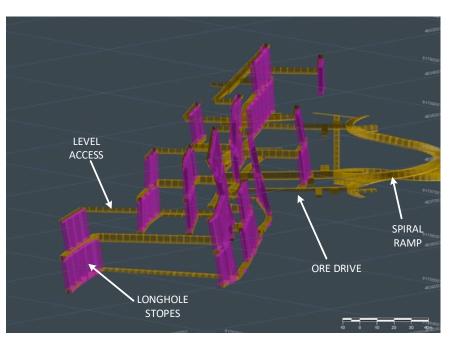
OPEX Sensitivity Analysis at US\$1300 Au Mine Plan

	NPV at 0% (US\$M)	NPV at 5% (US\$M)	IRR	Payback (Mo)
20%	\$145	\$82	20.1%	39
10%	\$165	\$95	21.9%	38
Base Case	\$184	\$108	23.6%	36
-10%	\$203	\$121	25.3%	35
-20%	\$223	\$134	26.9%	35

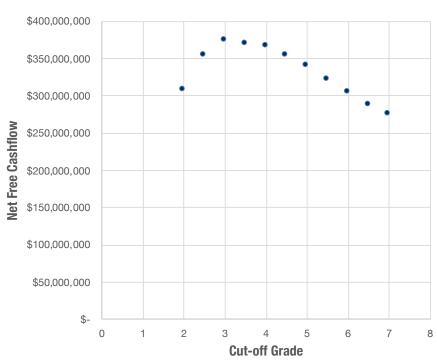
Mining Method Longhole Stoping Minimum Width 2.5m – Cutoff Grade 3.5 g/t AuEq



Longhole Open Stoping at Homestake Ridge

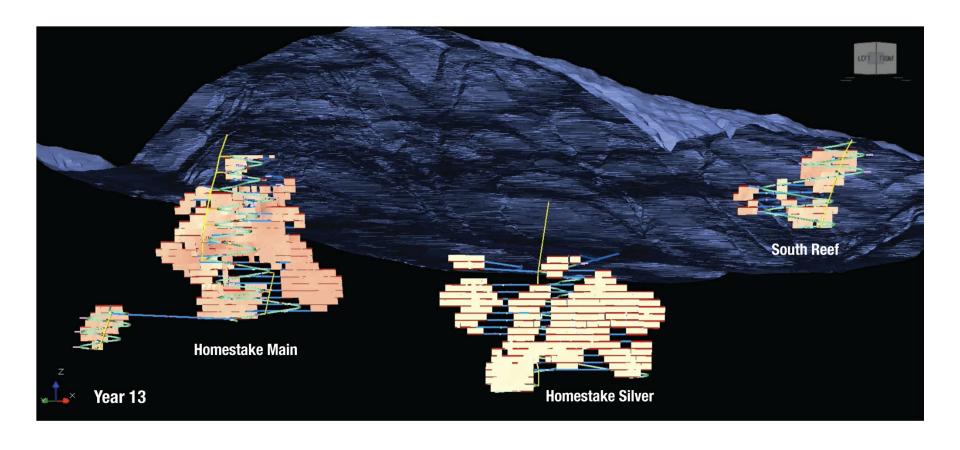


Cutoff Grade AuEq vs Net Free Cash Flow \$1,300 Au Mine Plan



Homestake Ridge Mine Plan Stopes that Report to the Mine Plan





High Value Concentrates Produced – Not Fully Optimized



Homestake Main Zone

Process	Concentrate Grade (g/t or %)	Recovery %
Cu Flotation – Au	555 g/t	54%
Cu Flotation – Ag	3,384 g/t	44%
Cu Flotation – Cu	28%	73.4%
Combined Au		83.1%
Combined Ag		66.6%

Homestake Silver Zone

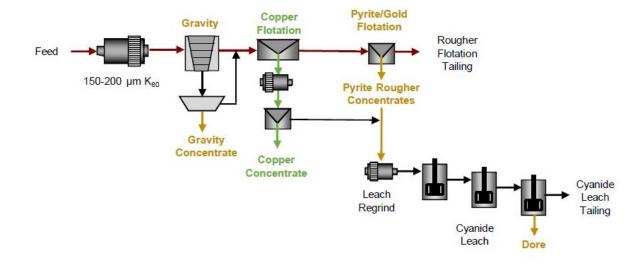
Process	Concentrate Grade (g/t or %)	Recovery %
Pb Flotation – Au	524 g/t	63.5%
Pb Flotation – Ag	17,310 g/t	49.1%
Pb Flotation – Pb	30%	67.9%
Combined Au		89.6%
Combined Ag		75.9%

