



1 September 2023

## COMPANY PRESENTATION

PolarX Limited (ASX:PXX) attaches a copy of its latest presentation titled “Advancing High-Grade Discoveries”.

Authorised for release by the Managing Director, Dr Jason Berton.

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# POLARX

LIMITED

## Advancing High-Grade Discoveries

September 2023



Alaska Range Project  
ALASKA, USA

Humboldt Range Project  
NEVADA



79  
**Au**  
Gold  
196.97

29  
**Cu**  
Copper  
63.546

ASX: PXX  
[www.polarx.com.au](http://www.polarx.com.au)

79  
Au  
Gold  
196.9729  
Cu  
Copper  
63.54647  
Ag  
Silver  
107.87

# USA focus

## Advancing Alaska Range Mine Development:

**Total JORC resource 11.2Mt; 269,375t Cu, 213,000oz Au and 3,131,000oz Ag.**

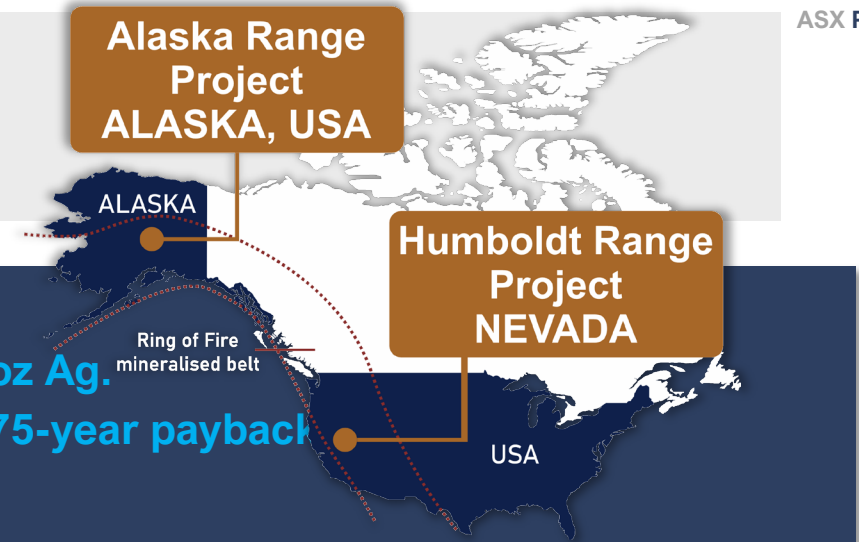
**Mine Scoping Study: A\$309m pre-tax NPV, A\$223m Capex, 38% IRR. 2.75-year payback**

### Stellar Property (100% PXX)

- 4.0Mt @ 1.1% Cu + 1.6g/t Au + 12.6g/t Ag JORC at Zackly Project, open in all directions
- Metallurgical test work at Zackly supports copper, gold and silver recovery
- Potential joint co-processing options being assessed in an ongoing mining scoping study

### Caribou Dome Property (PXX earning up to 90%)

- 7.2Mt @ 3.1% Cu & 6.5 g/t Ag JORC at Caribou Dome deposit, with high-grade surface zones up to 7% Cu
- Mineralization open in all directions, and numerous untested IP/geochemical targets.



## Nevada: Humboldt Range

- **Bonanza grades: 9.1m @ 124g/t Au + 49g/t Ag in drilling at Star Canyon**
- New 2.7km long mineralized gold target ready to drill
- Tier 1 fiscal and geological jurisdiction
- **Lies between the 5Moz Florida Canyon Gold Mine, and the 400Moz Rochester Silver mine (which also contains 3.5Moz gold), same geology**
- Outcropping quartz veins and historical mines show numerous assays over 10g/t gold, with **peak values of 3,384g/t gold 4,800g/t silver, 22.9% lead, 3.1% Zn**

# Alaska: USA's Mineral Frontier

## TIER 1 Geology:

One of the world's great mineral provinces:

- Over 40Moz Au mined to date
- More than 200Moz Au under development/feasibility study
- In the world's most productive copper belt, >50Mt Cu in feasibility/permitting stage
- World's highest grade giant zinc deposit

**Considerably under-explored** vs. other TIER 1 provinces:

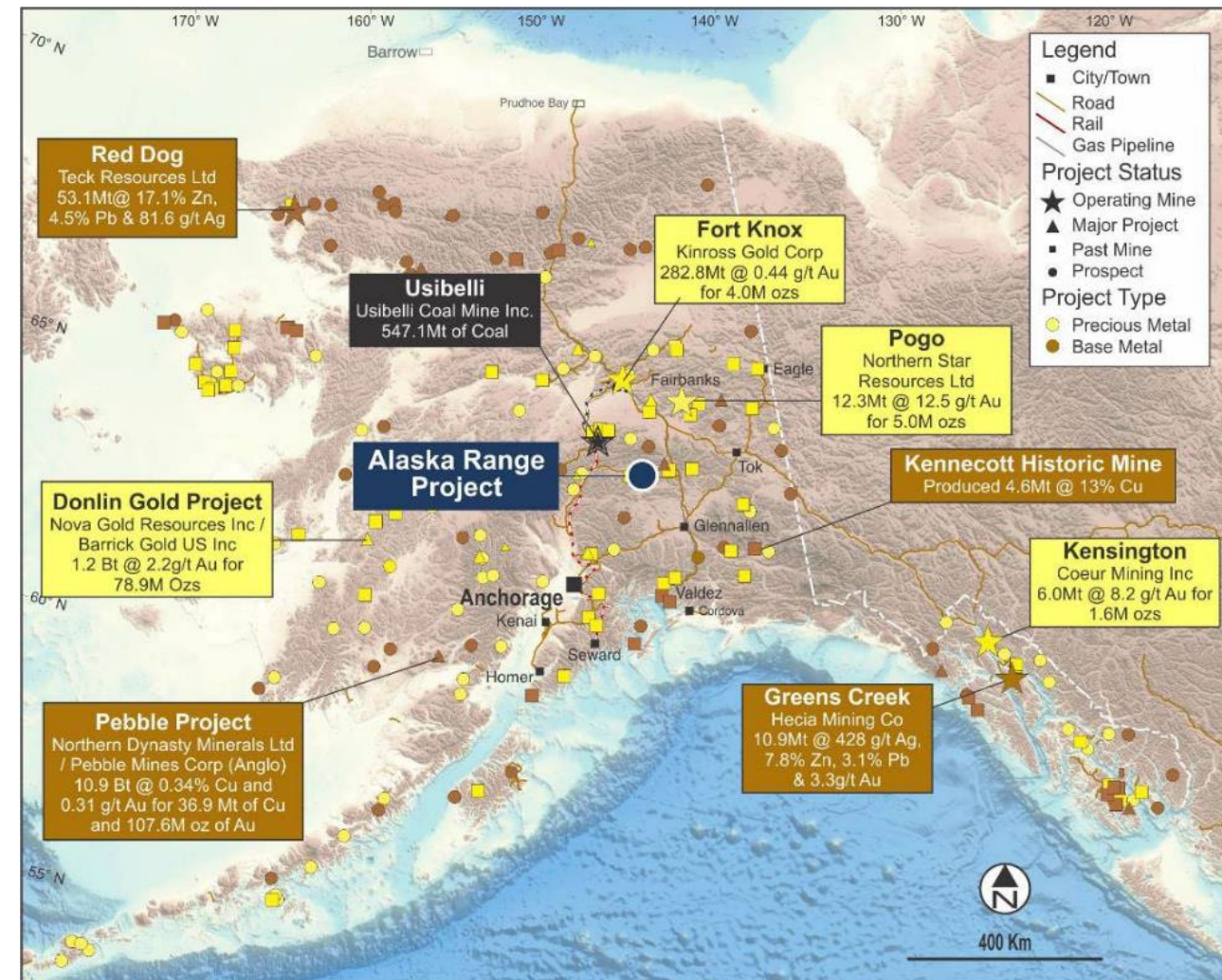
- Many new discoveries made in last decade
- New opportunities are near-surface, accessible

## Attractive mining investment destination:

- Transparent regulatory regime for exploration + mining
- Strong local support for job creation
- Home of major players

**Strong Australian presence** in major projects:

- Northern Star acquisition of Pogo (Au)
- South32 investment in Trilogy (Cu, Co)



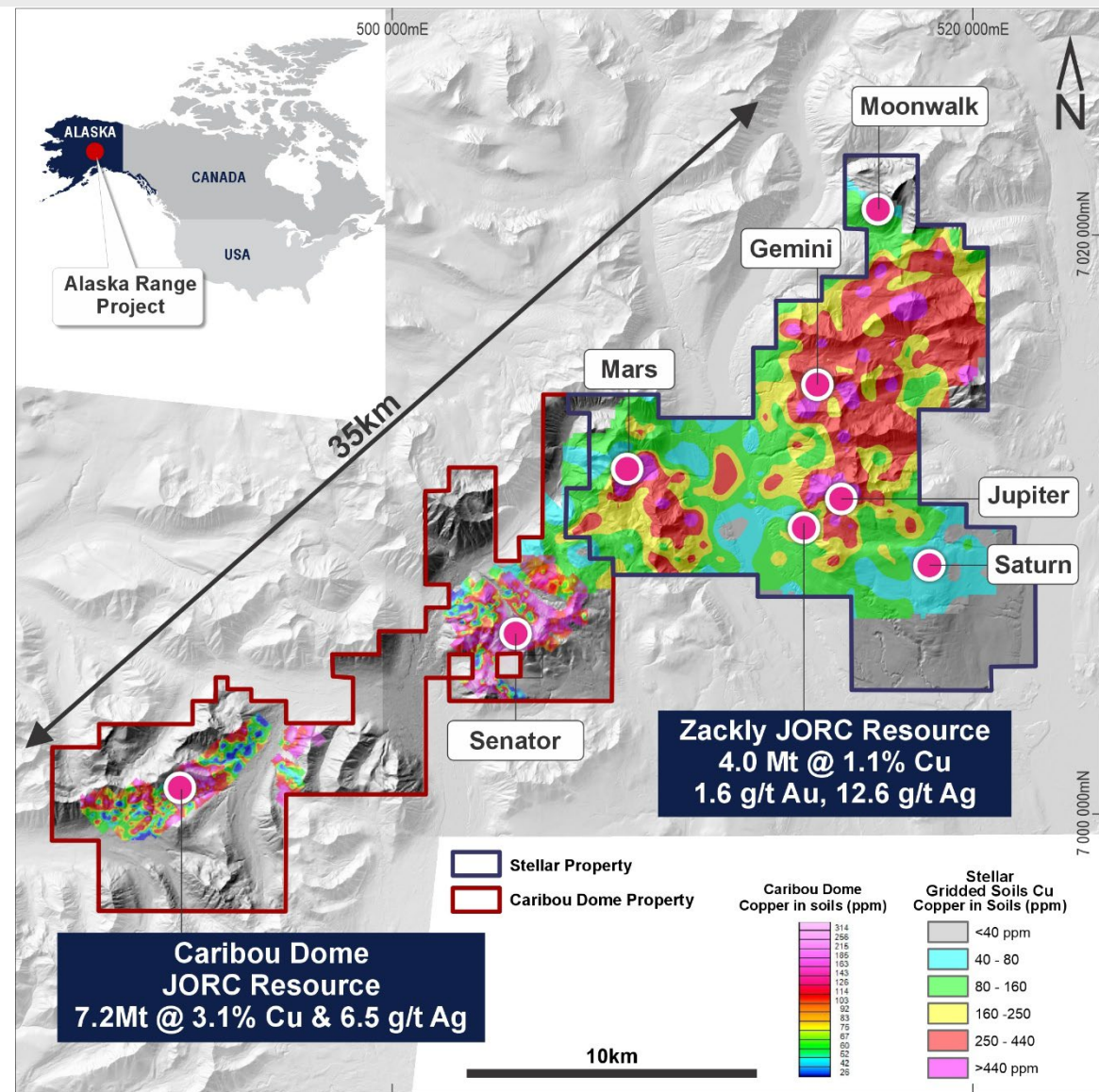
# Alaska Range: Overview

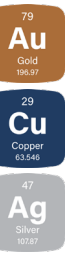
## Alaska State Mining Claims) covering ~261km<sup>2</sup> Caribou Dome

