



BMO



**ADVANCING THE HIGH-GRADE PICKLE CROW
PROJECT IN ONTARIO, CANADA**

2.2 Moz of Gold at 7.8g/t and **Growing Rapidly**

RAY SHORROCKS - EXECUTIVE CHAIRMAN

DARREN COOKE - CHIEF OPERATING OFFICER

28 FEB – 2 MARCH 2022 | ASX: AUT

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References to previous ASX announcements should be read in conjunction with this release. The Company confirms that it is not aware of any new information or data that materially affects the information included in this presentation.

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This document contains forward looking statements concerning the Company. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward looking statements in this document are based on the Company's beliefs, opinions and estimates of the Company as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. Although management believes that the assumptions made by the Company and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. 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 anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of commodities, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. Readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws. No representation, warranty or undertaking, express or implied, is given or made by the Company that the occurrence of the events expressed or implied in any forward-looking statements in this presentation will actually occur.

NO NEW INFORMATION OR DATA

This Presentation contains references to Mineral Resource estimates, all of which have been extracted from the Company's ASX announcement titled "Resource increases by 500,000oz to 2.23Moz at 7.8g/t" and dated 15 February 2022. All future references in this presentation that relate to the Mineral Resource Estimate should be read in conjunction with the aforementioned ASX release. The Company confirms that it is not aware of any new information or data that materially affects the information included in that ASX announcement and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate (Inferred Resource – 8.9 Mt @ 7.8 g/t gold for 2.23M ounces of gold) in that announcement continue to apply and have not materially modified. A breakdown of the resource is set out in this Presentation.

INTRODUCTION TO AuTECO MINERALS (ASX: AUT)

Canadian focused ASX-listed explorer with one of the highest grade +2Moz Resources GLOBALLY and an exceptional growth trajectory

Rapid Low-Cost Growth

The Resource stands at **2.23Moz at 7.8g/t. Addition of 1.23Moz** of Resource in just **16 months** at a cost of **A\$17.58** per ounce

Asset & Location

Tier 1 Location and an asset with a long history of **high-grade** production **1.5Moz @ 16.1gpt gold** between 1935 & 1966

Prospectivity

Exceptional **500km²** holding in the world-class **Uchi Belt** (Red Lake, Dixie) with **camp-scale** drill targets and exceptional **discovery potential**

Infrastructure

Inherited infrastructure provides a **pathway to low capital start-up production** (processing plant on site, underground)

CORPORATE OVERVIEW

A Canadian-focused ASX listed company with one of the highest grade +2 Moz Resources Globally

CAPITAL STRUCTURE

ASX Code	AUT
Shares on issue	2B
Unlisted options & performance rights	366M
Top 20 Shareholders	63%

SHAREHOLDER SUMMARY¹

Board and Management (on a fully diluted basis)	16%
Australian & Global Institutions	37%
Substantial Shareholders	
• 1832 Asset Management	13.1%
• Campbell Kitchener Hume & Assoc.	5.8%
• Franklin Resources, Inc.	5.0%



1. Indicative as at market close on 22 February 2022 and includes shares from the recent placement see ASX 21 February 2022.

2. Unaudited balance net of payables as of 31 December 2021, plus placement completed on 28 February 2022.

BOARD & MANAGEMENT TEAM

A leadership team with management DNA and experience in some of the most successful resource sector stories in the past decade, including Bellevue Gold and Northern Star



- 27 years experience working in the investment banking industry, highly conversant and experienced in all areas of mergers and acquisitions and equity capital markets.
- Significant track record of transactions in the metals and mining sectors
- Previous Chairman of Bellevue Gold

Ray Shorrocks – Executive Chairman



- Geologist with 25 years' experience having previously held senior positions in global majors including Barrick Gold, Newmont and Northern Star Resources
- Extensive gold industry experience in Australia and North America spanning regional and near mine exploration, operational geology, long-term planning and corporate development

Darren Cooke – Chief Operating Officer



- Experienced geologist with a proven track record of mineral discoveries, corporate growth, international investor relations and creating shareholder wealth
- Founder and former Managing Director of Gryphon Minerals
- Founder and Managing Director of Bellevue Gold

Steve Parsons – Non-Executive Director



- 15 years' of experience in the resources sector, operating in Australia, Canada, Europe and Africa
- Corporate and financial management with a number of ASX listed companies active in a range of commodities, precious and base metals and industrial minerals sector, together with Directorships and Company Secretarial of unlisted entities

Nick Katris – Chief Financial Officer and Company Secretary



- 26 years' experience in corporate advisory and public company management since commencing his career and qualifying as a chartered accountant
- Involved in the financial management of mineral and resources focused public companies serving on the board and in the executive management teams.
- Executive Director of Bellevue Gold

Michael Naylor – Non-Executive Director

CANADA & ONTARIO – THE INVESTMENT CASE

A true tier 1 mining location in every definition of the term

JURISDICTION



- Canada is one of the **best mining locations globally**
- **Ontario** consistently ranks in the **top 20 states & provinces** globally in the Fraser Institute Investment Attractiveness Index
- Strong **taxation incentives** to explore (e.g., Flow Through)

PROSPECTIVITY



- **Canada** is home to some of the **biggest** current and historical **gold deposits globally**
- Ontario hosts world-class deposits, and the Archean rocks of Ontario are **relatively under-explored** and are yielding new discoveries

RELATIVE VALUATIONS



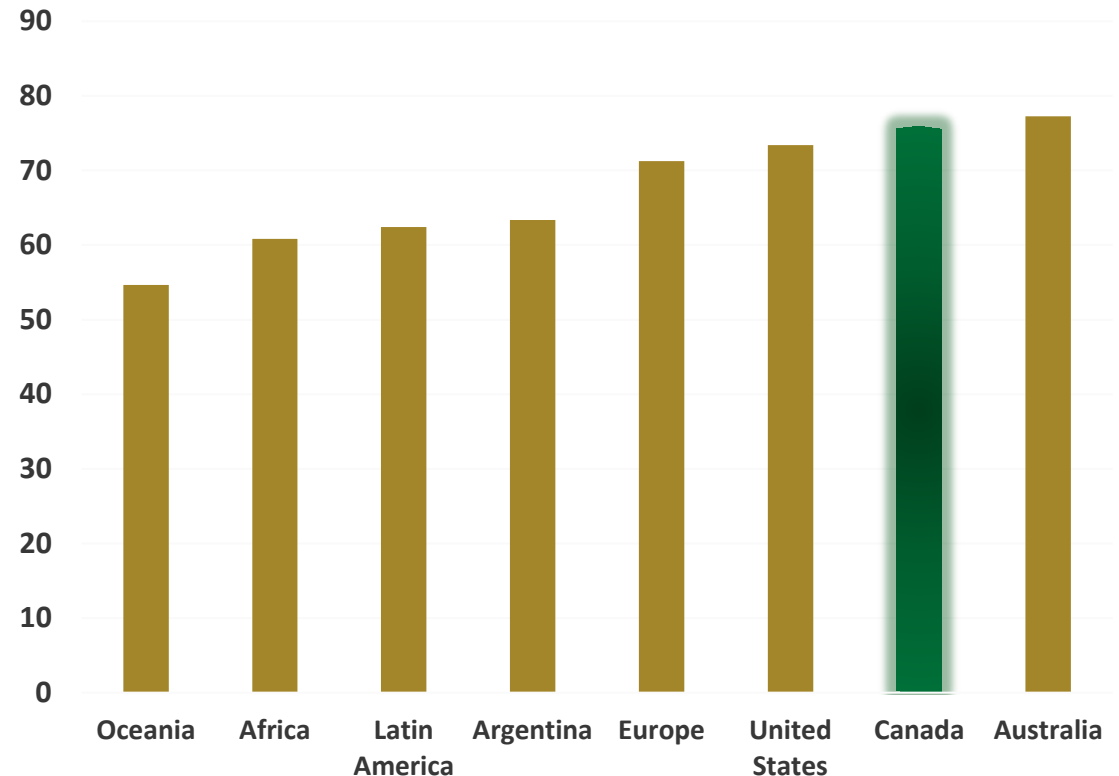
- Projects in Canada are **undervalued** relative to similar properties in Australia

ONTARIO IS HOME TO MAJOR GLOBAL GOLD PRODUCERS

Including Barrick, Newmont, Agnico-Eagle, Kirkland Lake, Evolution

Fraser Institute Survey of Mining Companies 2020³

Regional Median Overall Investment Attractiveness



PICKLE CROW ASSET OVERVIEW

Exceptional location in a Tier 1 mining jurisdiction, Pickle Crow is an asset with a long history of producing high grade gold

Asset Location

- **Tier 1** Jurisdiction of Ontario, Canada
- ~400km North of Thunder Bay (pop. ~110k)

