



Investor Presentation

February 2023





Disclaimer and Forward-Looking Statements

COMPLIANCE AND CAUTIONARY STATEMENT

NOTES TO MINERAL RESOURCES

The Mineral Resource Estimates for the Dynasty Gold Project and Jerusalem Project are not reported in accordance with the JORC Code 2012. A competent person has not done sufficient work to classify the foreign estimate as mineral resources in accordance with the JORC Code 2012. It is uncertain that following evaluation and/or further exploration work that the foreign estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code 2012.

Pursuant to Listing Rule 5.13, Titan confirms that it is not in possession of any new information or data in respect to either the Dynasty Gold Project and the supporting information provided in the relevant initial Announcements (being the ASX release dated 30 April 2020 with respect to the Dynasty Gold Project) continues to apply and has not materially changed.

The Mineral Resources estimates contained herein are Canadian National Instrument 43-101 compliant resource (“NI 43-101” or “foreign”) estimates.

Project	Category	Tonnes	Au	Ag	Contained Au (oz)	Contained Ag (oz)
			(g/t)	(g/t)	(000's)	(000's)
Dynasty Gold Project	Indicated	6,622,000	4.65	36	991,000	7,673,000
	Inferred	7,824,000	4.42	36	1,113,000	9,151,000

COPPER EQUIVALENT (CU EQ) VALUES – REQUIREMENTS UNDER THE JORC CODE

Assumed commodity prices for the calculation of Copper Equivalent (Cu Eq) is Cu US\$3.00/lb, Au US\$1,700/oz, Mo US\$14/lb and Ag US\$20/oz. Recoveries are assumed from similar deposits: Cu = 85%, Au = 65%, Ag = 65%, Mo = 80%. Cu Eq (%) was calculated using the following formula: $((Cu\% \times Cu \text{ price } 1\% \text{ per tonne} \times Cu \text{ recovery}) + (Au(g/t) \times Au \text{ price per g/t} \times Au \text{ recovery}) + (Mo \text{ ppm} \times Mo \text{ price per g/t} \times Mo \text{ recovery}) + Ag \text{ ppm} \times Ag \text{ price per g/t} \times Ag \text{ recovery}) / (Cu \text{ price } 1\% \text{ per tonne} \times Cu \text{ recovery})$. Cu Eq (%) = Cu (%) + (0.54 x Au (g/t)) + (0.0037 x Mo (ppm)) + (0.0063 x Ag (ppm)). TTM confirms that it is the Company’s opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

COMPETENT PERSON STATEMENT

The information in this release that relates to Exploration Results is based on information compiled by Ms Melanie Leighton, who is a Member of the Australian Institute of Geoscientists and is a Consulting Geologist. Ms Leighton has sufficient experience relevant to the style of mineralisation and type under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Ms Leighton consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

SUMMARY INFORMATION

This document contains a summary of information about Titan and its activities that is current as at the date of this document. The information in this document is general in nature and does not purport to be complete or to contain all the information which a prospective investor may require in evaluating a possible investment in Titan or that would be required in a prospectus or a product disclosure statement prepared in accordance with the Corporations Act 2001 (Cth) (Corporations Act).

NOT AN OFFER OF SECURITIES

This presentation has been prepared by Titan Minerals Limited (“Titan” or the “Company”) and is provided for informational purposes only. This presentation does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any securities of Titan. This presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any securities in any jurisdiction (in particular, the United States), or a securities recommendation. This presentation is not a prospectus, product disclosure statement or other offering document under Australian law or any other law and will not be lodged with the Australian Securities and Investments Commission.

NOT FINANCIAL PRODUCT ADVICE

This presentation does not constitute financial product advice and does not consider any investor’s personal investment objectives, taxation situation, financial situation or needs. This presentation consists purely of factual information and does not involve or imply a recommendation of a statement of opinion in respect of whether to buy, sell or hold a financial product. An investment in Titan or Core is considered to be speculative in nature. Before making any investment decision in connection with any acquisition of securities, investors should consult their own legal, tax and/or financial advisers in relation to the information in, and action taken on the basis of, this presentation.

NO LIABILITY

To the extent permitted by law, Titan makes no guarantee representation or warranty express or implied as to the accuracy, reliability, correctness, completeness or adequacy of any statements, estimates, options, conclusions or other information contained in this presentation. To the maximum extent permitted by law, Titan and each of its affiliates and its directors, officers, employees, associates, advisers and agents expressly disclaims any and all liability, including, without limitation, any liability arising out of fault or negligence, for any loss arising from the use of or reliance on information contained in this presentation including representations or warranties or in relation to the accuracy or completeness of the information, statements, opinions, forecasts, reports or other matters, express or implied, contained in, arising out of or derived from, or for omissions from, this presentation including, without limitation, any financial information, any estimates or projections and any other financial information derived therefrom. Statements in this presentation are made only as of the date of this presentation unless otherwise stated and the information in this presentation remains subject to change without notice. To the extent permitted by law, no responsibility or liability is assumed by Titan or any of its affiliates and its directors, officers, employees, associates, advisers and agents for updating any information in this presentation or to inform any recipient of any new or more accurate information or any errors or mis-descriptions of which Titan and any of its affiliates or advisers may become aware.