- Earn-In JV Agreement at Caribou Dome (PXX earning 80%) and Senator (PXX earning 90%)
- Massive sulphides remain open at depth and along strike
- JORC resource more than doubled to 7.2Mt @ 3.1% Cu and 1.6g/t Ag in 2023 from surface to only 300m depth
- Exceptional +ve Economic **Scoping Study**

## Stellar (PXX 100%)

- Zackly JORC 4.0Mt @ 1.1% Cu, 1.6g/t Au and 12.6g/t Ag) and open at depth along several km's of strike
- Prospectivity for larger porphyry copper-gold deposits confirmed by the presence of the Zackly skarn mineralisation:
  - **Porphyry copper-gold mineralisation discovered at Mars in 2019**, intersected 102m @ 0.22% Cu, 0.1g/t Au, hole ended in mineralisation
  - High-grade Cu and Au in rock-chip sampling and soils at Jupiter and Gemini
  - Intense alteration in drilling and associated geophysical anomalies at the blind Saturn porphyry prospect





# Strong management backed by strong investors

## Key Executives and Management:



**Mr. Mark Bojanjac (Executive Chairman)**

A Chartered Accountant with >25 years experience in the resource sector. Has led many successful mining developments, including the discovery and development of the East Kundana goldfield near Kalgoorlie, development of the Boroo gold mine in Mongolia and the Nzema gold mine in Ghana.



**Dr. Jason Berton (Managing Director)** is a Structural Geologist with >20 years experience, including working for Homestake, Barrick, BHP Billiton and SRK Consulting. He also has experience in private equity and is the former managing director of ASX-listed Estrella Resources.



**Dr. Frazer Tabcart (Director)** is an economic geologist with >30 years international experience. Spent 15 years with WMC Resources, prior to leading several ASX-listed exploration companies through discovery, resource delineation and feasibility studies in copper-gold, uranium and coal in North America and Africa.

31 Jul 2023 :

<b>MKT CAP:</b>	A\$16.5M
<b>CASH:</b>	~A2.0M
<b>DEBT:</b>	Nil

<b>MAJOR SHAREHOLDERS</b>	<b>%</b>
Ruffer Gold Fund (UK)	10.8
Northern Star Resources (Aus)	10.0
U.S. Global (US)	6.2
Lundin Mining Corporation (Can)	3.6
Management/Directors/MRG	2.3

<b>Top 20</b>	<b>= 54%</b>
<b>Top 40</b>	<b>= 65%</b>



# Caribou Dome & Zackly Combined: Compelling Scoping Study

Total JORC resource est. of 11.2Mt\* containing:

269,375t Copper,

213,000oz Gold, and

3,131,000oz Silver.

- **PolarX more than doubled the Caribou Dome Copper and Silver resource estimate and trebled the projected pre-tax NPV in 2023**
- Conventional sulphide flotation plant.
- Processing 750ktpa over 5 years at Caribou-Dome followed by 600ktpa over 4.5 years mining underground at Zackly.
- Modelled on a 100% project basis without finance leverage.
- Prelim metallurgical recoveries of 90% copper and 79% gold from flotation assumed at Zackly, and 78% copper at Caribou Dome
- **Returns most sensitive to copper price, metallurgical recovery, concentrate grades and operating costs**

<p><b>Revenue</b></p> <p>US\$1,375 M A\$2,115 M (\$0.65)</p>
<p><b>C1 Cash Cost</b></p> <p>US\$1.93 / lb A\$2.97 / lb</p> <p>Cash costs with Au and Ag credits</p>
<p><b>Average Annual Free Cash Flow</b></p> <p>US\$53 M A\$82 M</p> <p>Post construction</p>
<p><b>NPV<sub>7</sub> Pre-tax</b></p> <p>US\$201 M A\$309 M</p>
<p><b>Payback</b></p> <p>2.75 Years</p> <p>Post construction</p>

<p><b>Total EBITDA</b></p> <p>US\$573 M A\$882 M</p>
<p><b>Operating Margin</b></p> <p>42%</p> <p>EBITDA/Revenue</p>
<p><b>Initial Capital Required</b></p> <p>US\$145 M A\$223 M</p> <p>Including pre-strip &amp; royalty buyback</p>
<p><b>IRR Pre-tax</b></p> <p>38.4%</p>
<p><b>Mine Life</b></p> <p>9.5 Years</p>

\*Refer Cautionary Statements slide for further details on the Mineral Resource Estimates

(Note - all references to \$ are in US Dollars unless otherwise stated)

# Caribou Dome & Zackly Combined: Sensitivity = Next Steps

Sensitivity Analysis indicates:

## Metallurgy

Increased Recovery and Concentrate grades are the biggest uplift.

Lifting copper recovery from 78% to 85% and floating a 20% concentrate at Caribou Dome could increase projected pre-tax NPV by 87%.

Sampling for more metallurgical test-work is underway.

## Resource Extension

- **Caribou Dome** has drill intercepts 150m below its existing surface to 300m resource.
- If drilling extended it to 450m and 2Mt was mined underground it could yield a potential pre-tax NPV increase of \$50M.
- **Zackly** could deliver a potential \$22M increase on the same basis by drilling deeper under known geology to add another year's production.

Assuming constant grades	\$US M	A\$ M @0.65
Base Case pre-tax NPV	201	
<b>Caribou Dome</b> Increase Cu recovery to 85% and concentrate grade to 20% on existing resource	176	
Extra 2Mt underground by drilling 150m deeper	50	
<b>Zackly</b> Another year's production	25	
<b>TARGET</b>	<b>452</b>	<b>695</b>

*Over 9.5 years, Measured and Indicated Mineral Resources account for 83% of the total tonnes mined and Inferred Mineral Resources comprise only 17%. In the first 3 years approx. 99% of the material to be mined is Measured and Indicated. There is a low level of geological confidence associated with Inferred Mineral Resources and no certainty that further exploration work will result in the determination of Indicated Mineral Resources nor that the production target itself will be realised.*

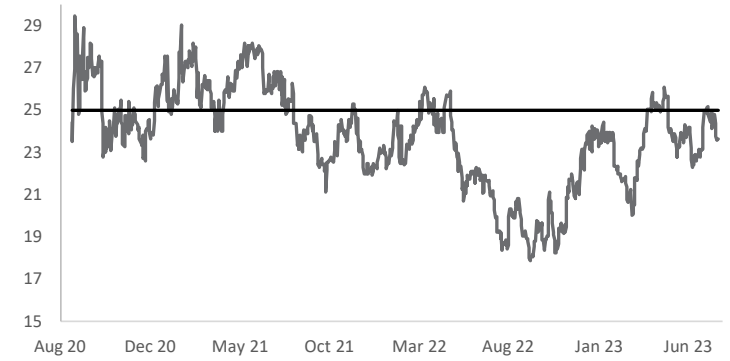


79  
**Au**  
Gold  
196.97

29  
**Cu**  
Copper  
63.546

47  
**Ag**  
Silver  
107.87

# Key Metrics



79  
**Au**  
Gold  
196.97

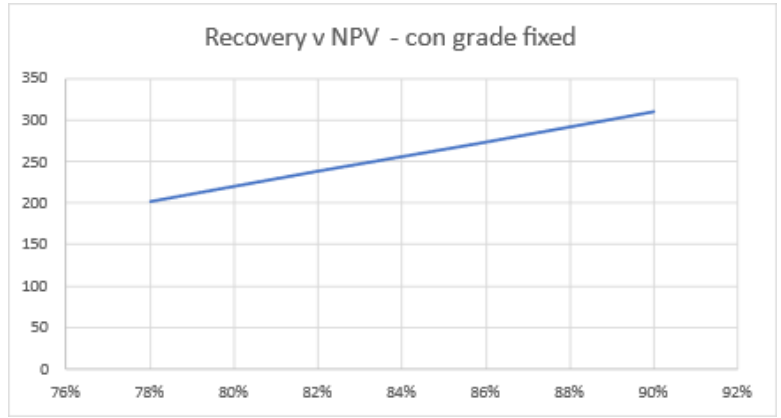
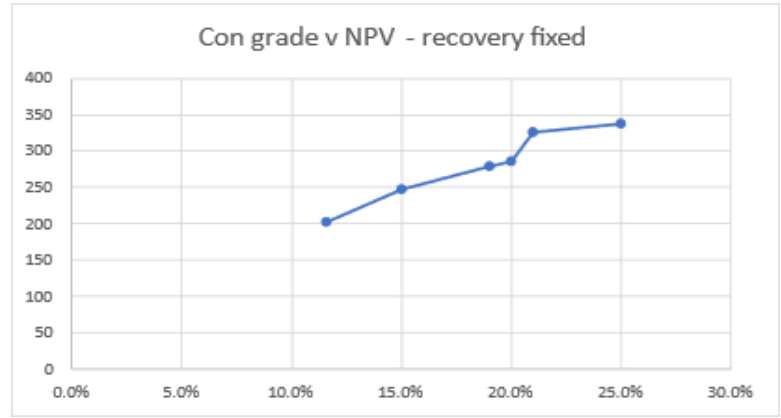
**US\$1900/oz**  
(2022 study \$1800)