Tenure & Ownership

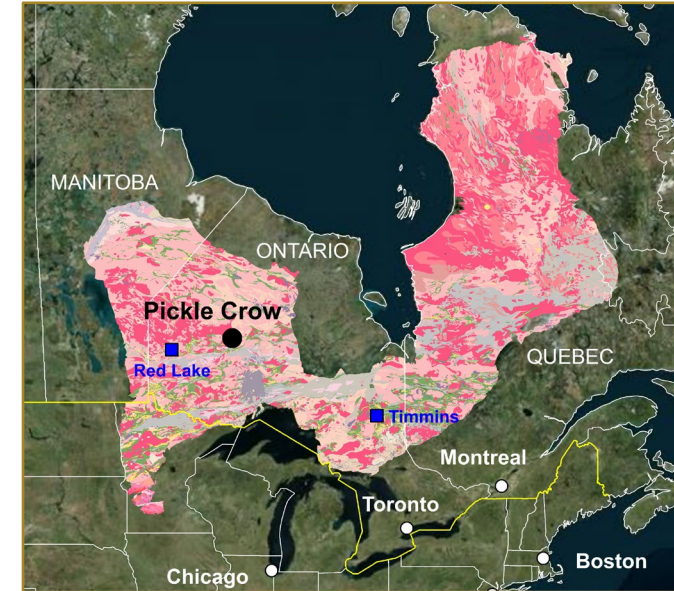
- **500km²** of tenure under management
- 70% equity, can move to **80% for C\$3M**

Historic Mining

- Past production of **1.5Moz @ 16.1 g/t**
- Hand-held mining, 3 shafts, >40km development (1935 – 1966)

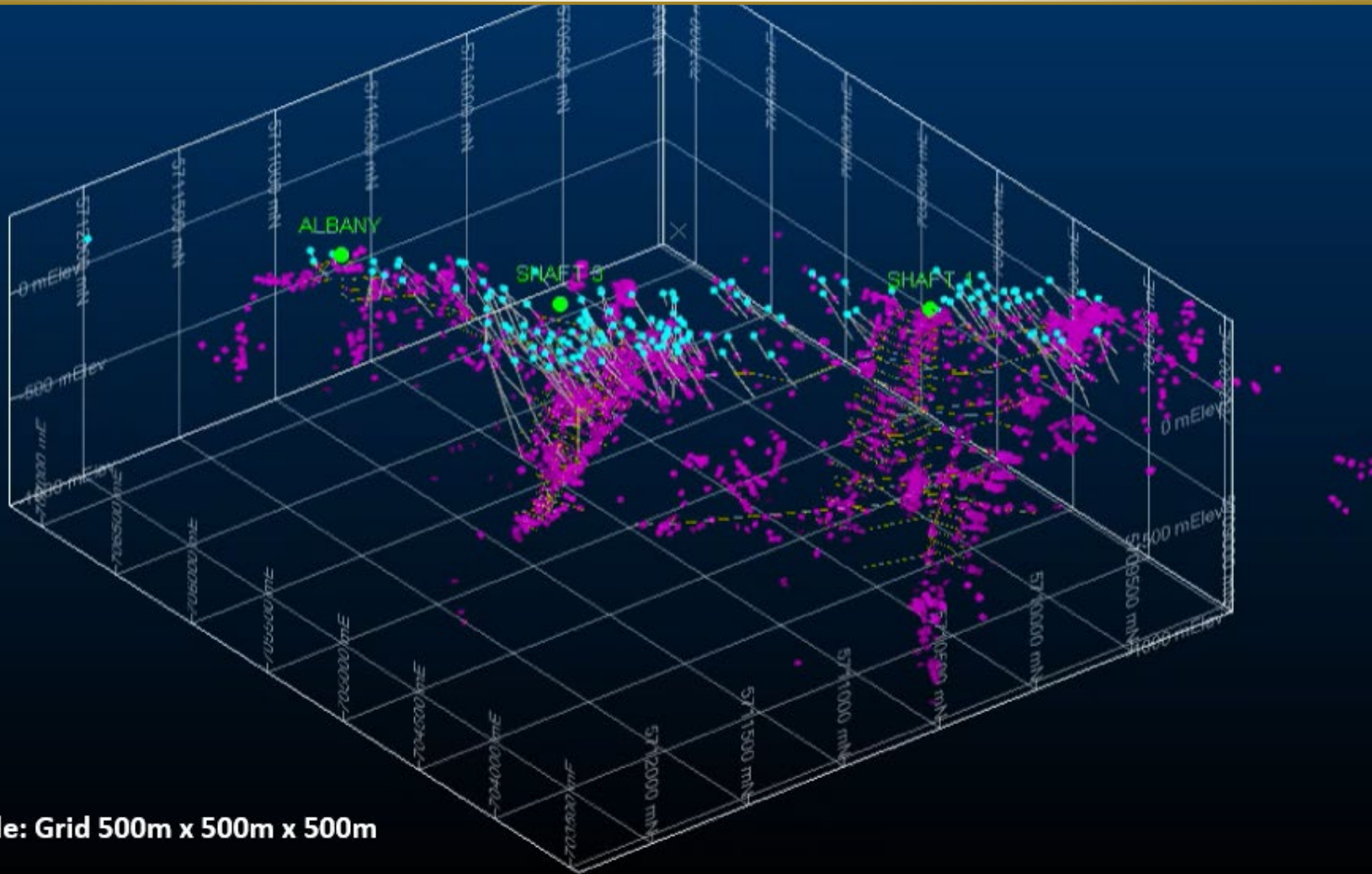
Inferred Resource

- 8.9Mt @ **7.8g/t** for **2.23Moz** Gold
- **Remains open**



PICKLE CROW ASSET OVERVIEW

THE HISTORIC PICKLE CROW MINE IN 3D (1.5Moz @ 16.1g/t)



Scale: Grid 500m x 500m x 500m

HISTORIC MINE

- Mined between 1935 & 1966
- 1.5Moz @ 16.1g/t gold
- 3 Main Shafts
- >40km of development
- Historically hand-held mining
- Rail & cart haulage



DRILL DATA

- ~170km of surface drilling
- Selective sampling of quartz



AuTECO
Drillholes



Historic Assays
>2g/t Au

PICKLE CROW ASSET OVERVIEW

Excellent surface infrastructure and low capex startup options provide a great foundation to build a mine



PROCESSING PLANT

- A **310 tonne per day (110kt p.a.)** processing plant is present on site
- Built in 2004 and **never commissioned**, it consists of crushing circuit, ball mill and knelson concentrators

Photographs taken in September 2021



HYDRO POWER GREEN ENERGY



- The **First-Nation owned Wataynikaneyap hydro** power project line runs through the Pickle Crow property
- **Ample clean energy** is available for future projects



PICKLE CROW GEOLOGICAL SETTING

World-class setting in the prolific Superior Craton

CONTINENT



North America

TECTONIC ELEMENT



Laurentia Superior Craton

PROVINCE



Uchi Sub-province

REGION



Pickle Lake Greenstone Belt

DEPOSIT



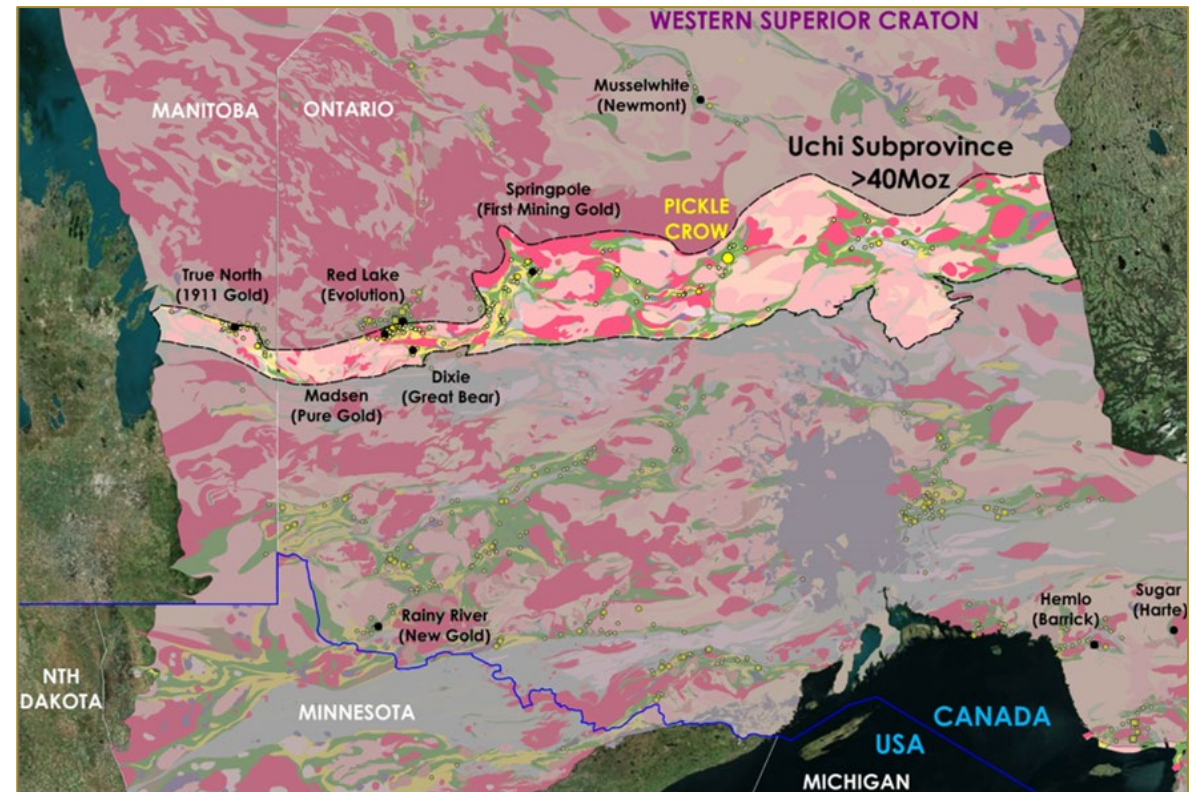
Pickle Crow & Central Patricia

THE UCHI SUBPROVINCE

One of the best gold addresses globally

- Located in the prolific Uchi Sub province of the Western Superior Craton
- Archean Granite – Greenstone terrane that hosts significant gold deposits, including:
 - **Red Lake** (Evolution Mining)
 - **Musselwhite** (Newmont)
 - **Springpole** (First Mining)
 - **Madsen** (Pure Gold)
 - **Dixie** (Great Bear)
 - **West Red Lake** (West Red Lake Gold)