FORWARD LOOKING STATEMENTS

Certain information in this document refers to the intentions of Titan, but these are not intended to be forecasts, forward looking statements or statements about the future matters for the purposes of the Corporations Act or any other applicable law. The occurrence of the events in the future are subject to risk, uncertainties and other actions that may cause Titan’s actual results, performance or achievements to differ from those referred to in this document. Accordingly, Titan and its affiliates and their directors, officers, employees and agents do not give any assurance or guarantee that the occurrence of these events referred to in the document will actually occur as contemplated.

Statements contained in this document, including but not limited to those regarding the possible or assumed future costs, performance, dividends, returns, revenue, exchange rates, potential growth of Titan, industry growth or other projections and any estimated company earnings are or may be forward looking statements. Forward-looking statements can generally be identified by the use of words such as ‘project’, ‘foresee’, ‘plan’, ‘expect’, ‘aim’, ‘intend’, ‘anticipate’, ‘believe’, ‘estimate’, ‘may’, ‘should’, ‘will’ or similar expressions. These statements relate to future events and expectations and as such involve known and unknown risks and significant uncertainties, many of which are outside the control of Titan. Actual results, performance, actions and developments of Titan may differ materially from those expressed or implied by the forward-looking statements in this document.

Such forward-looking statements speak only as of the date of this document. There can be no assurance that actual outcomes will not differ materially from these statements. To the maximum extent permitted by law, Titan and any of its affiliates and their directors, officers, employees, agents, associates and advisers:

disclaim any obligations or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions;

do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and

disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).

ACCEPTANCE

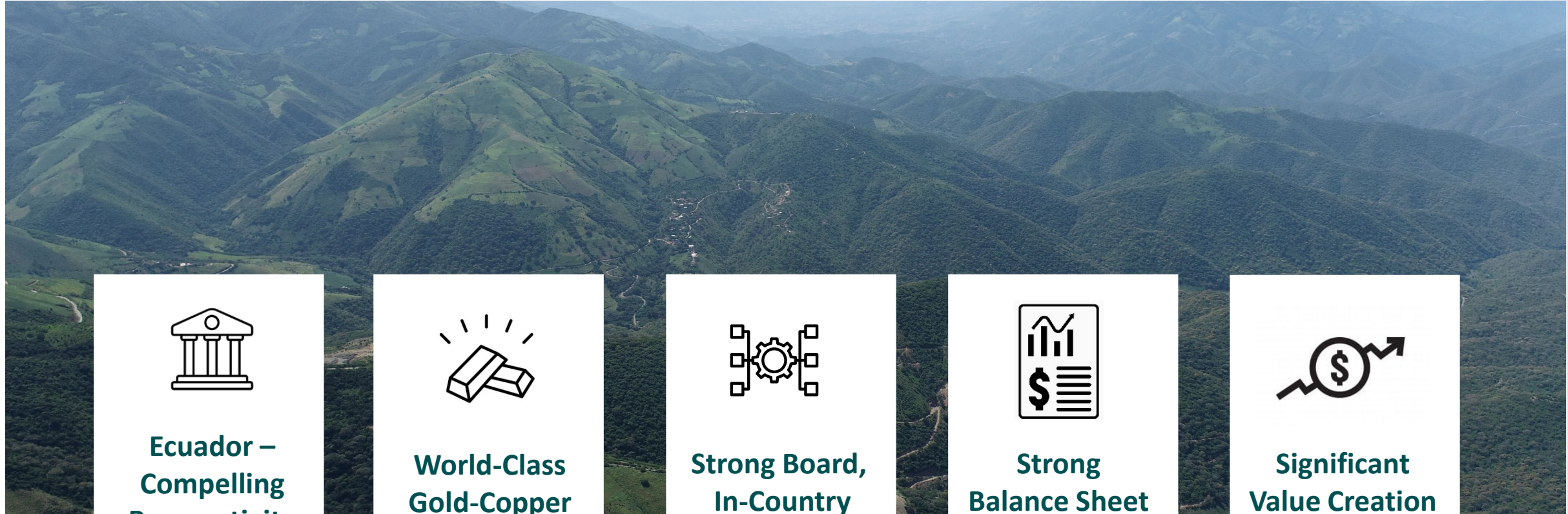
By attending an investor presentation or briefing, or accepting, accessing or reviewing this document you acknowledge and agree to the “Disclaimer” as set out above.