29  
**Cu**  
Copper  
63.546

**US\$8500/t**  
(2022 study \$9000)

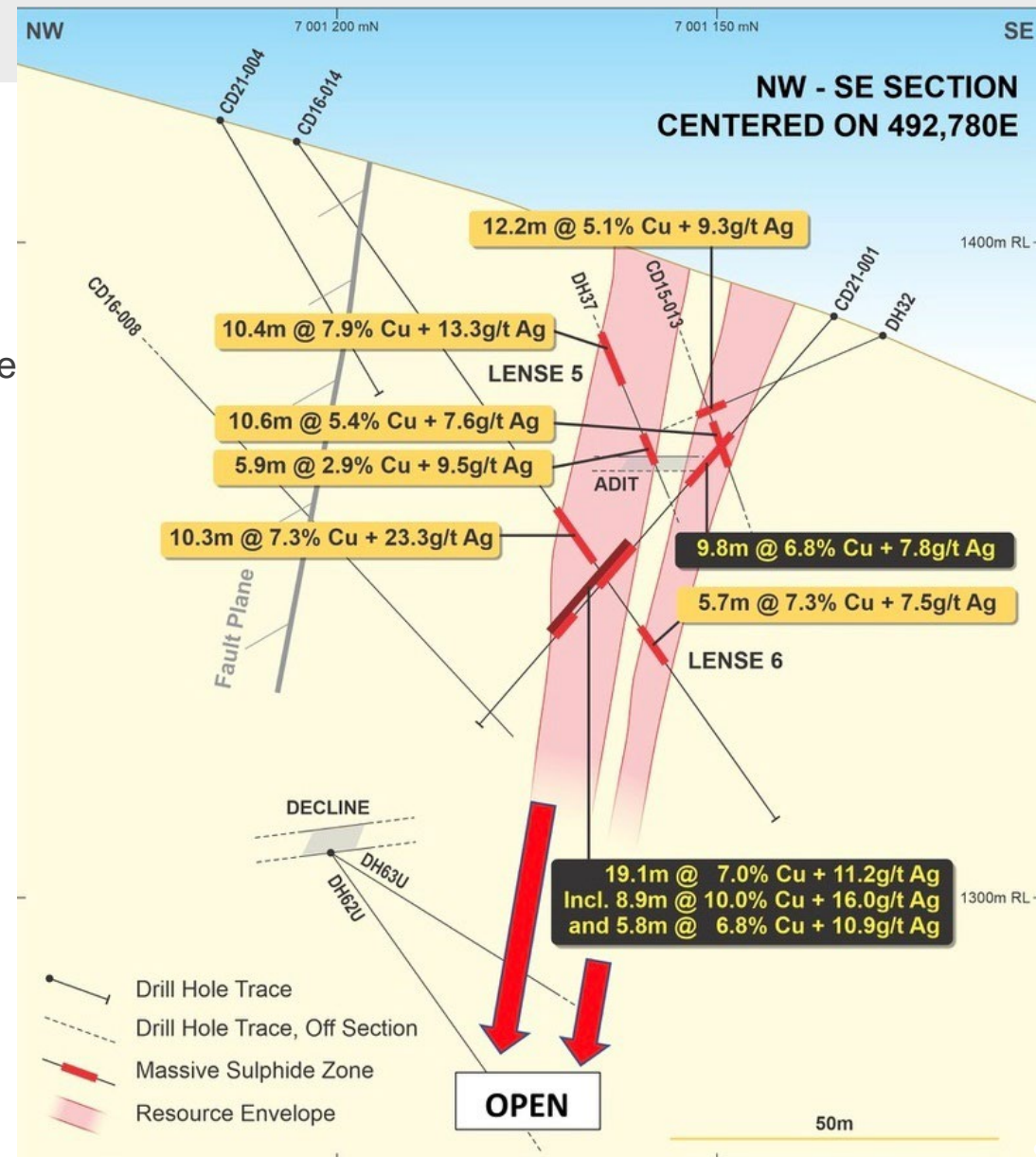
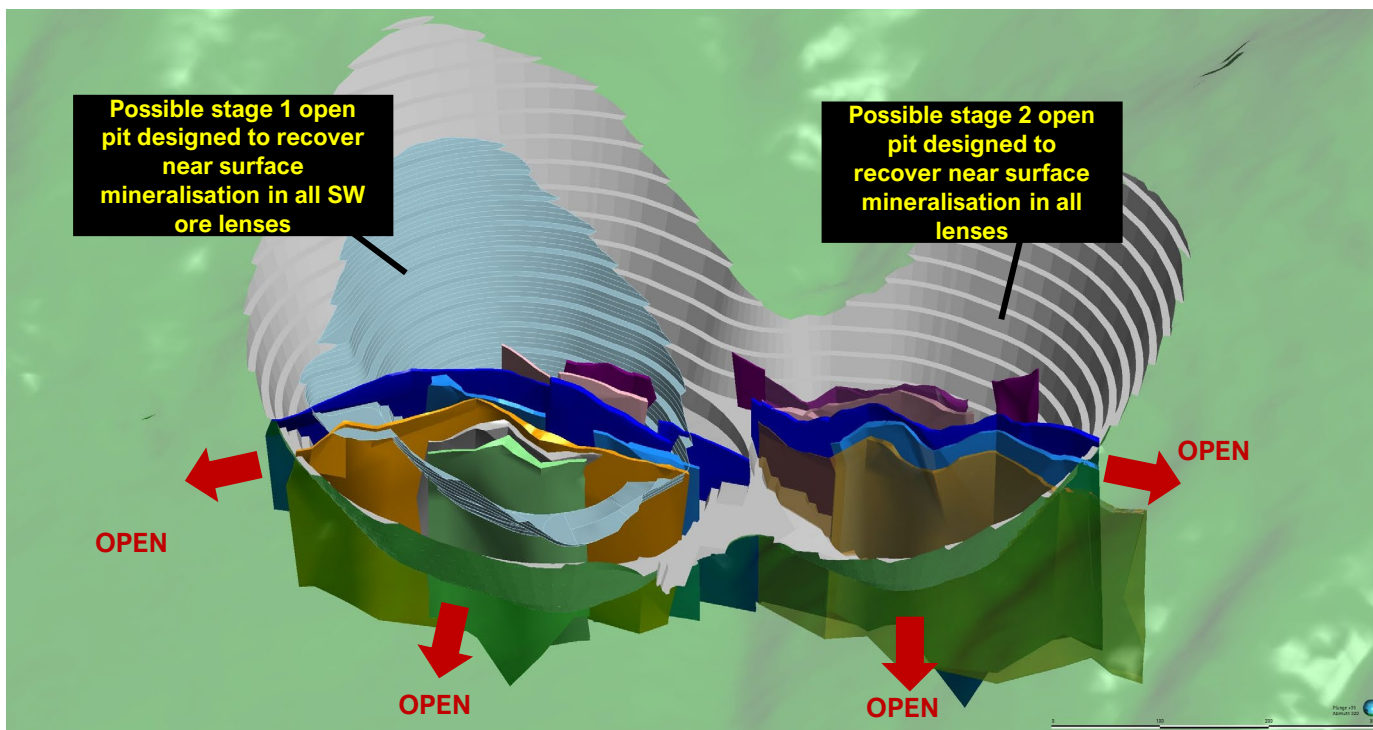
47  
**Ag**  
Silver  
107.87

**US\$25/oz**  
(2022 study \$25)



# Caribou Dome: Very high-grade surface copper

- **4-5% Copper from surface!**
- Drill intersections over >800m strike-length
- Open in all directions
- Many un-tested 3D-IP and soil anomalies within 1km of mineral resource
- 80% earn-in completed by June 2024 after paying US\$1.26M cash



79

Au

Gold  
196.97

29

Cu

Copper  
63.546

47

Ag

Silver  
107.87

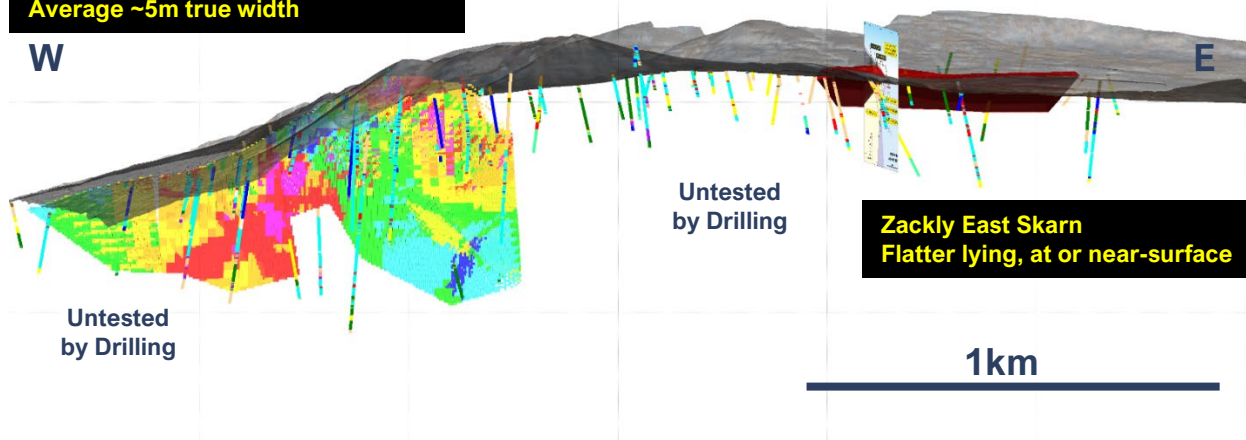
## Zackly Deposit: High-grade Copper/Gold

- 5km long skarn system with high-grade gold, copper and silver from surface and open to at least ~400m depth
- Zackly Main Skarn JORC Resource hosts **4.0Mt averaging 1.6g/t Au + 1.1% Cu + 12.6g/t Ag at its western end**
- Subvertical Cu-Au-Ag mineralization could be mined by conventional underground mining methods
- Zackly East mineralisation is generally thicker and may be more suitable for open pit mining
- Substantial exploration upside – **over 2.5km of untested strike-length on known, mineralised structures**

**Further upside on identification of the source porphyry system feeding Zackly**

### Long-section View Looking toward the North

**Zackly Main Skarn**  
4Mt @ 1.1% Cu, 1.6g/t Au, 12.6g/t Ag  
Sub-vertical 1km strike-length  
Average ~5m true width



### Oblique view along the Zackly system, View looking towards the west, Mars porphyry deposit on the far horizon

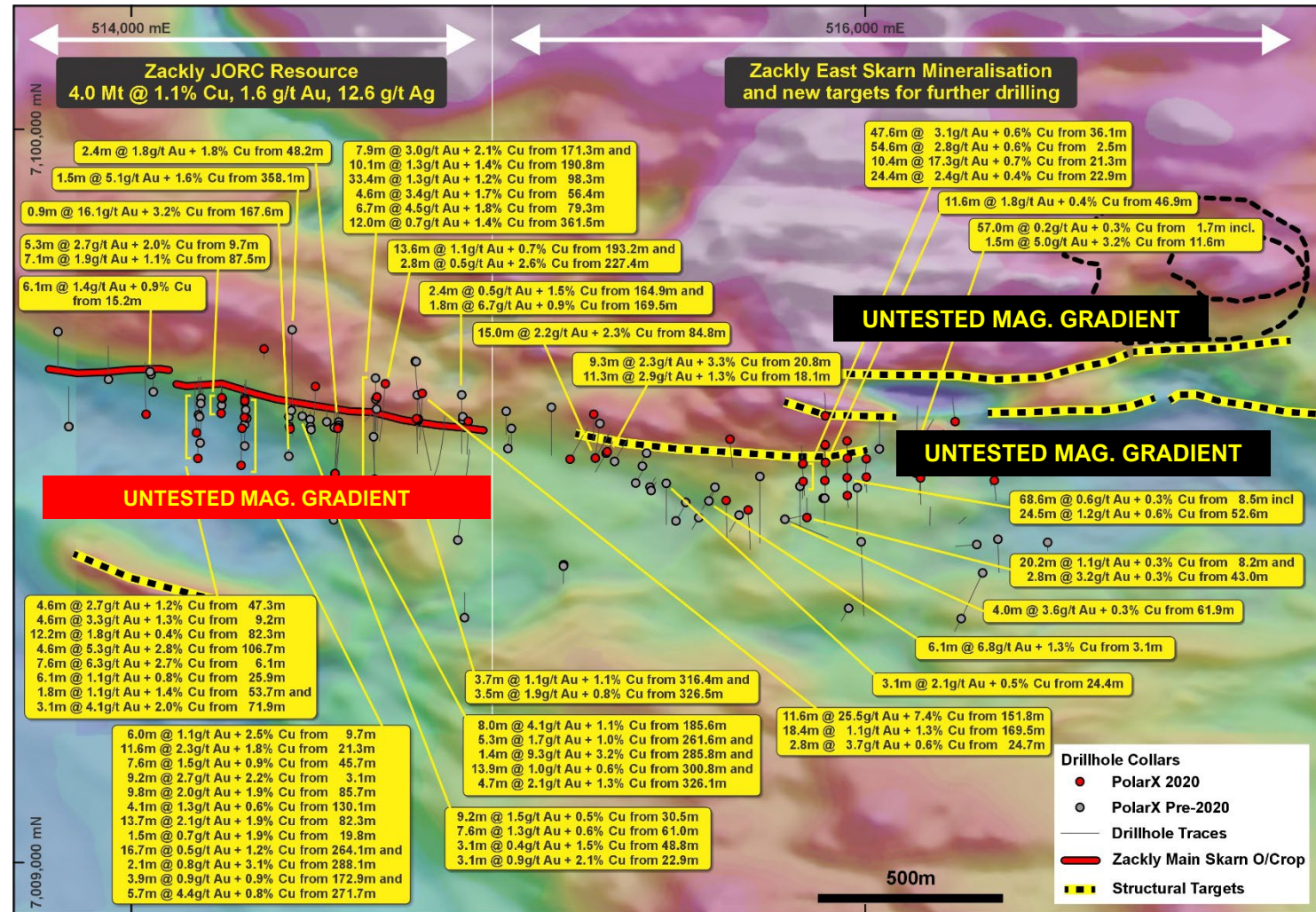




# Stellar Property, Zackly Deposit: 5km of copper/gold strike to be tested

- Zackly Main JORC resource is all within just 1km of strike and occurs along a structure with a strong magnetic gradient
- Mineralisation now confirmed along strike over >800m East extending mineralised strike-length to 2.5km (Zackly Main + Zackly East)
- A further 2.5km of untested strong magnetic gradient to the north and east of current drilling