BASEMENT GEOLOGY OF THE WESTERN SUPERIOR CRATON⁵



TWO DISTINCT STYLES OF MINERALISATION

Bulk and narrow mineralisation styles have the potential to provide future operational flexibility



ALTERATION (BIF) HOSTED

Dec 2021 Resource
2.5Mt @ 3.8g/t for
300koz

- Overlooked in previous exploration activities
- **Broad zones** of **sulphide** mineralisation (to +20m)
- Typically hosted in **BIF** and lesser Porphyry
- Amenable to **Bulk Mining** (Both Open pit & UG)
- This type of mineralisation was mined at
 - Musselwhite (Newmont, +5Moz), 150km from PC
 - Dona Lake (MEK, 0.5Moz), Central Patricia (0.67Moz)

2021 DRILL HIGHLIGHTS

- 20.4m @ 5.3 g/t
- 19.5m @ 3.3 g/t
- 10.5m @ 3.6 g/t
- 14.9m @ 2.2 g/t
- 36.7m @ 1.5 g/t
- 25.2m @ 1.3g/t
- 6.0m @ 5.8g/t



QUARTZ VEINS

Dec 2021 Resource
6.4Mt @ 9.3g/t for
1,920koz

- Source of historic production at Pickle Crow (**1.5Moz @ 16.1g/t**)
- **High-grade** narrow veins, **coarse gold**, low sulphide content
- **Consistent veins** with internal high-grade plunging shoots, **multiple** orientations
- Amenable to **Selective Mining**

2021 DRILL HIGHLIGHTS

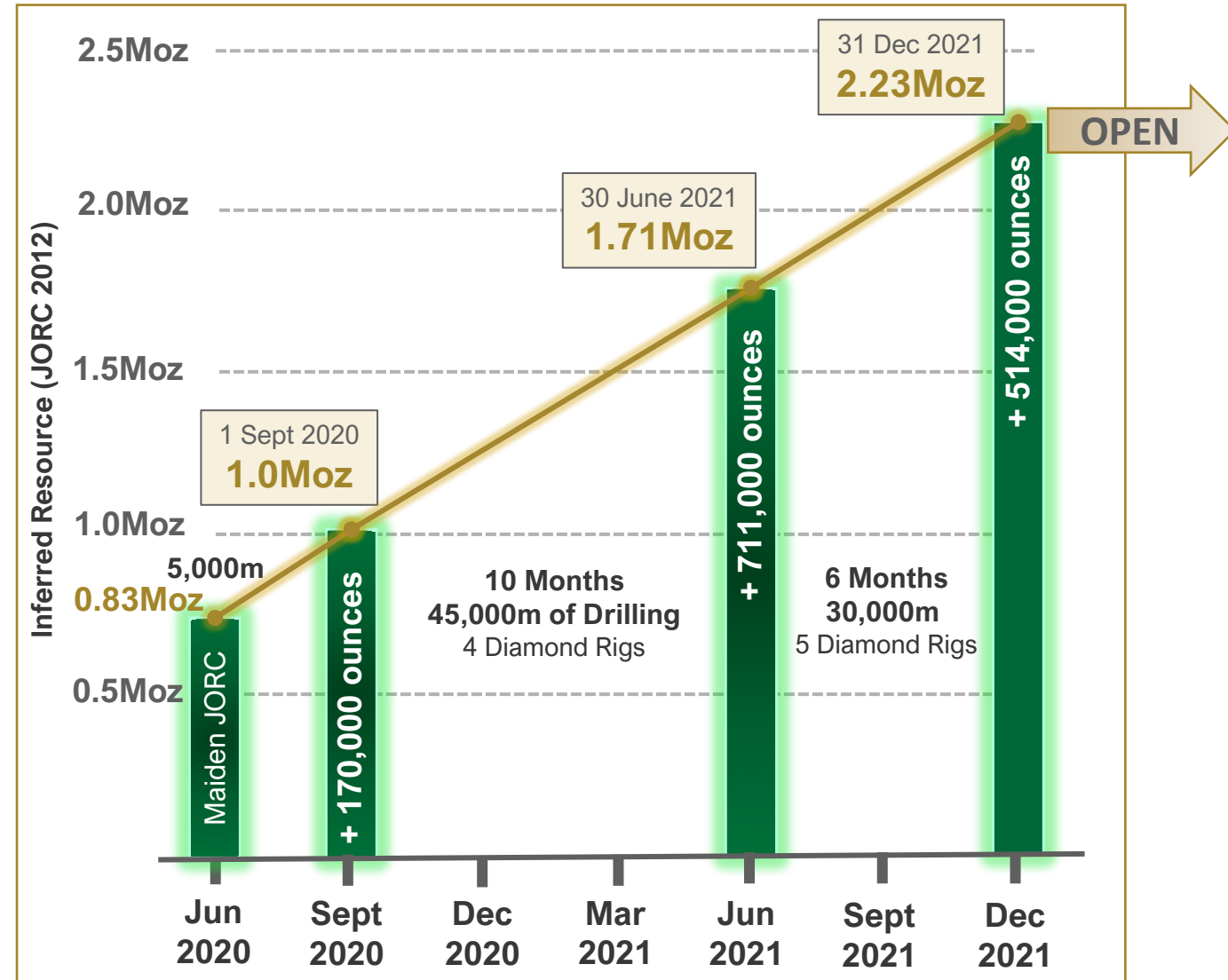
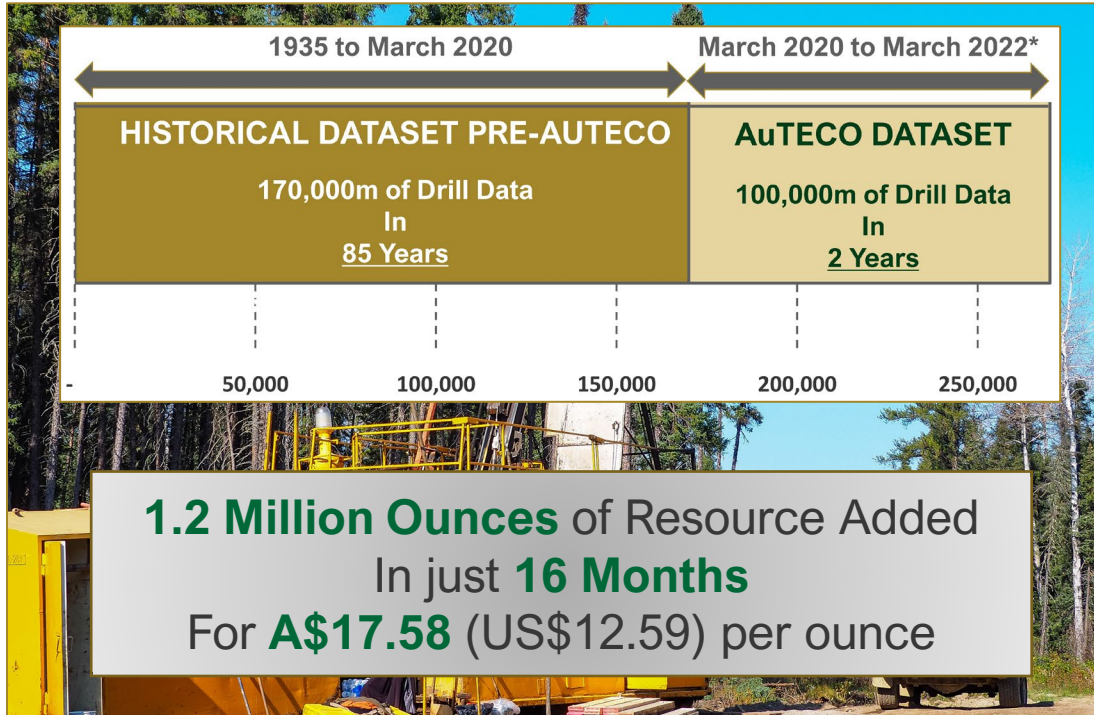
- 7.3m @ 33.3 g/t
- 2.0m @ 68.3 g/t
- 2.1m @ 31.8 g/t
- 3.3m @ 15.9 g/t
- 2.8m @ 17.9g/t
- 4.1m @ 11.0 g/t
- 1.8m @ 21.2 g/t