AUTHORISATION

Released with the authority of the board of Titan Minerals Ltd.

Well Positioned to Create Value

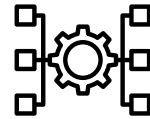
WORLD-CLASS GOLD-COPPER PORTFOLIO



**Ecuador –
Compelling
Prospectivity
and Supportive
Government**



**World-Class
Gold-Copper
Project
Portfolio**



**Strong Board,
In-Country
Management &
Technical
Capability**



**Strong
Balance Sheet
and Treasury**



**Significant
Value Creation
Opportunity**

Corporate Summary

EXPERIENCED AND SUCCESSFUL BOARD



Peter Cook
Non-Executive Chair
 Geologist & Mineral Economist
 “Proven Mine and Company Builder”



Matthew Carr
Executive Director (part time)
 “Businessman & Project Developer”



Tamara Brown
Non-Executive Director
 Engineer & Corporate Strategist
 “Strong Ecuadorian and Capital markets experience”



Nick Rowley
Non-Executive Director
 Commerce & Applied Finance Degrees
 “Proven dealmaker and experienced corporate”



Barry Bourne
Non-Executive Director
 Geologist and Geophysicist
 “Renowned Innovator”



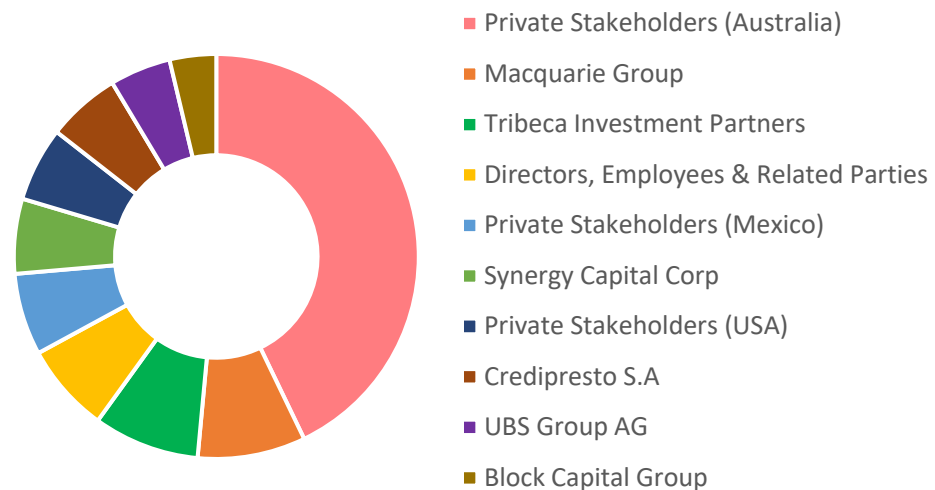
Melanie Leighton
Chief Executive Officer, *appointed Jan 2023*
 Geologist & Business Master
 “Strong Latin American and Mineral Exploration experience”



Capital Structure (as at Dec 31, 2022)

ASX	TTM
Share Price	A\$0.061
Common Shares O/S	1,411m
Options & Performance Rights	96.6m
Est. Cash and Receivables	A\$2.5
Market Capitalisation	~A\$86

Top 10 Shareholders



Why Ecuador?

EMERGING TIER 1 MINING JURISDICTION

- Emerging major mineral exporter with major mining groups invested:



- Lasso government supports responsible mining with mining development considered critical to Ecuador's economic revitalization
- Mining Investment Attractiveness Index improved from 45 (2015) to 73 (2021)¹
- Lowest effective tax rates and fastest permitting in Latam
- Several major projects advancing from exploration through development and production, with 2 major mines now in full production- Fruta del Norte and Mirador
- Mining and exploration contributing significantly to taxes, employment, infrastructure and communities



Titan Strategy

CONSIDERED, FOCUSED AND EFFECTUAL EXPLORATION

- ✓ Rank and prioritise strategic assets and define opportunities through systematic exploration
- ✓ Improve technical standards, create and integrate multi-layered digital scientific datasets to better define and prioritise targets
- ✓ Build on ESG outputs and social license to create community engagement and sustainable positive impacts
- ✓ Engage key technical experts to guide and optimize exploration strategy
- ✓ **Unlock each project's potential by defining and drill testing high conviction targets!**



Titan Projects

LARGE-SCALE, WELL LOCATED, COPPER-GOLD PROJECTS IN TIER 1 JURISDICTION



Key Projects...