Possible porphyry Cu-Au targets to north and east of current drilling





# Stellar Property, Zackly Deposit: Porphyry Copper/Gold potential

Broad spaced (500m) soil sampling shows 2 highly significant copper anomalies, both >250ppm, ~11km x 6km in size

## MARS (Porphyry, skarn)

- 2km x 1.5km soil anomaly with visible copper oxides at surface, up to **3,510ppm Cu and 1.1g/t Au** in soils
- Rock-chip samples up to **6.9g/t Au and 7.4% Cu**
- Co-incident ground geophysics (IP) anomaly
- Discovery hole 19MAR001: **102m @ 0.22% Cu + 0.1g/t Au**

## JUPITER (Porphyry)

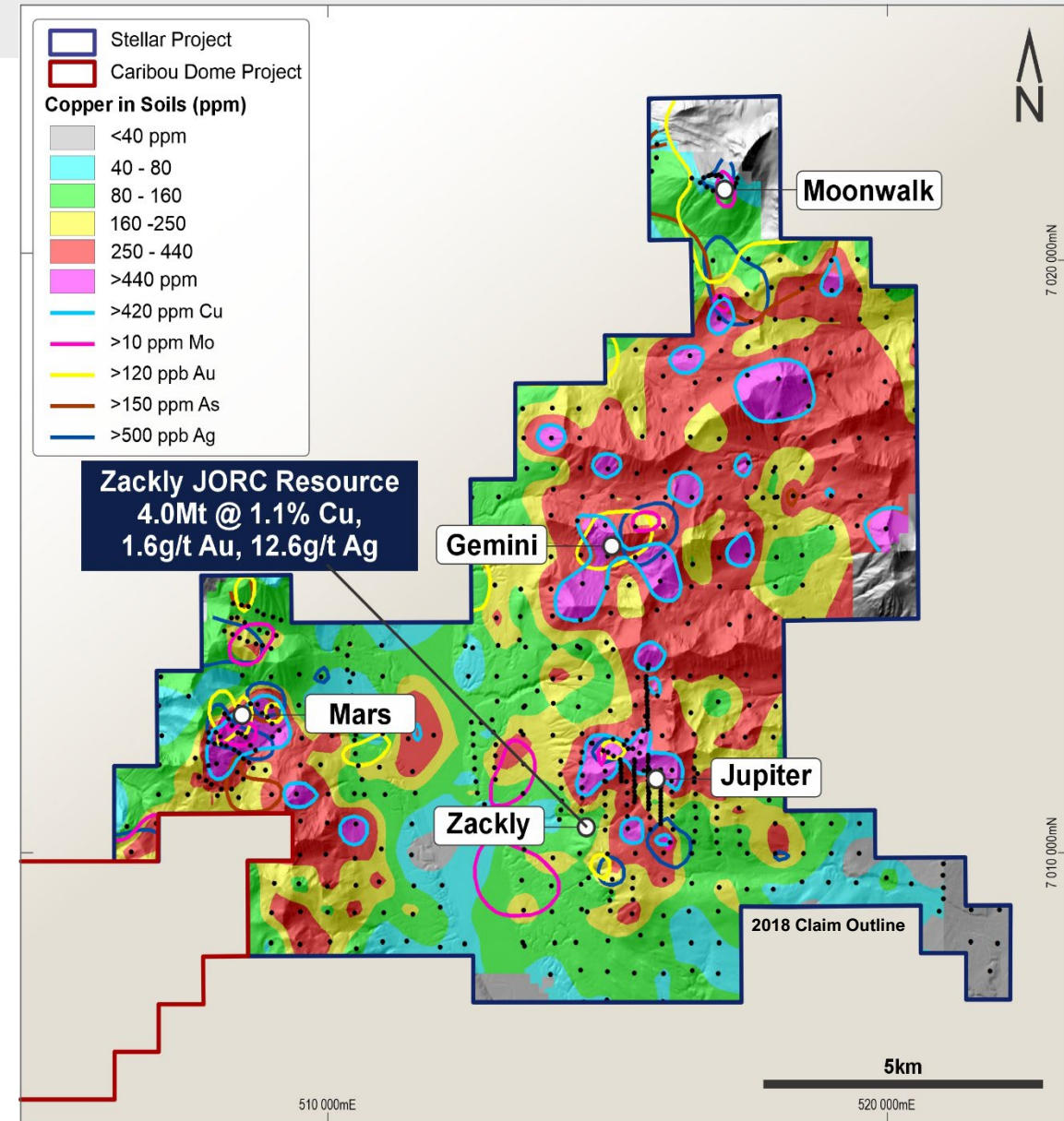
- 2km x 1km soil anomaly at Jupiter with up to **3,850ppm Cu, 0.78 g/t Au**, no drilling, and very limited IP

## GEMINI (Porphyry)

- 2km x 2km soil anomaly with up to **1,130ppm Cu, 0.25g/t Au**, no IP or drilling, high-grade copper in sporadic rock-chips

## MOONWALK (Tintina-style Au)

- 1km x 1km Au, As, W anomaly in soils, Tintina style Au mineralisation in outcrop - multiple samples >1g/t Au in rock-chips



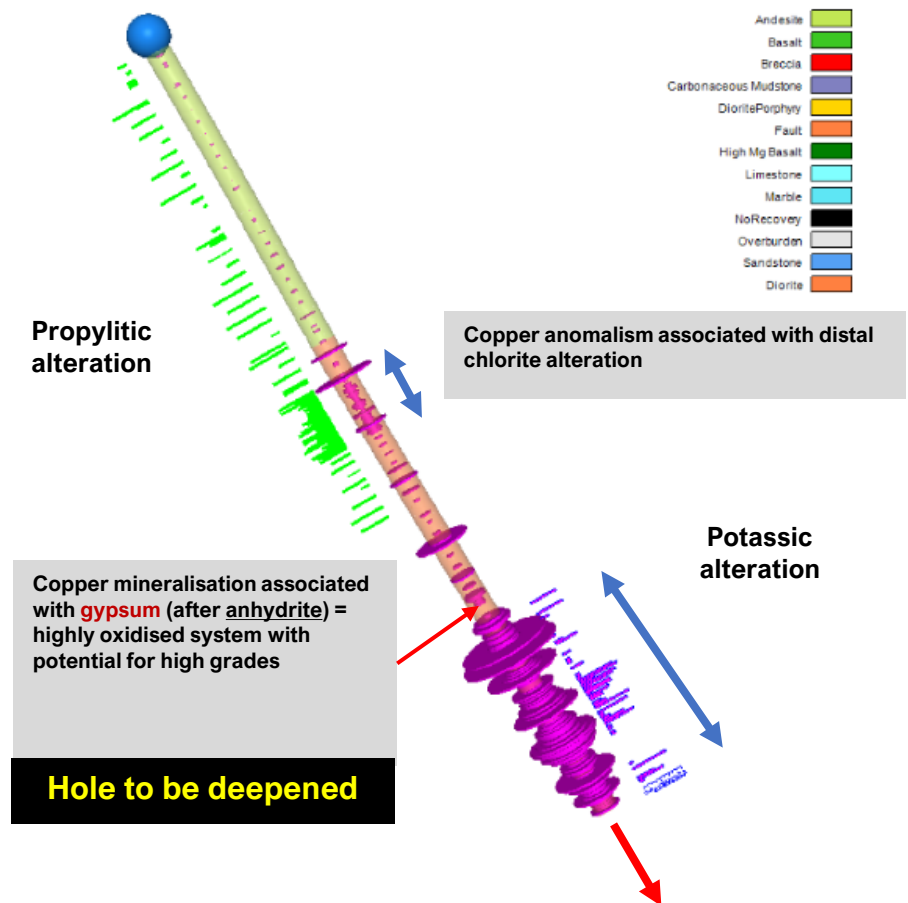
# Stellar Property: Mars porphyry Cu-Au discovery

- Porphyry Cu-Au discovered in **first (and only) drill hole** 9MAR001: **102m @ 0.22% Cu + 0.1g/t Au** below a 1200m x 800m Cu-Au-As-Mo soil anomaly
- Associated with porphyry B-Veins in potassic alteration (anhydrite and biotite), **hole ended in mineralisation, but not yet in best part of system**
- Potentially higher-grade core of the intrusion not yet drilled
- Seeking a Major Miner JV earn-in for porphyry exploration / development

High-grade copper mineralisation at surface at the Mars porphyry prospect

3-D drill hole plot showing increasing copper grade (magenta discs) once into the zone of potassic alteration