RAPID & LOW-COST RESOURCE GROWTH

A sustained history of creating shareholder value with smart investment in the drill bit

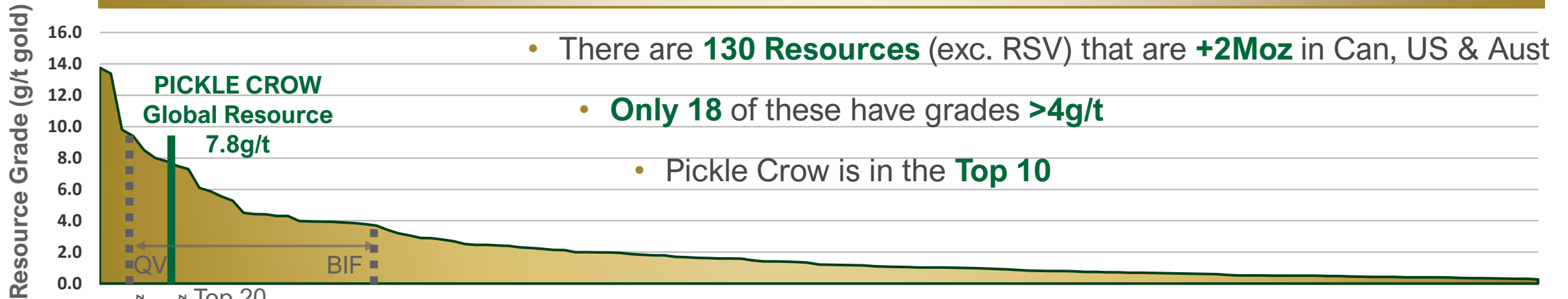
RESOURCE ESTIMATE AT 31 DECEMBER 2021

Mineralisation Domain	Lower Cut-off	Tonnes (Mt)	Gold Grade (g/t)	Gold (Million oz)	Variance to 30 June 2021 Resource
Quartz Lodes	3.5g/t	6.4	9.3	1.92	+453,000oz
Alteration Hosted (BIF)	2.0g/t	2.5	3.8	0.30	+61,000 oz
TOTAL		8.9	7.8	2.23	+514,000 oz (+30%)

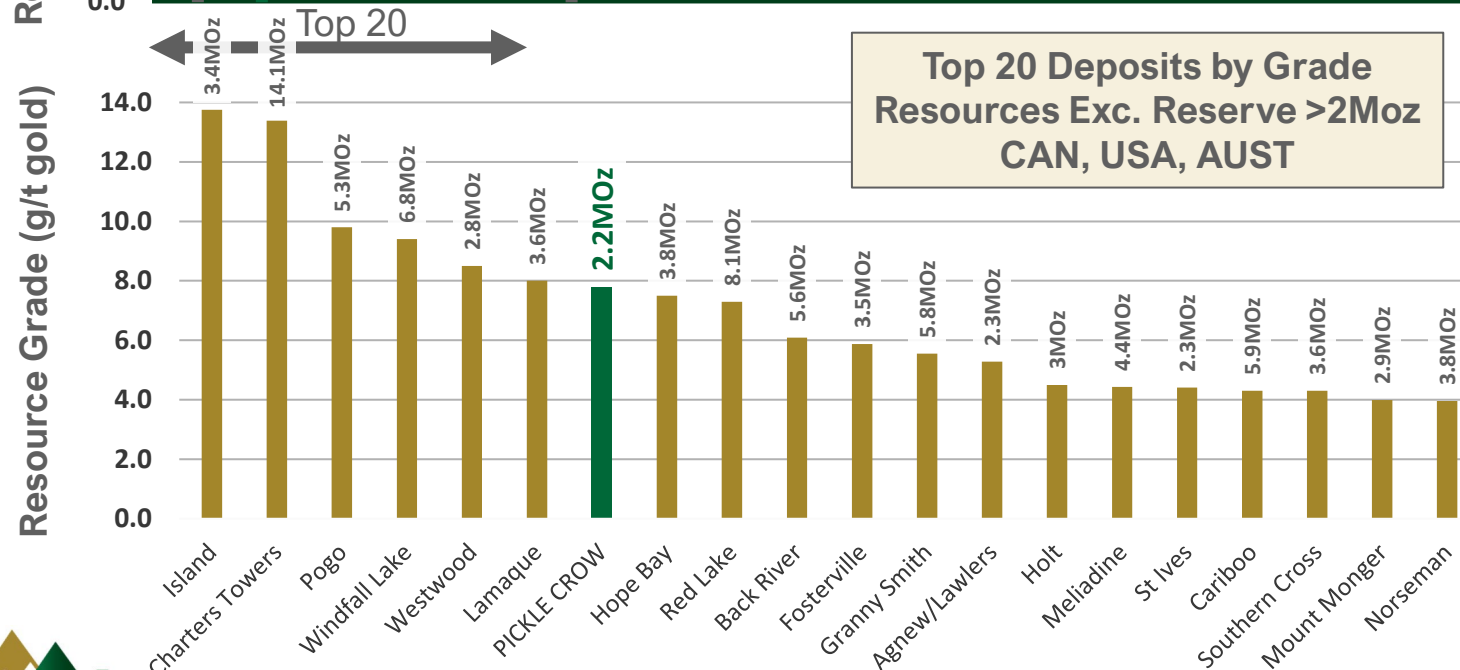


GLOBALY SIGNIFICANT RESOURCE GRADE

GRADE DISTRIBUTION OF TIER 1 +2MOz RESOURCES (Exclusive of Reserve)⁶



Top 20 Deposits by Grade Resources Exc. Reserve >2Moz CAN, USA, AUST



Deposit	Resource Exclusive of Reserves		Reporting Code
	Grade (g/t)	Ounces	
Island	13.75	3,374,000	NI 43-101
Charters Towers	13.39	14,065,382	JORC
Pogo	9.80	5,282,000	JORC (2012 Edition)
Windfall Lake	9.40	6,789,000	NI 43-101
Westwood	8.50	2,807,000	NI 43-101
Lamaque	8.01	3,612,000	NI 43-101
PICKLE CROW	7.80	2,230,000	JORC (2012 Edition)
Hope Bay	7.50	3,755,000	NI 43-101
Red Lake	7.30	8,124,000	JORC (2012 Edition)
Back River	6.09	5,589,000	NI 43-101
Fosterville	5.88	3,466,000	JORC (2012 Edition)
Granny Smith	5.55	5,769,000	JORC (2012 Edition)
Agnew/Lawlers	5.28	2,261,000	JORC (2012 Edition)
Holt	4.50	3,009,000	NI 43-101
Meliadine	4.43	4,426,000	NI 43-101
St Ives	4.41	2,299,000	JORC (2012 Edition)
Cariboo	4.30	5,921,000	NI 43-101
Southern Cross	4.30	3,610,000	JORC (2012 Edition)
Mount Monger	3.99	2,913,000	JORC (2012 Edition)
Norseman	3.96	3,822,000	JORC (2012 Edition)

6. Source: S&P Global Dataset Resources reported exclusive of ore reserves. Please note that some of these Resources have not been prepared in accordance with the JORC Code (2012 Edition) and are Foreign Estimates prepared in accordance with the Canadian National Instrument 43-101



RESOURCE NEXT STEPS

Long-term strategy for Resource growth

DEFINE THE SCALE OF THE SYSTEM

Continue expanding the 2.23Moz Inferred Resource and **define the system extents** in order to 'right size' potential future infrastructure. The Resource remains open

0 – 24 Month Timeframe

Resource Focus

In-Mine Exploration



Explore for new structures and mineralisation proximal to the existing Resource area

Near Mine Extension



Continue to step out and test extensions of known structures and high-grade ore shoots

Ore Type

Quartz Vein

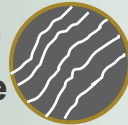
- High Grade
- Selective Mining
- UG Mining Potential



Dec 2021: 1.9Moz @ 9.3 g/t

Alteration (BIF)

- Medium Grade
- Bulk Mining
- OP & UG Potential



Dec 2021: 0.3Moz @ 3.8 g/t

UG EXPLORATION & CONVERSION

Conversion of the 1.9Moz @ 9.3g/t vein Inferred Resource to the Indicated category is **most effectively completed from Underground** due to data density requirements

12 – 36 Month Timeframe

Underground Access Options

Rehab Historic Shaft #3



Source a new headframe, de-water the workings and rehabilitate the shaft to the 750 Level (228m below surface) and utilize as a drill platform