^{*} Au and Ag values shown in g/t, all other elements are reported in percent

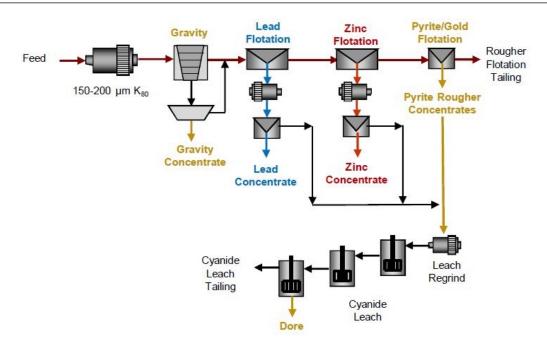
Processing Flow Sheet



Homestake Main - Copper Concentrate

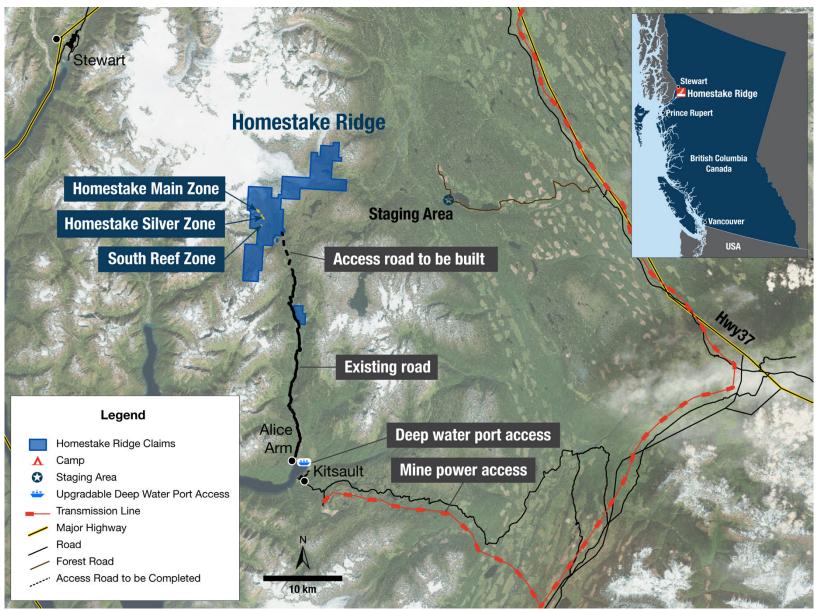


Homestake Silver -Lead Concentrate



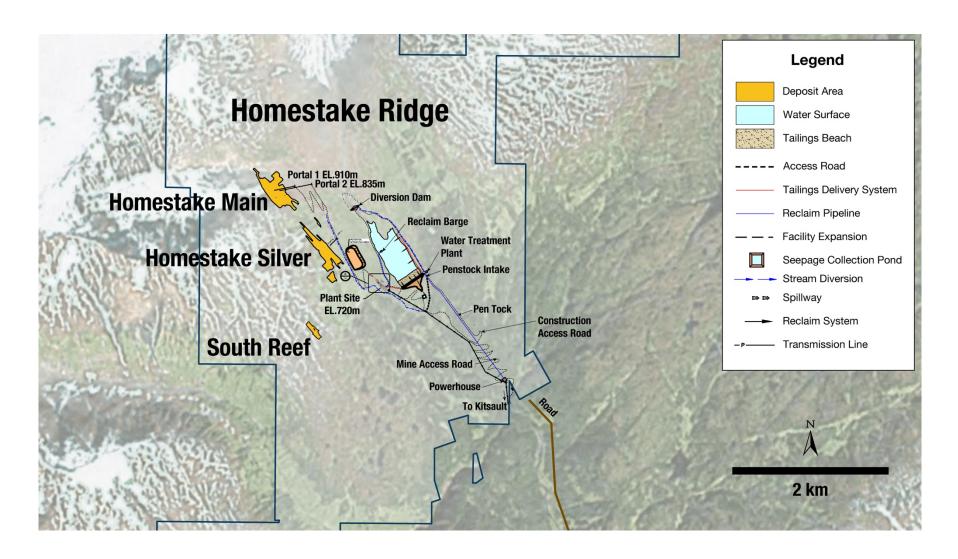
Homestake Ridge Access to Infrastructure





Homestake Ridge Initial Site Layout – Knight Piesold 2011



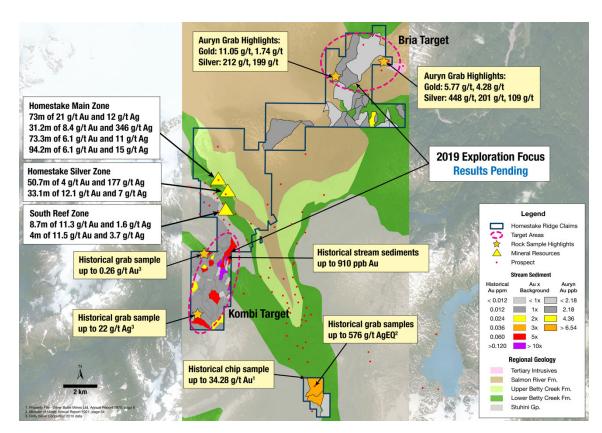


Homestake Ridge Deposit – Summary and Catalysts



Summary

- Excellent discovery potential
 7500 hectares
- Resource expandable currently defined by limited of drilling
- Low Capex, high margin economics
- Project is highly leveraged to gold price
- Currently permitted for 500 drill sites & exploration work



Future catalysts

- Resource infill and expansion drilling
- Exploration targets to be tested for new mineralized bodies
- Permit the 6 km road to access project
- Work toward an exploration agreement with the Nisga'a Nation
- Environmental baseline work to start



TSX: AUG

NYSE American: AUG

www.aurynresources.com