19MAR001



79

Au

Gold  
196.97

29

Cu

Copper  
63.546

47

Ag

Silver  
107.87

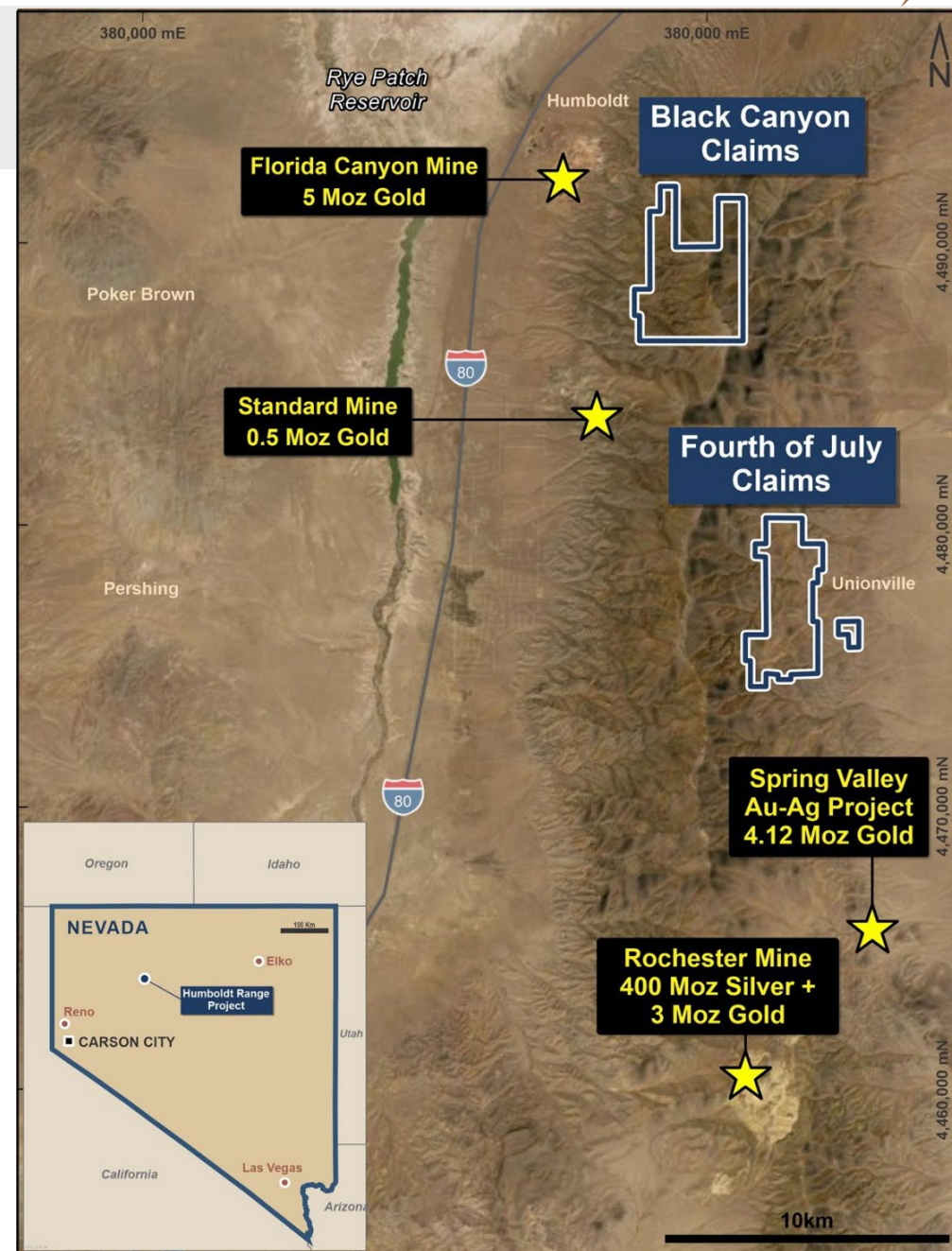
# Humboldt Range: High-grade Gold / Silver

## Project Highlights

- +75% of USA's annual gold production
- Close to active multi million-ounce gold and silver mines
- 2 claim blocks: Black Canyon and Fourth of July
- Very high grades of Au and Ag in drilling, outcrop, historic workings (pre-1927)

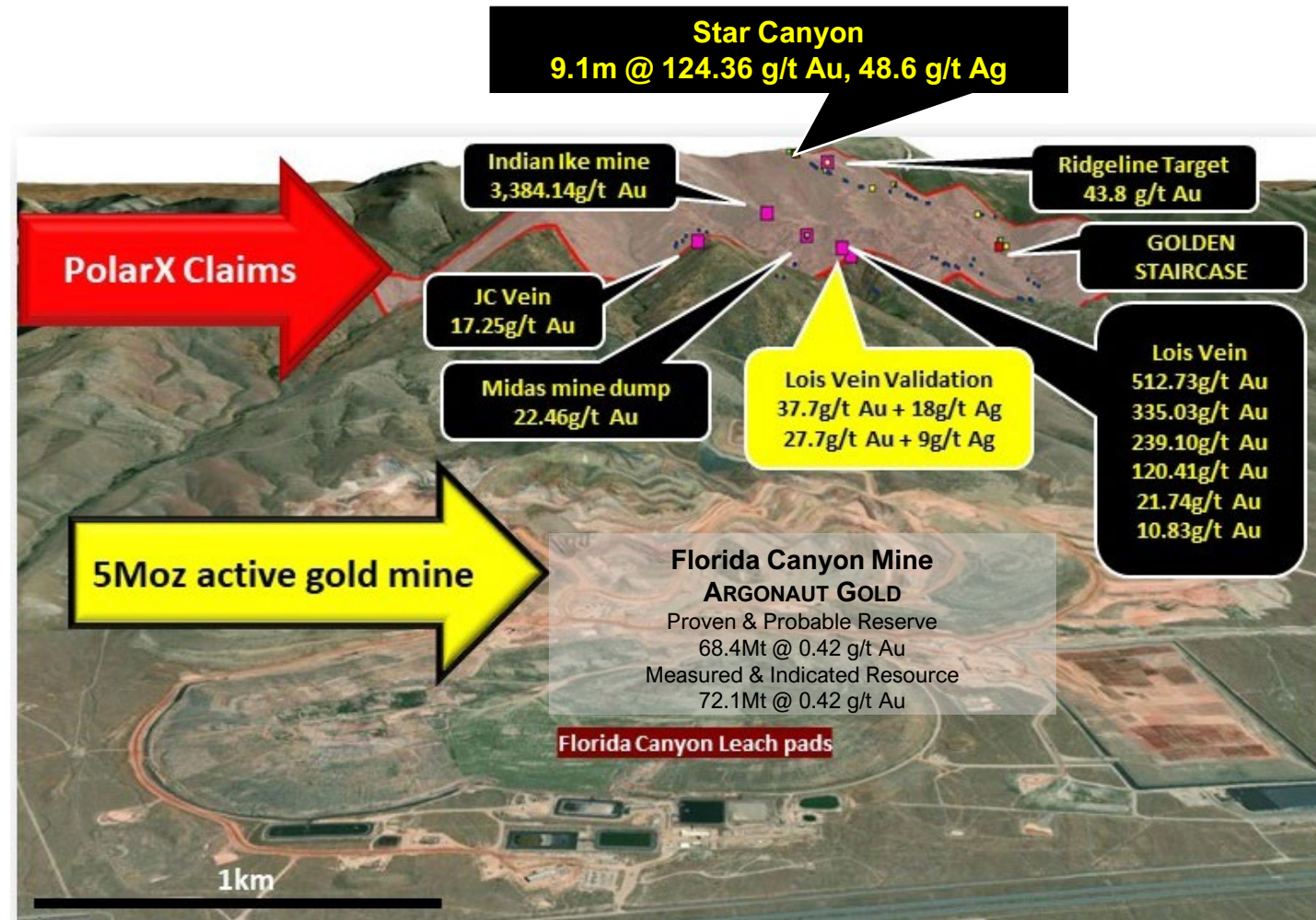
## Exploration Program

- Very successful maiden RC drilling program at Star Canyon: **9.1m @ 124g/t Au + 49g/t Ag**
- >2,200 soil samples and >150 rock-chip samples collected since April 2021
- similar geology to nearby mines
- Ultra-high-resolution drone images for geological mapping and drill planning
- Rock-chip and channel sampling confirms mine-grade material at surface
- Recent IP program to highlight extensive regional scale anomalies
- Multiple drill targets



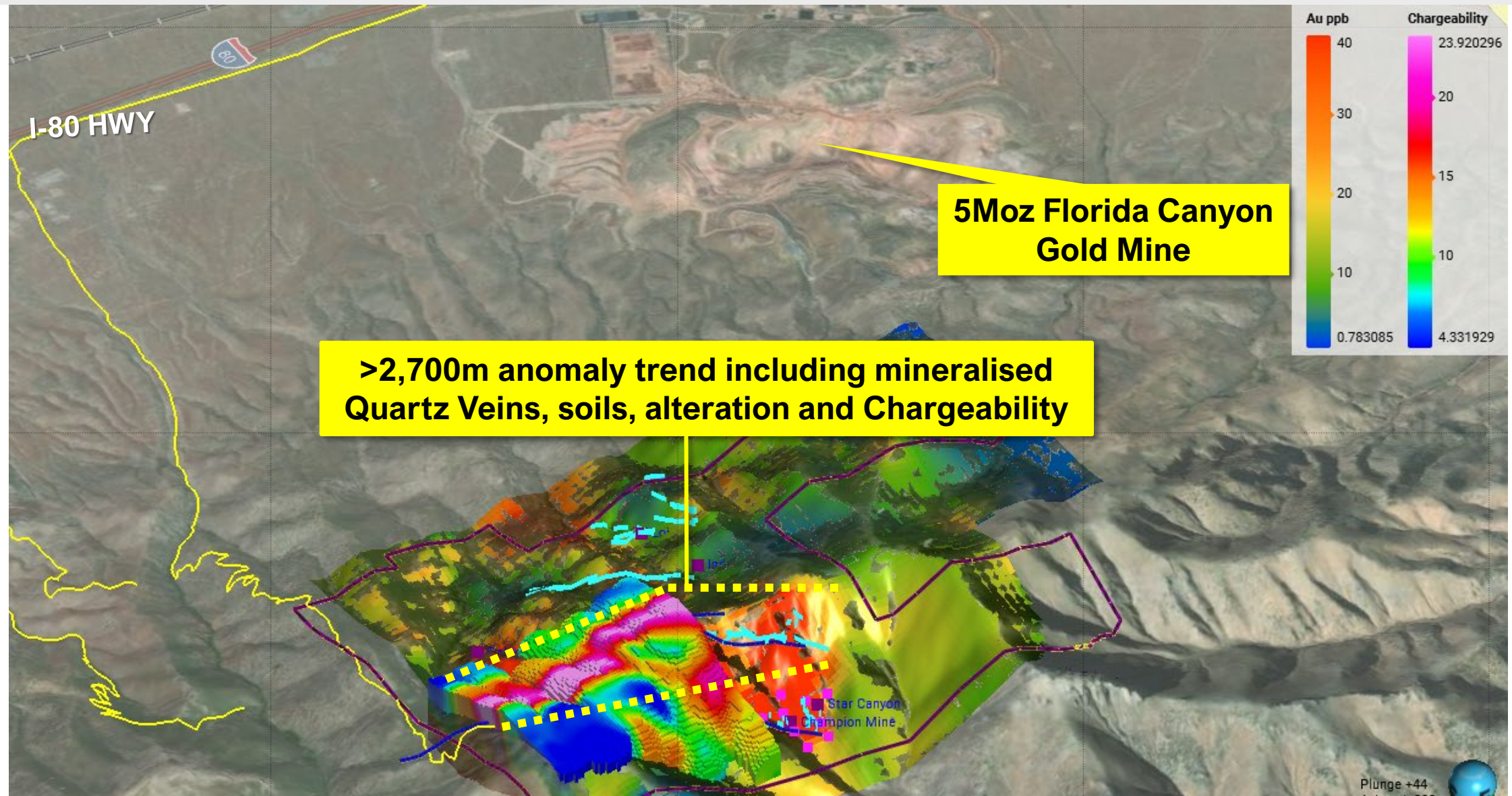
# Humboldt Range: Black Canyon Claims

- Owned by same family since 1950
- Limited exploration since mining ceased in 1927
- High-grade assays from previous rock-chip sampling of outcropping veins and grab sampling from the dumps of old mine workings with peak values up to:
  - 3,384g/t gold,
  - 2,837g/t silver,
  - 22.9% lead and 3.1% zinc
- Maiden RC drill program at Star Canyon:  
**9.1m @ 124.36 g/t Au, 48.6 g/t Ag from 27m**
- Gold occurs in swarms of 5cm to 1.5m wide epithermal quartz veins and silicified alteration haloes
- Structural corridors between 30m and 275m wide contain numerous (in some cases hundreds of) mineralised quartz veins
- Potential bulk mining targets being drilled