Starter Pit & Decline



Mine a starter open pit, scaled start up of mill to generate cashflow, mine a decline ramp off the base of the pit to commence UG exp & conversion

Exploration Decline

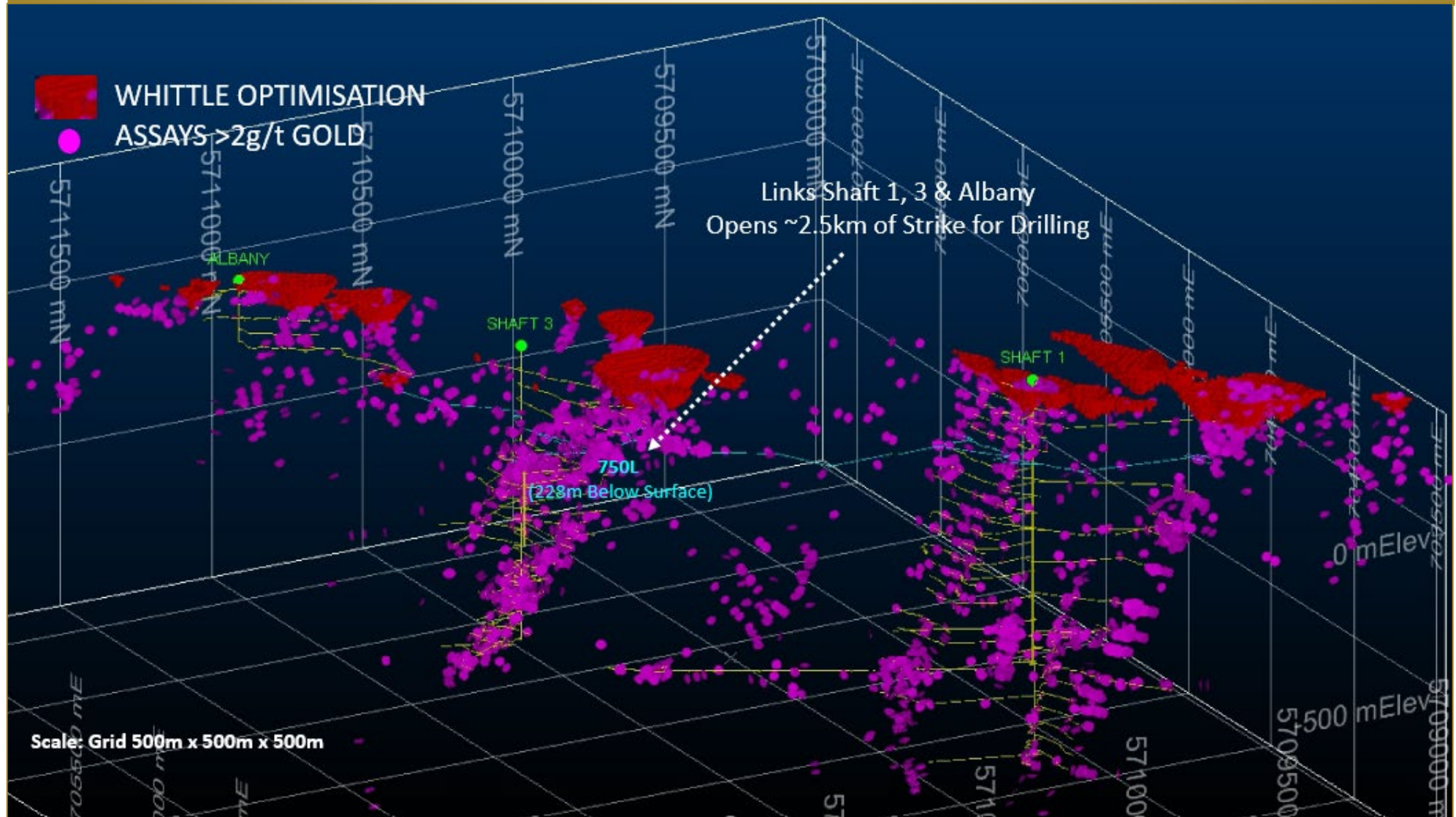


Commence a box cut and UG exploration decline from surface, positioned in such a way that it could be used for potential extraction in the future

Conceptual Trade Off Studies to Commence in 2022

RESOURCE NEXT STEPS

THE STARTER PIT CONCEPT TO RE-ESTABLISH UG ACCESS



EXPLORATION & GROWTH

Exceptional progress across all areas of the project pipeline in 2021, setting the platform for 2022

OBJECTIVES

GENERATIVE



- Mapping and reconnaissance rock chip sampling conducted South of the Resource area
- Ground magnetic survey continue

DISCOVERY



- First-pass drill testing of conceptual targets in the northern near-mine area
- Additional testing at Tyson discovery

RESOURCE GROWTH



- Continued step out and exploration in the near mine area
- Drilling to extend Inferred Resource
- Determine 'size of the prize'

RESULTS

2021 Work Program

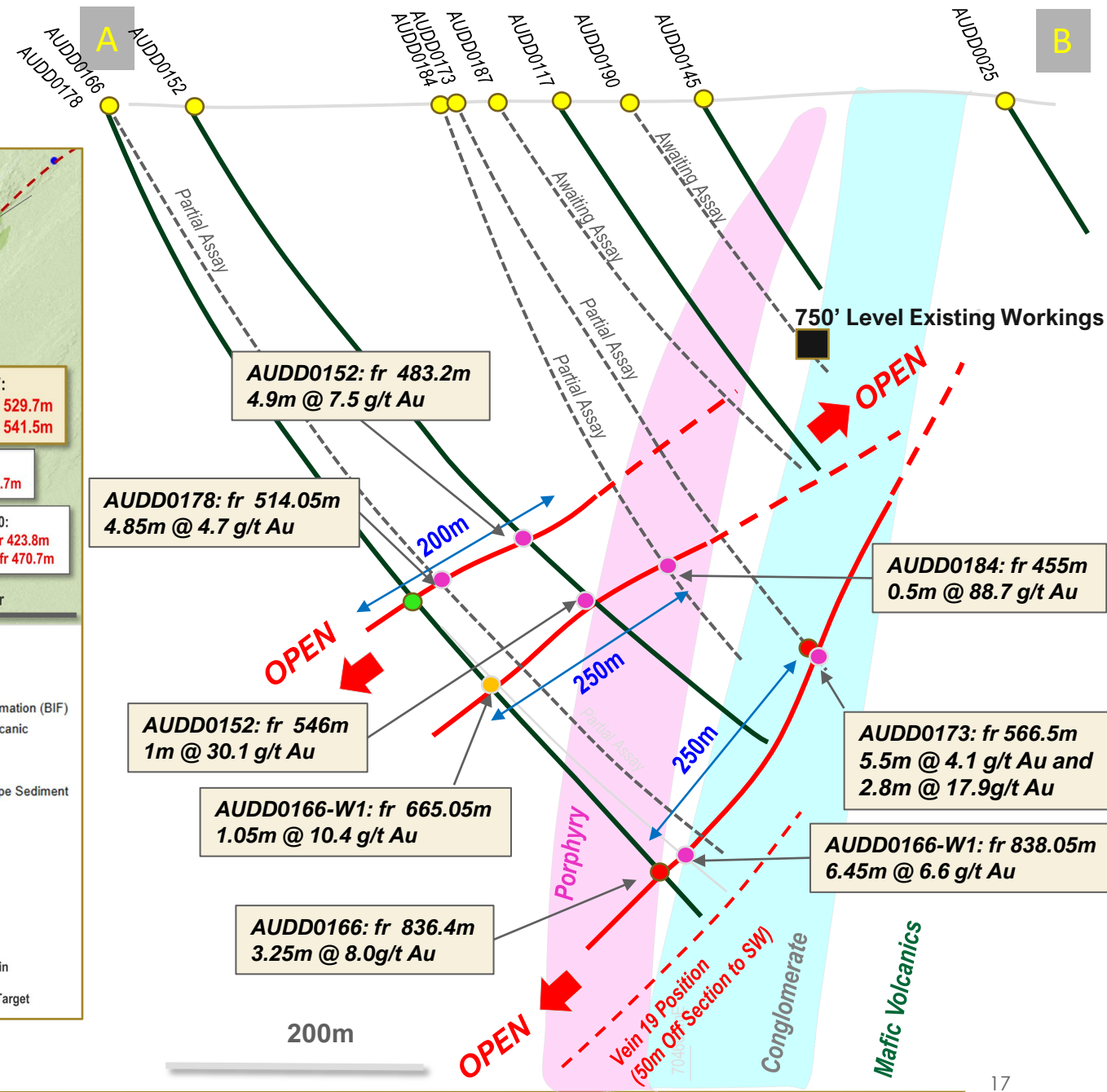
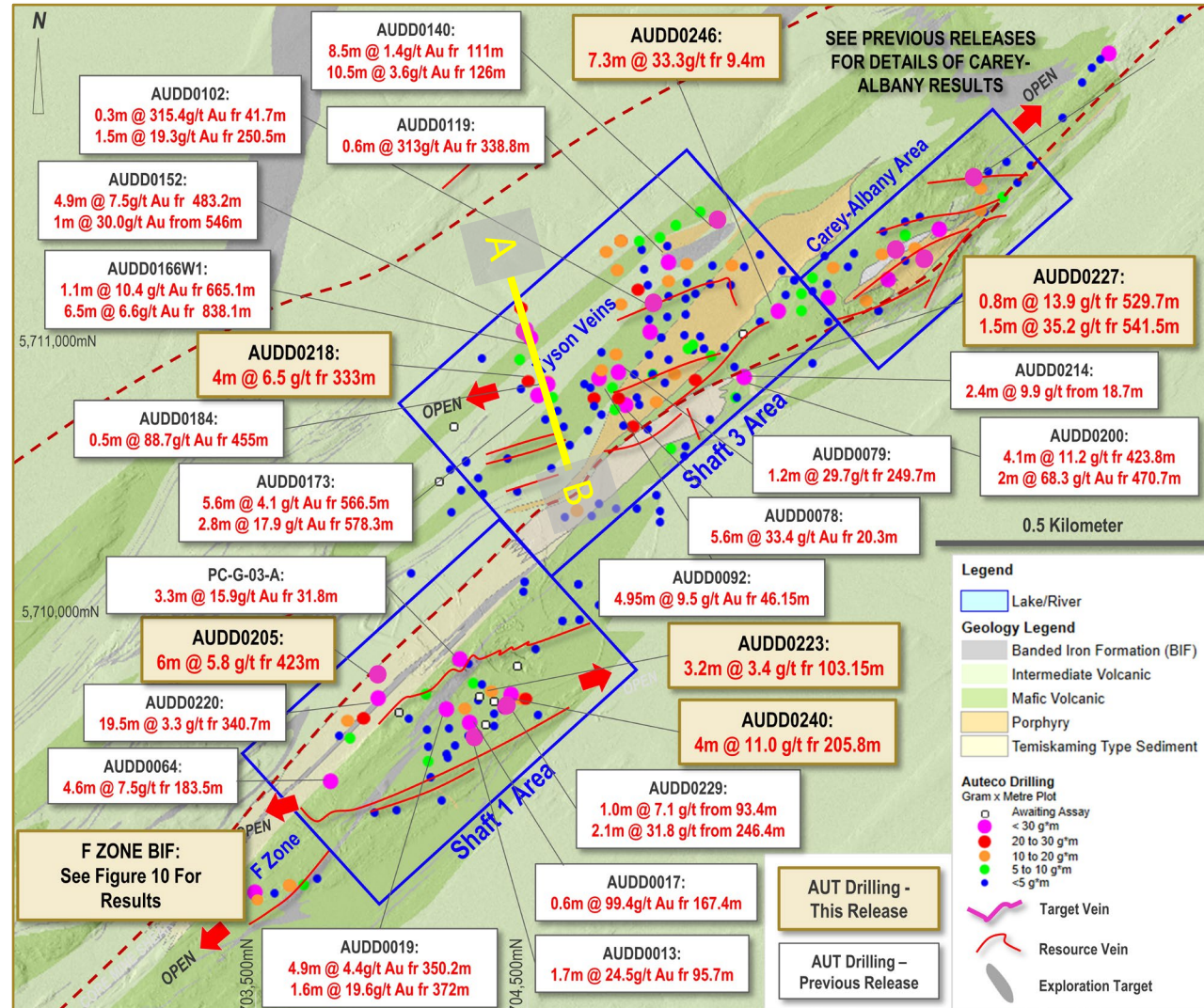
- Numerous **outcropping veins** traced and mapped at Springer prospect
- Rock chip samples include:
 - **145.7 g/t gold**
 - **6.2 g/t gold**
 - **5.7 g/t gold**
- Ground magnetics identified multiple structural offsets and **demagnetised zones**