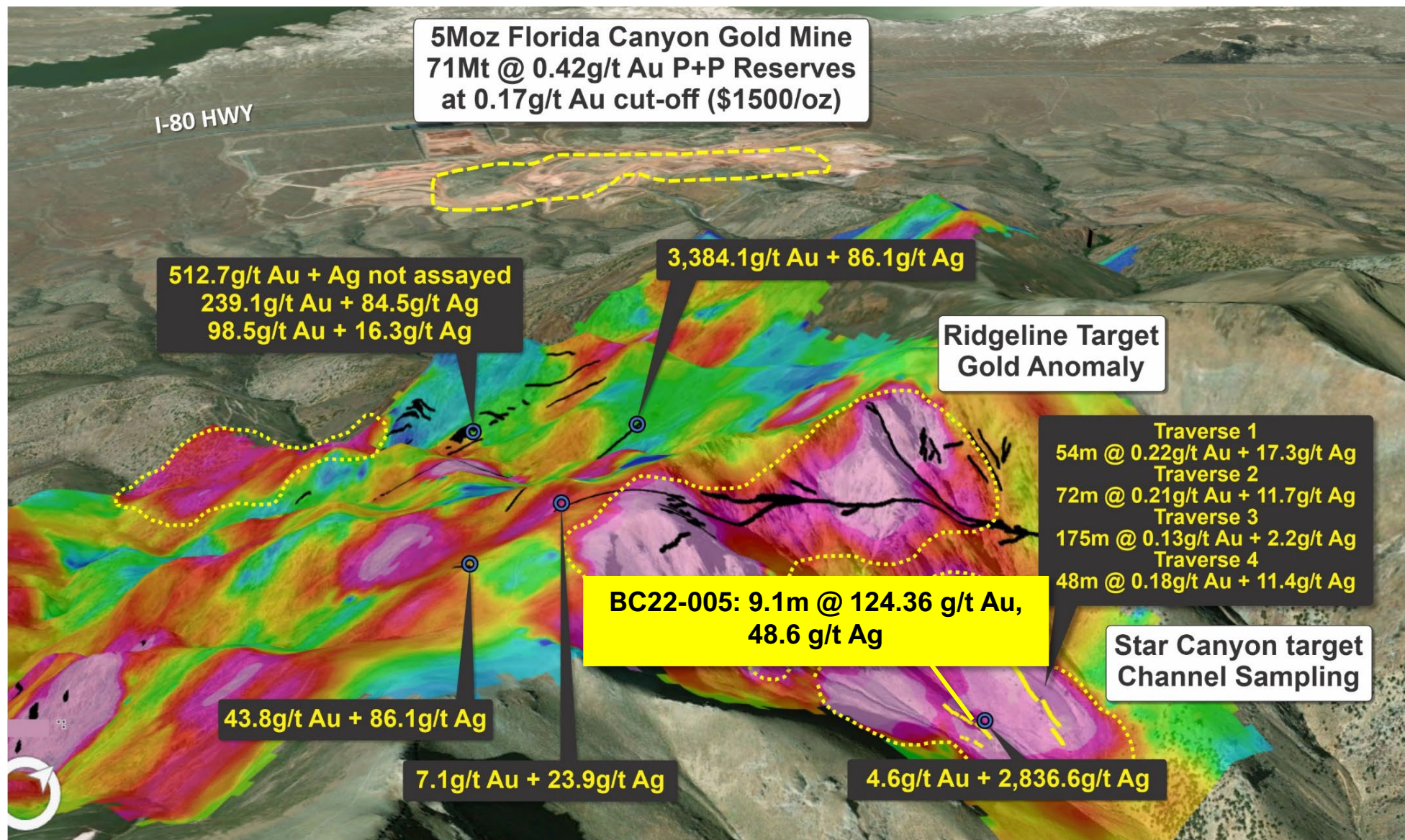




# Black Canyon: Scale and Proximity to a 5Moz operating gold mine



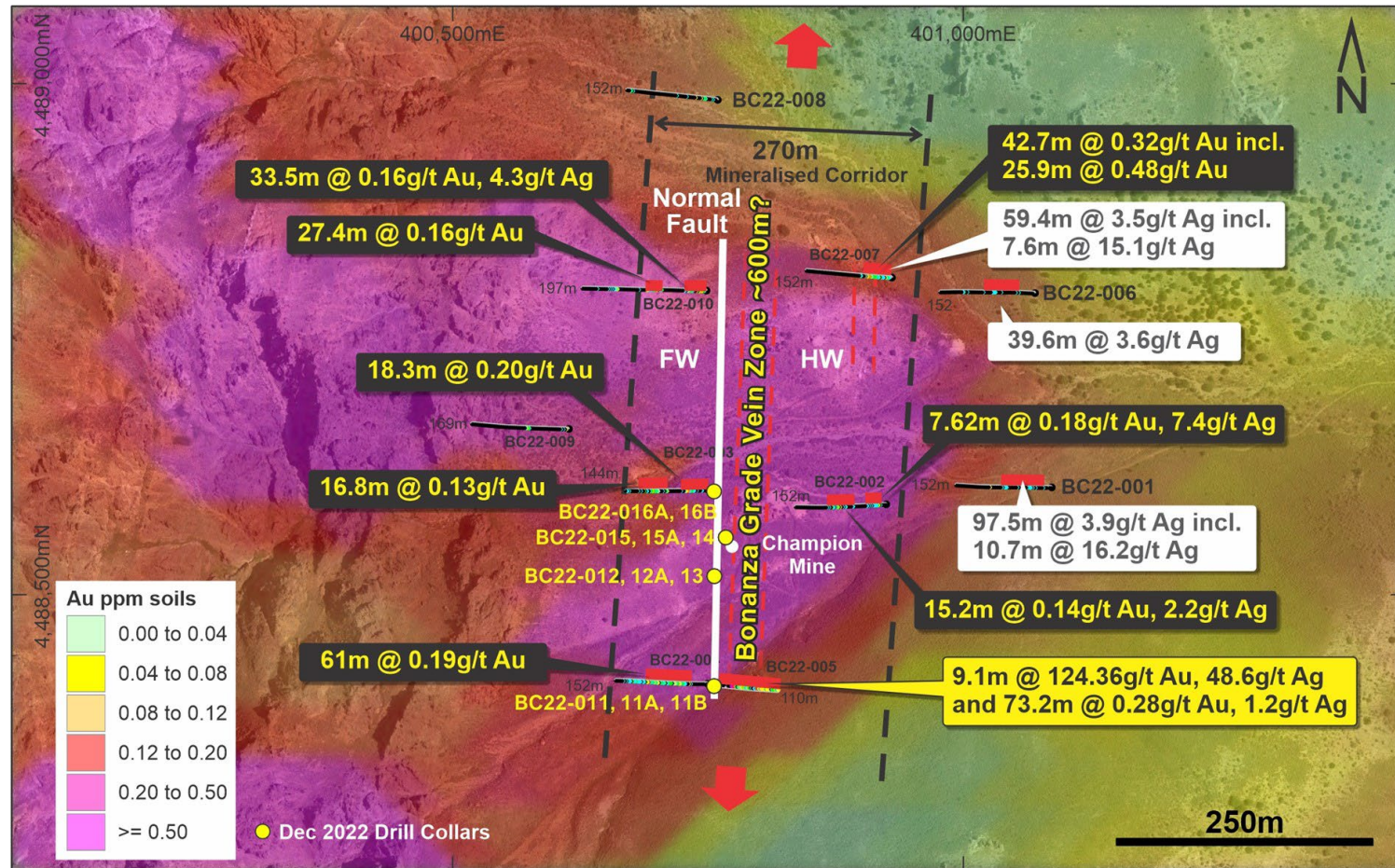
# Star Canyon: Gold + Silver .... Everywhere



# Bonanza veins AND Rochester Rhyolite

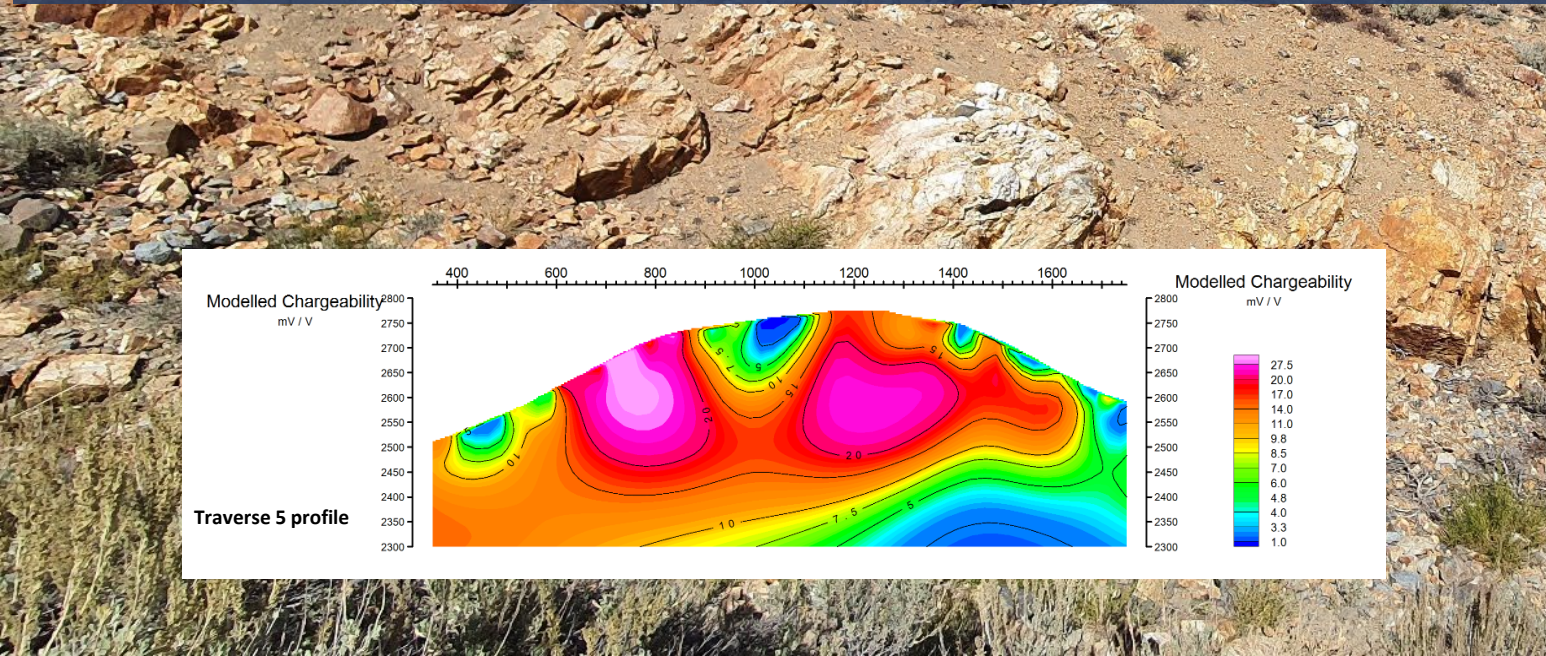
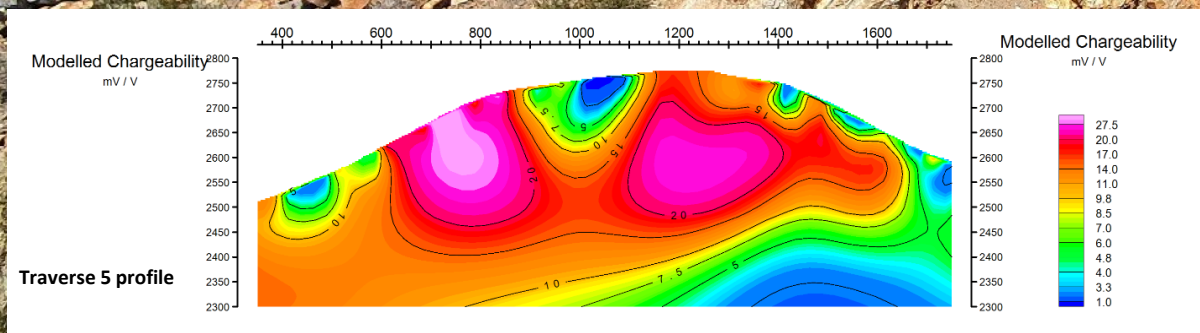
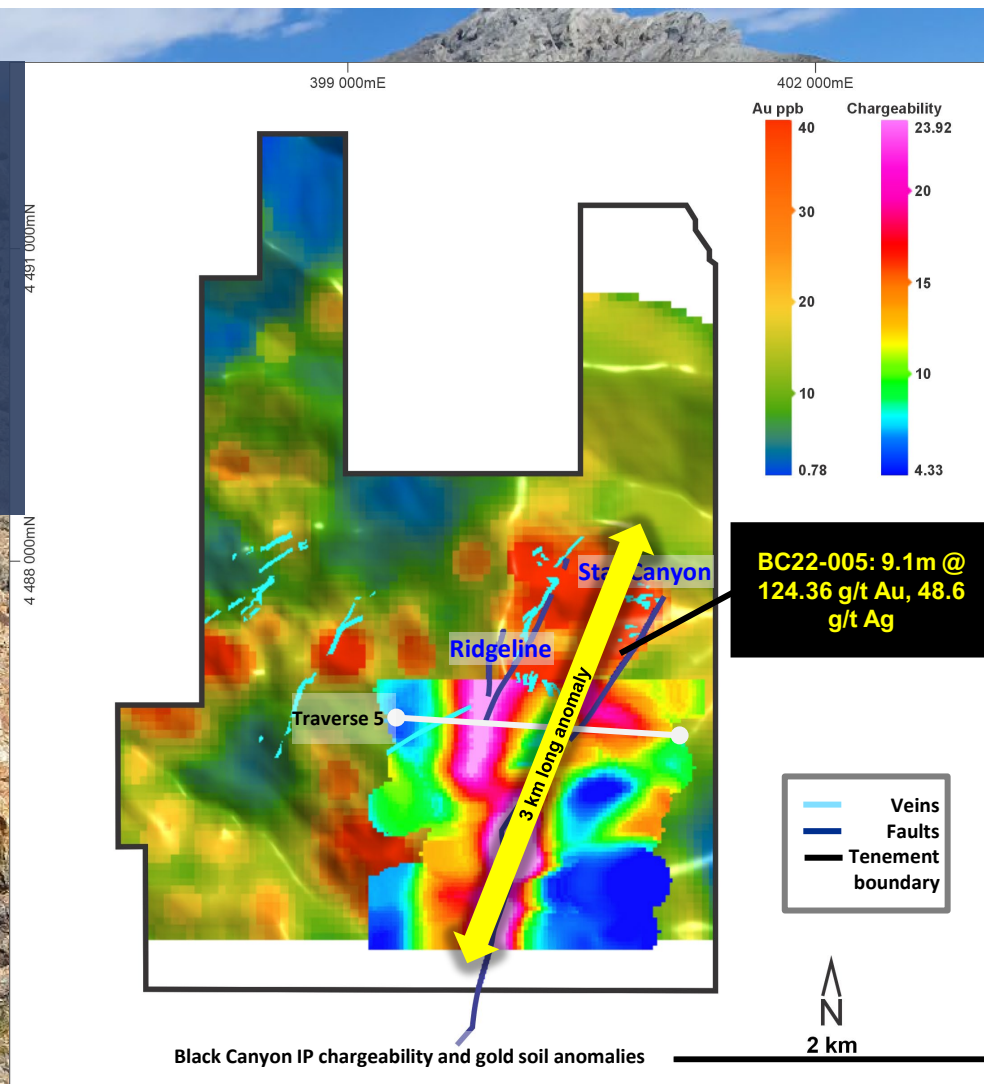
## FIRST DRILLING