- **New Mineralised BIF Zones**
- **Discovery of the Carey and now Tyson zones,**
- Assays from Carey include:
 - **20.4m @ 5.3 g/t gold**
 - **13.8m @ 2.0 g/t gold**
 - **16.5m @ 2.2 g/t gold**
 - **6.5m @ 4.6 g/t gold**
- Assays from Tyson include:
 - **2.8m @ 17.9 g/t gold**
 - **1.0m @ 30.1 g/t gold**
 - **5.5m @ 4.1 g/t gold**

- **RESOURCE UPDATE – 2.23Moz**
- **Discovery of new structure**
- **Extensions of known veins**
- The following results were received after the data cut-off for the current Resource and will contribute to future updates:
 - **7.3m @ 33.3 g/t gold**
 - **1.5m @ 35.2 g/t gold**
 - **4.0m @ 11.0 g/t gold**
 - **6.0m @ 5.8 g/t gold**
 - **25.2m @ 1.6 g/t gold**

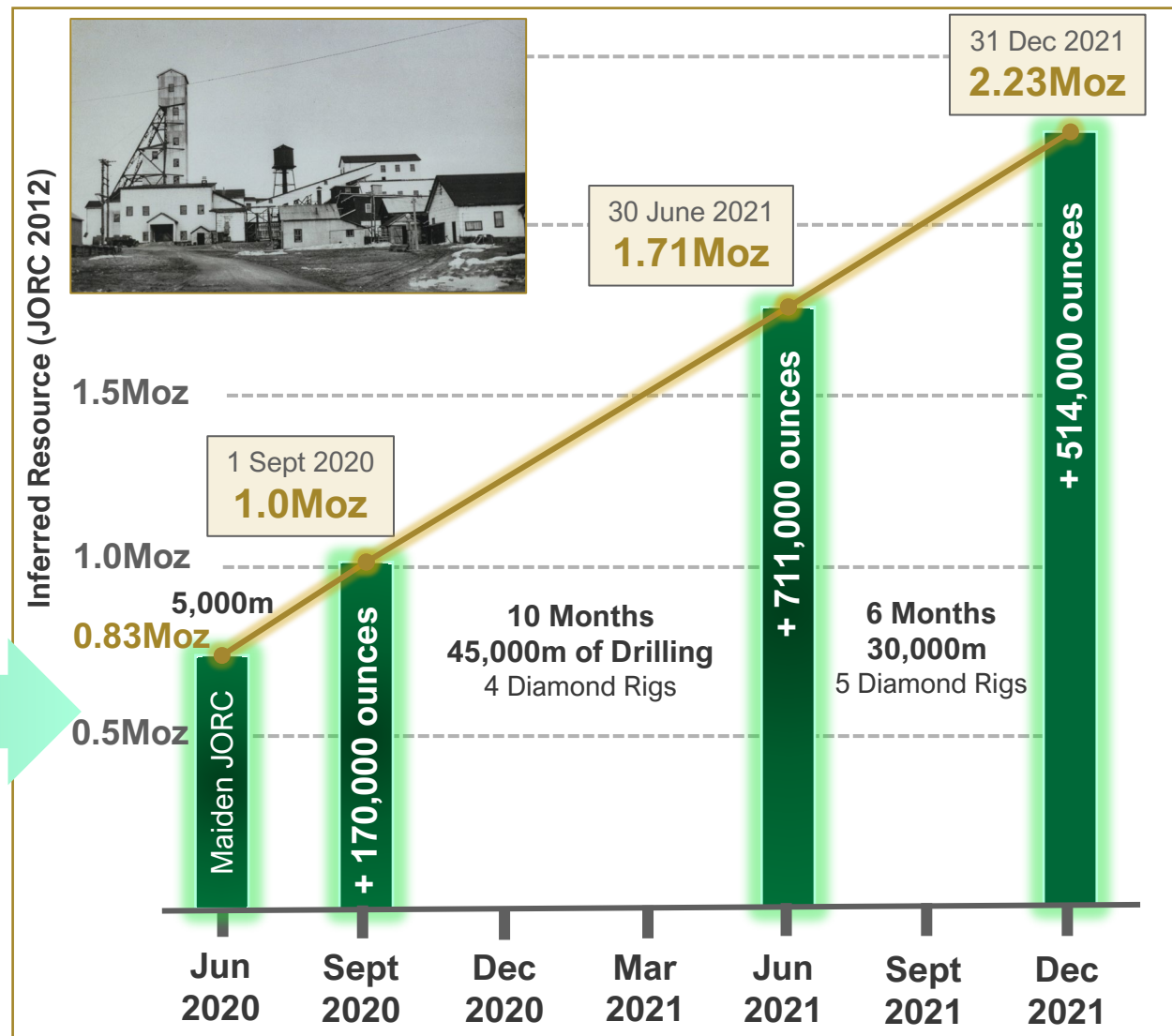
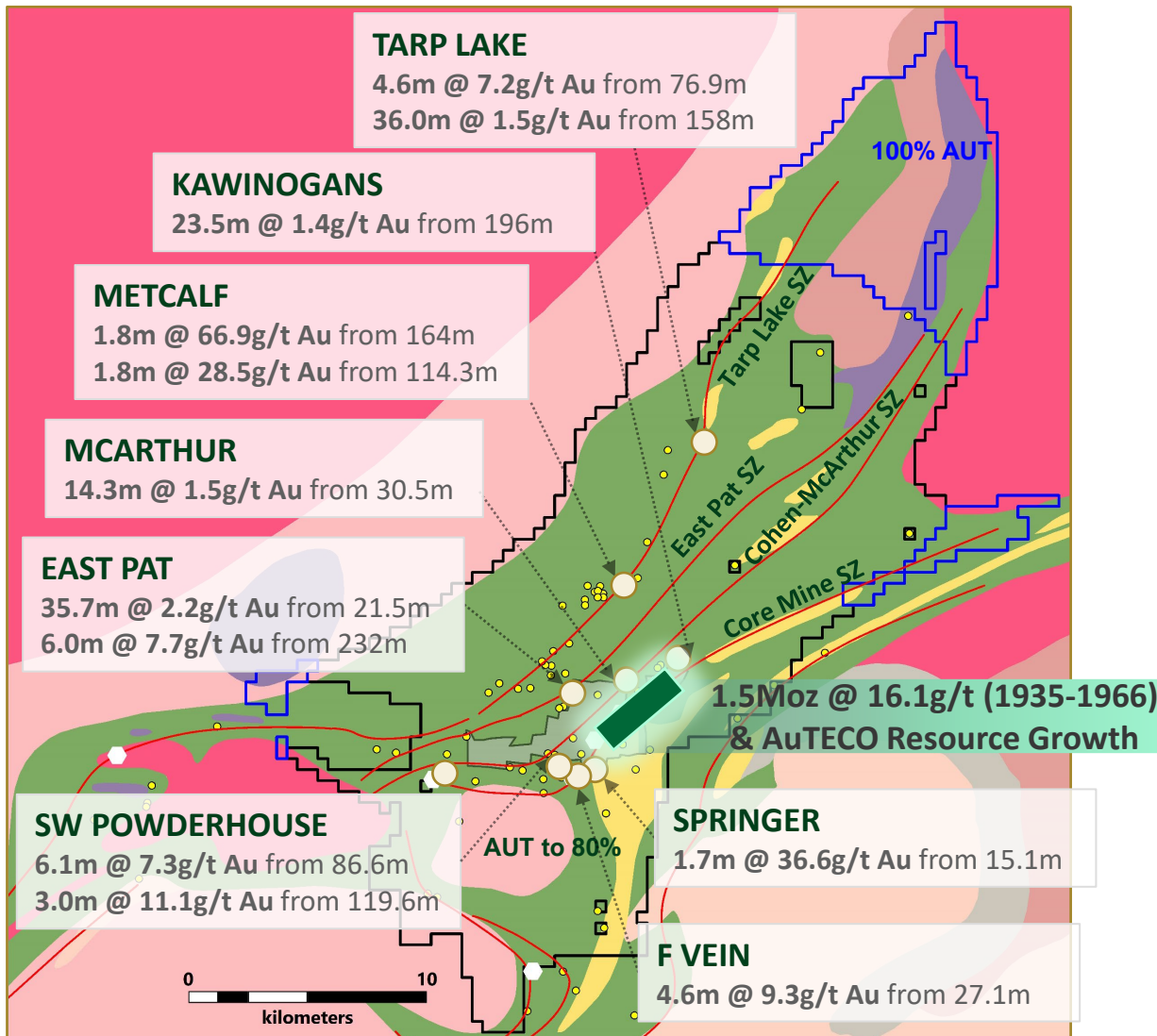
THE TYSON DISCOVERY