- Bonanza grades in quartz veins seen in BC22-005 **9.1m @ 124g/t Au + 49g/t Ag**
- Immediately overlies **73.2m @ 0.3g/t Au + 1.2g/t Ag**
- Lower grade mineralisation is in Rochester Rhyolite: silicified volcanics with sulphide alteration
- Structural corridor over 275m wide contains numerous (hundreds of) mineralised quartz veins **at nearby mine grades**
- Potential for open pit bulk mining and more targeted underground mining on the bonanza veins at depth
- Very broad initial drill spacing highlights scale of opportunity



# Soil sampling highlights scale of opportunity

- Detailed soil sampling outlined a 3km long gold anomaly
- Contains outcropping high-grade veins such as the Monster Vein system
- Also contains the Star Canyon area where Rochester Rhyolite mineralisation outcrops
- Wide spaced RC drilling undertaken in Star Canyon
- Successfully discovered both bonanza veins and Rochester Rhyolite style Gold + Silver mineralisation
- Our broad spaced drilling only covers ~15% of the 3km long soil anomaly
- IP survey completed to target sulphide mineralisation concentration



79  
Au  
Gold  
196.97

29  
Cu  
Copper  
63.546

47  
Ag  
Silver  
107.87

# Numerous Other Vein Systems – Never Drilled

Ridgeline anomaly veins above  
Star Canyon

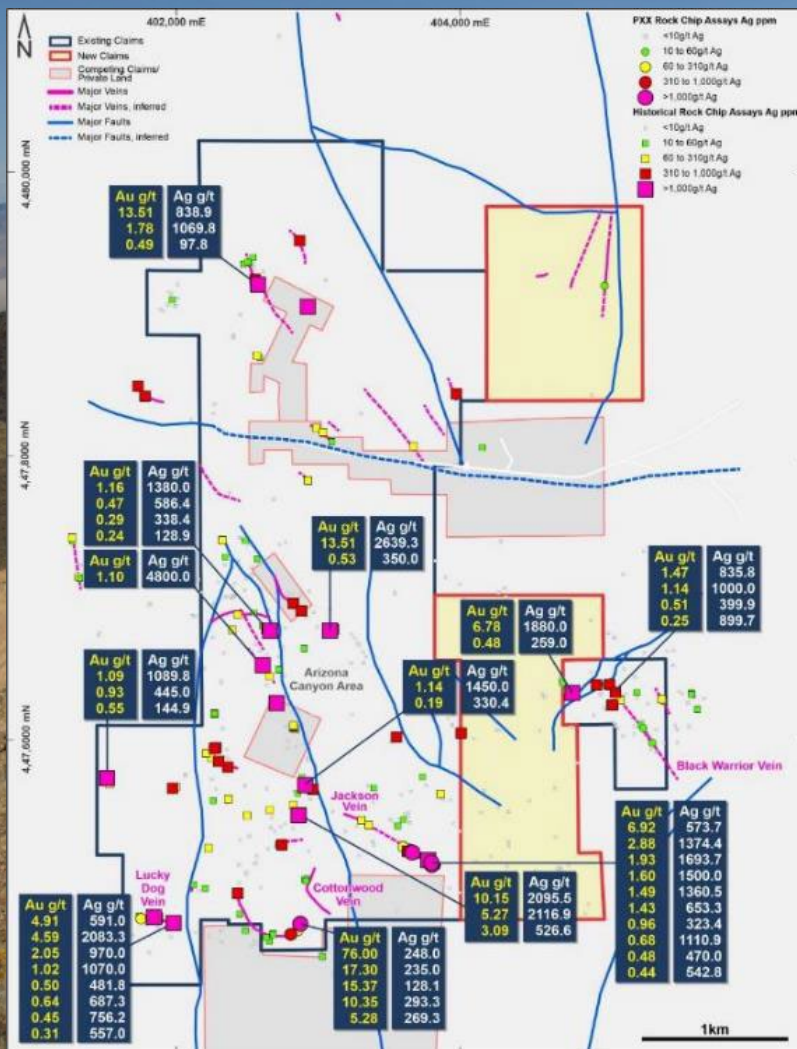


The Golden Staircase veins  
69m @ 1.10 g/t Au, 7.65 g/t Ag (channel)