A new vein system that breaks the paradigm



EXCEPTIONAL GROWTH POTENTIAL BEYOND THE RESOURCE

Only a fraction of the camp-scale potential has been adequately tested



FORWARD WORK PLAN

Continuing to advance and grow Pickle Crow at all levels



Resource Growth

Extend and **increase** the Resource with emphasis on both **open pit** and **underground growth potential**

KEY OBJECTIVES (Jan-July 2022)

- Continue to grow the Inferred Resource
- Identify areas for conversion to Indicated
- Re-model the orebody at a 0.5g/t COG to assess bulk mining potential (OP & UG)



Exploration & Drilling

Continue the dual strategy of **Near Mine** Resource growth and **Regional Discovery** focused exploration

- Complete the 50,000m drill campaign
- Continue with BIF exploration to define size
- Continue vein exploration
- Test >5 regional targets outside of mine area



Pathway to Production

Complete works and long lead time items that **advance the project towards production** in anticipation of **success**

- Continue permitting to Advanced Exp
- Option study to access UG for infill drilling
- Conduct optimisations to assess pit potential

AuTECO – A COMPELLING INVESTMENT OPPORTUNITY

In Summary

AuTECO has built a strong platform for future growth, having advanced the historic Pickle Crow gold project to be one of the highest-grade emerging +2Moz Resources Globally

Work will continue to explore, define and grow the asset



One of the best mining addresses in the world

- Operating in a stable Tier 1 mining jurisdiction (Ontario, Canada)
- Located in a prolific mineral belt with >40Moz gold endowment (Superior Craton, Uchi Sub-province)



A long history of delivering high-grade gold

- Pickle Crow has a long history of high-grade gold mining, 1.5Moz @ 16.1g/t produced (1935-66)
- Independently estimated Resource of 2.23Moz at 7.8g/t Au
- Year-round access with quality Infrastructure and a large regional land holding



Exceptional exploration targets and strong drill results to date

- Limited modern systematic camp-scale exploration conducted by previous owners
- Promising near mine drill results to date, demonstrating extensions to known structures and discovery of mineralised vein arrays
- Historical data highlights regional potential, with km-scale mineralised trends - limited testing



Well funded to deliver with a quality experienced team

- Healthy cash balance to deliver growth
- 50km drill program in progress, 5 rigs on site
- Corporate & management team with experience, expertise and a track record of delivery
- Experienced, talented and established team on the ground in Canada



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APPENDICES

- 1) Pickle Crow Earn-In Structure
- 2) Regional Geology & Structural Setting
- 3) Pickle Crow Deposit Scale Geology



Pickle Crow Camp and Vein 5 Trench
October 2021

APPENDIX 1 – PICKLE CROW ACQUISITION & EARN-IN STRUCTURE

Earn up to 80% - First Mining Gold Inc.

EARN-IN DETAILS⁷

COMMENCEMENT (0%):

Auteco paid C\$50,000 to First Mining (TSX: FF) on signing binding term sheet. Upon signing the formal agreement:

- A further C\$50,000; and
- 25,000,000 Shares in the capital of Auteco (issued 23rd April 2020)



STAGE 1 EARN-IN (51%):

- Spending C\$5,000,000 over three years comprising:
- C\$750,000 within a 12-month period (Expenditure Payment 1);
- C\$4,250,000 within a 24-month period after Expenditure Payment 1 is satisfied; and
- Subject to shareholder approval, Auteco will issue First Mining 100,000,000 Shares.



STAGE 2 EARN-IN (UP TO 70%):

- Auteco to spend a further C\$5,000,000 in 2 years after satisfaction of Stage 1 Earn-in (Expenditure Payment 3); and
- Cash payment of C\$1,000,000 in 90 days of completing expenditure Payment 3 (Expenditure Payment 4).