# Humboldt Range: Fourth of July Claims

Fourth of July Claims



400Moz Rochester silver-gold mine

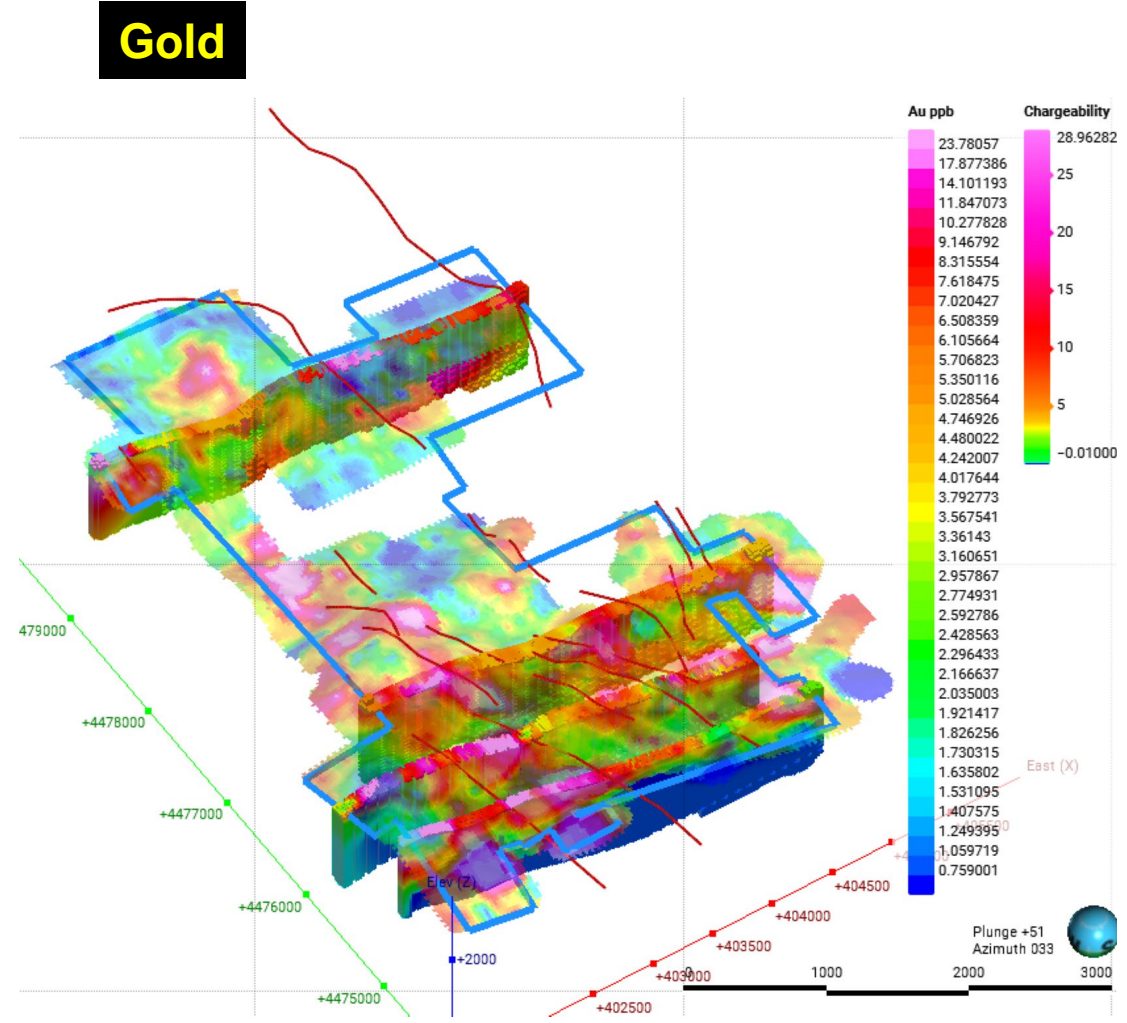
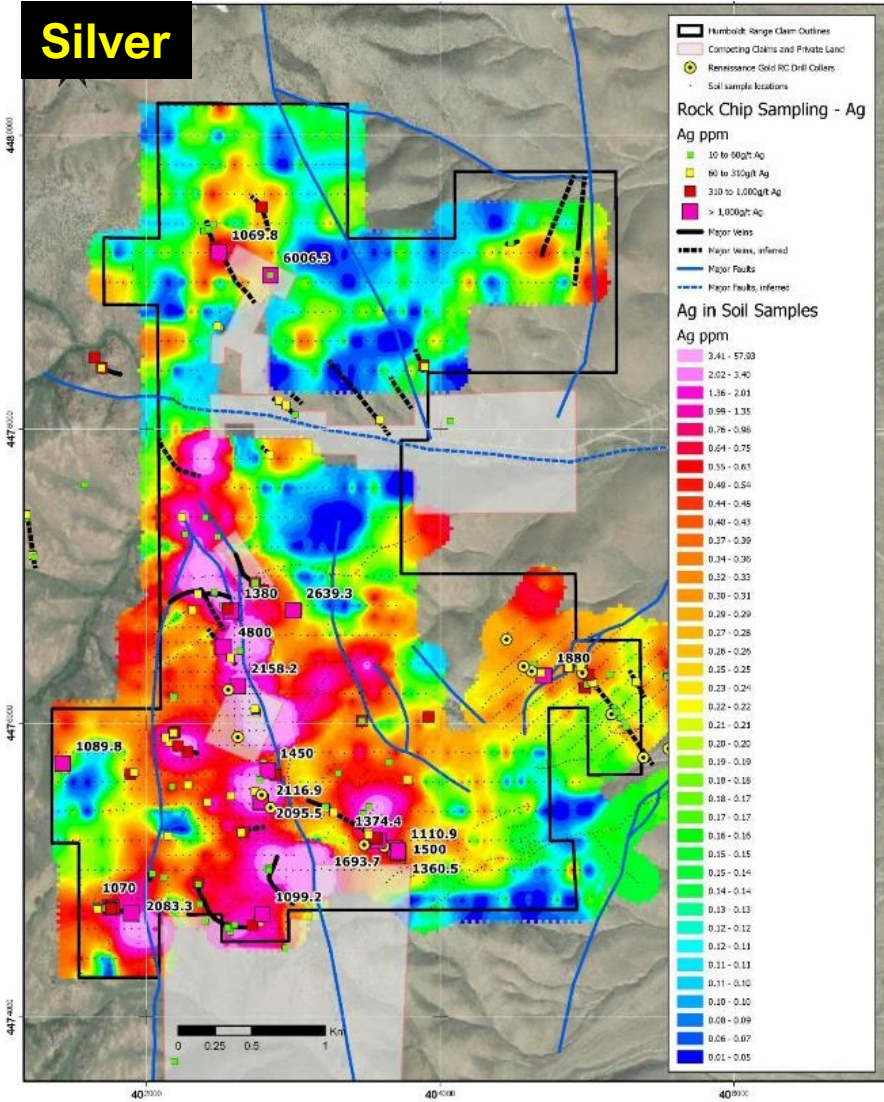
- Metal zonation from silver-rich veins with strong gold credits at southern part of Fourth of July (closest to the Rochester silver mine) to gold-rich veins in Black Canyon (close to Florida Canyon gold mine)
- Individual veins up to 700m long (eg, Jackson Vein)
- Massive silver and gold anomaly defined by PXX soil sampling in the Arizona Canyon area
- Targeting sulphide mineralisation in Rochester Rhyolite with IP

22

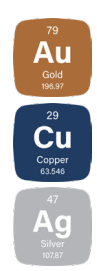
# Fourth of July: +3km long Silver/Gold Target



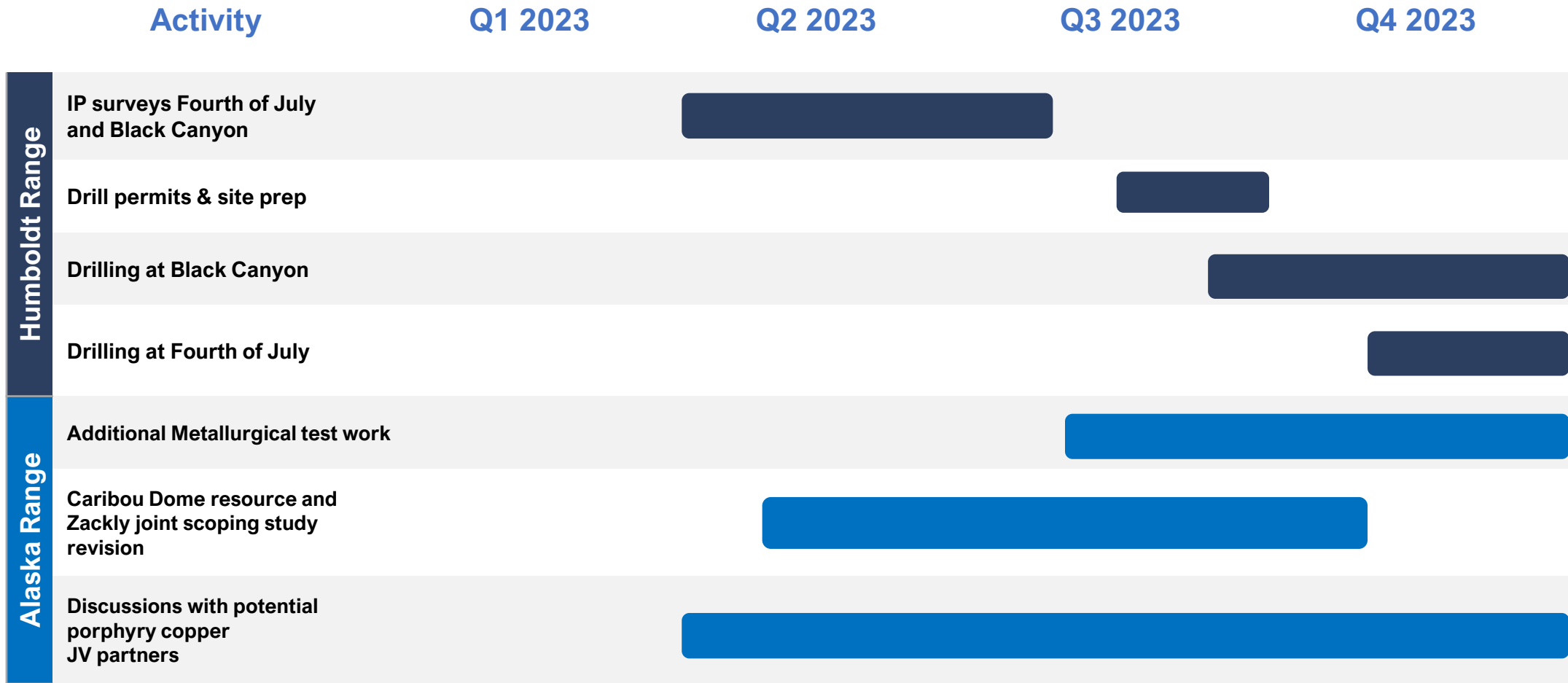
# Fourth of July: Very strong Silver/Gold anomalism







# Strong News Flow in 2023





# Cautionary Statements

This presentation has been prepared by PolarX Limited (“the Company”) to assist in informing interested parties about the Company and its progress. It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to securities in the Company. No agreement to subscribe for securities in either Company will be entered into on the basis of this presentation.

You should not act or refrain from acting in reliance on this presentation material. This summary does not purport to be all inclusive or to contain all information which recipients may require in order to make an informed assessment of the Company’s prospects. You should conduct your own investigation and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation and making any investment decision.

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This presentation includes certain “Forward- Looking Statements”. The words “forecast”, “estimate”, “like”, “anticipate”, “project”, “opinion”, “should”, “could”, “may”, “target” and other similar expressions are intended to identify forward looking statements. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding potential mineralisation, resources and reserves, exploration results, future expansion plans and development objectives of PolarX involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements.

## Previously Reported Results:

There is information in this presentation relating to:

- (i) the Mineral Resource estimate for the Zackly deposit, which was previously announced on 17 October 2022 ;
- (ii) the Mineral Resource estimate for the Caribou Dome deposit, which was previously announced on 13 June 2023; and
- (iii) exploration Results which were previously announced on 15 August 2018, 25 September 2018, 5 November 2018, 12 November 2018, 29 January 2019, 25 March 2019, 5 August 2019, 1 October 2019, 21 October 2019, 19 November 2019, 20 January 2020, 14 September 2020, 9 October 2020, 21 October 2020, 17 November 2020, 17 December 2020, 11 January 2021, 2 February 2021, 4 February 2021, 6 May 2021, 22 June 2021, 6 July 2021, 19 August 2021, 31 August 2021, 5 October 2021, 16 February 2022, 12 April 2022 and 20 February 2023.

Other than as disclosed in those announcements, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and that all material assumptions and technical parameters have not materially changed. The Company also confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

All references to the 2023 Scoping Study and its outcomes in this presentation relate to the announcement of 28 August 2023 titled “2023 Scoping Study Alaska Range Copper Gold Project”. Please refer to that announcement for full details and supporting information.

All references to the 2022 Scoping Study and its outcomes in this presentation relate to the announcement of 17 October 2022 titled “Scoping Study – Alaska Range Copper-Gold Project”. Please refer to that announcement for full details and supporting information.

Alaska Range Project Mineral Resource Estimates (JORC 2012), 0.5% Cu cut-off grade									
	Category	Million Tonnes	Cu %	Au g/t	Ag g/t	Contained Cu (t)	Contained Cu (M lb)	Contained Au (oz)	Contained Ag (oz)
<b>ZACKLY</b>	Inferred	1.5	0.9	1.2	10.4	14,300	32	58,000	513,000
	Indicated	2.5	1.2	1.9	13.9	30,700	68	155,000	1,120,000
	<b>TOTAL</b>	<b>4.0</b>	<b>1.1</b>	<b>1.6</b>	<b>12.6</b>	<b>45,000</b>	<b>100</b>	<b>213,000</b>	<b>1,633,000</b>
<b>CARIBOU DOME</b>	Measured	1.0	3.9	-	8.6	39,800	88	-	284,000
	Indicated	3.2	3.3	-	6.5	105,175	232	-	662,800
	Inferred	3.0	2.6	-	5.7	79,400	175	-	552,000
	<b>TOTAL</b>	<b>7.2</b>	<b>3.1</b>	<b>-</b>	<b>6.5</b>	<b>224,375</b>	<b>495</b>	<b>-</b>	<b>1,498,800</b>
<b>COMBINED TOTAL</b>		<b>11.2</b>				<b>269,375</b>	<b>595</b>	<b>213,000</b>	<b>3,131,000</b>

# POLARX

LIMITED

## Highlights

Tier 1 copper, gold and silver assets

Alaska and Nevada = within world's top mining exploration and investment precincts

Top 40 shareholders own 65% of PolarX  
- including management

Mining Scoping Study advancing Zackly and Caribou Dome toward potential mine production

Massive upside in Nevada adjacent to active mines

Management with a record of delivering increased shareholder value

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