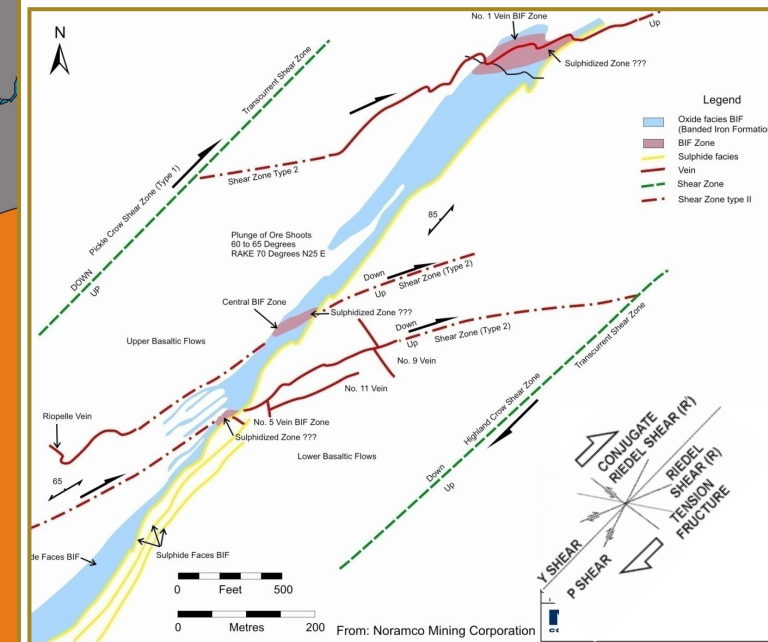
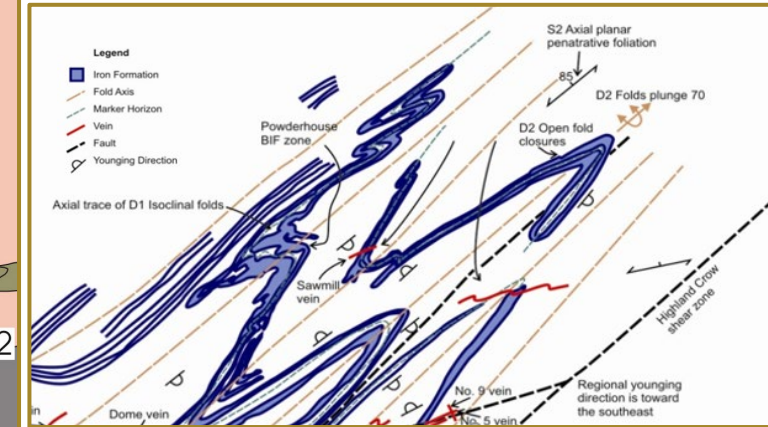
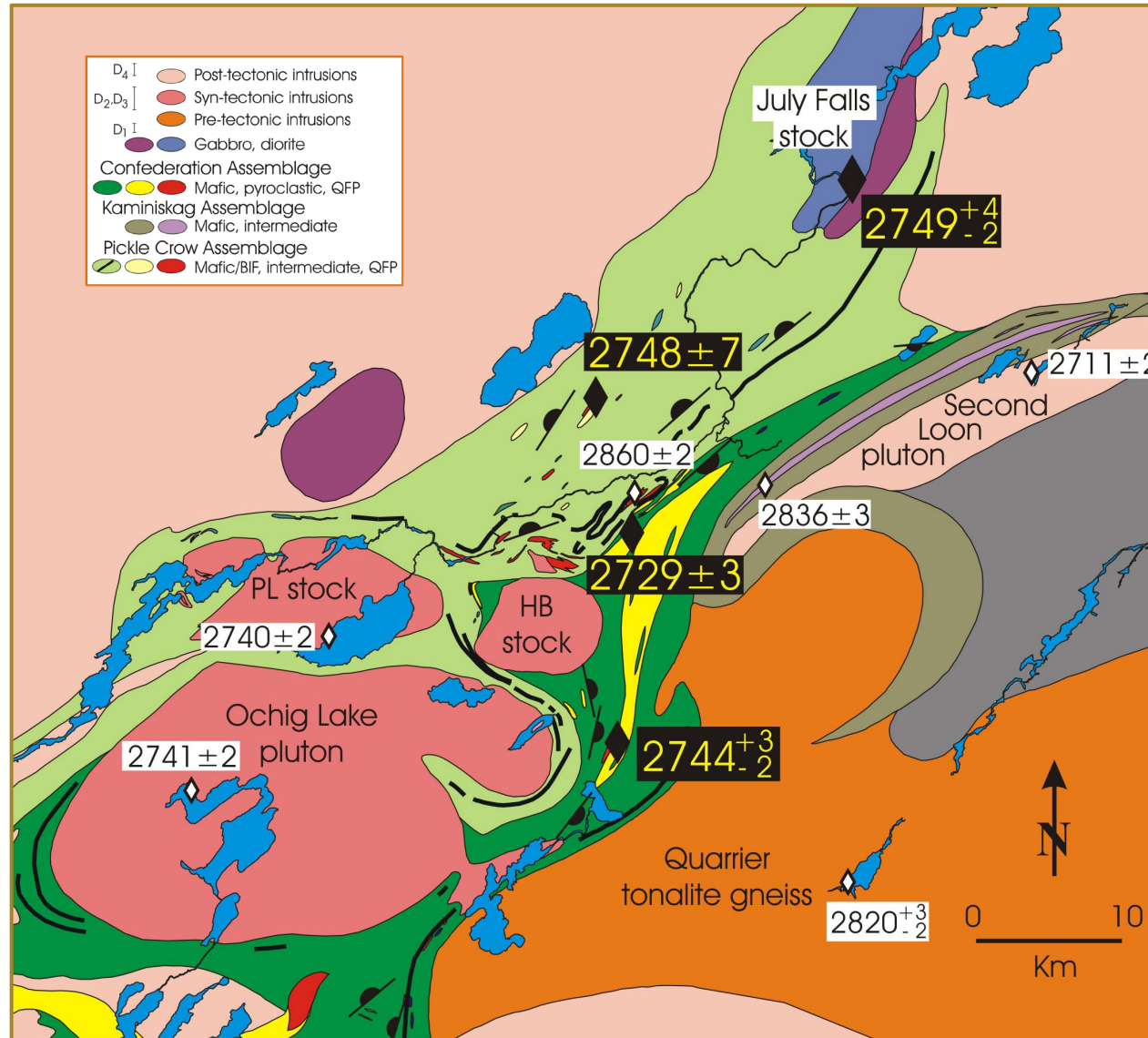
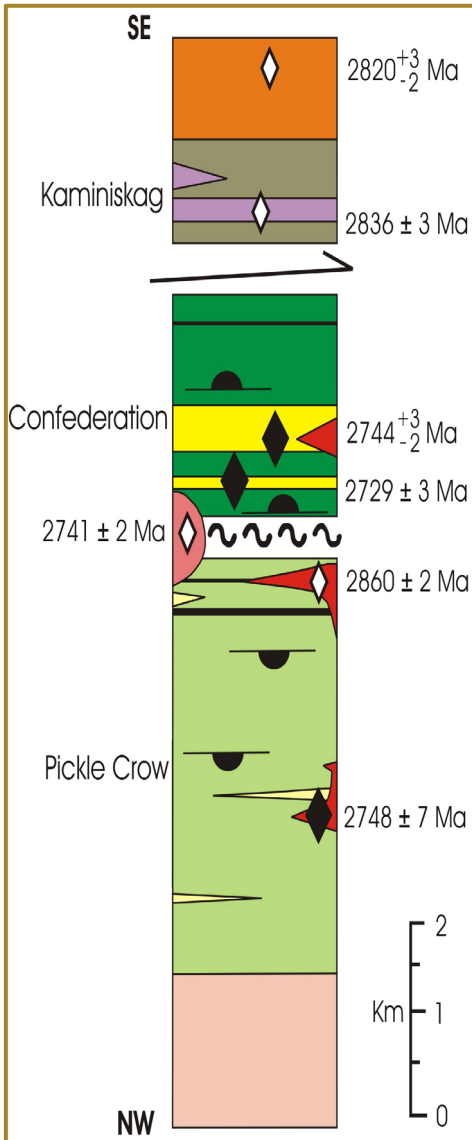
BUY IN (TO 80%):

- Auteco may buy a further 10% interest by paying C\$3,000,000 to First Mining; and
- Auteco will grant First Mining a 2% NSR granted after the Stage 2 Earn-In. Auteco has the right to purchase back 1% of the NSR for US\$2,500,000.



APPENDIX 2 - LOCAL GEOLOGY & STRUCTURAL ARCHITECTURE

Consistent styles with other deposits in the district



APPENDIX 3 - DEPOSIT SCALE GEOLOGY

Exploring the prolific Northern Pickle Lake greenstone belt

CONTINENT



North America

TECTONIC ELEMENT



Laurentia Superior Craton

PROVINCE



Uchi Sub-province

REGION



Pickle Lake Greenstone Belt

DEPOSIT



Pickle Crow & Central Patricia

A CLASSIC ARCHEAN OROGENIC GOLD SYSTEM



Deposit Classification

- Structurally controlled Archean greenstone hosted Mesothermal Orogenic Gold



Host Rocks

- Lower mafic sequence (predominantly basalt) with interflow sediments, including BIF
- Intermediate to Felsic volcanics and volcanoclastics intruded by qtz-feldspar porphyry
- Sediments, inc. Timiskaming-type conglomerates



Structure

- Multi-phased (D1-D4) isoclinally folded and faulted sequence with local disruptions adjacent to the plutons

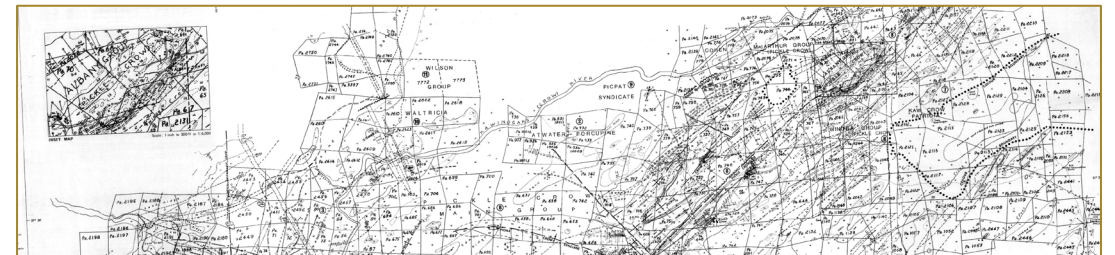


Metamorphism

- Regional greenschist facies, locally Amphibolite proximal to intrusions



HISTORIC SURFACE GEOLOGY MAP⁸



8. Source: Ferguson geology surface map of the Pickle Crow area