(ordered by advancement)

1.

Dynasty Gold Project (100%)

- NI 43-101 Mineral Resource of **2.1Moz Au and 16.8Moz Ag**
- Large near surface epithermal gold district
- Emerging copper-gold porphyry systems

2.

Linderos Project (100%)

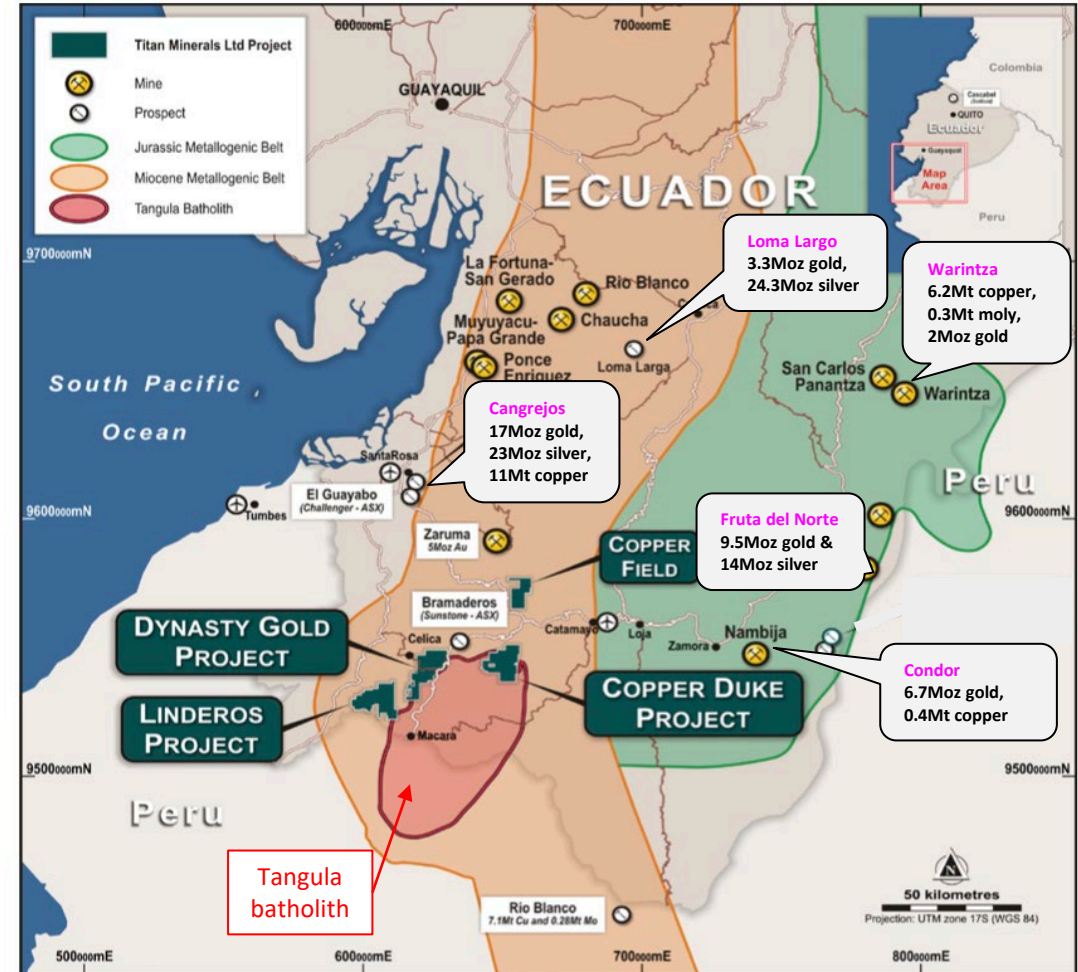
- Porphyry copper- gold and epithermal gold-silver systems confirmed by recent drilling

3.

Copper Duke Project (100%)

- Evidence for epithermal gold and large-scale porphyry copper systems

Located in major flexure of Andean Terrane, within corridor of mineralisation extending from Peru to northern Ecuador, associated with Miocene aged intrusions



Projects located at the Northern contact of the Tangula batholith in the Miocene Metallogenic Belt

Dynasty Project Summary

KEY HIGHLIGHTS & PROJECT ADVANCEMENT



- **Advancing Exploration-** data assessment and systematic exploration undertaken to produce consistent foundation geological datasets
- **Improved geological understanding & new targets defined-** both Intermediate Sulphidation Epithermal (gold) and Porphyry (copper, gold, molybdenum)
- **Mineral Resource Estimate-** multiple workstreams well advanced to facilitate JORC 2012 Resource
- **3D geology/ vein model being developed** following extensive surface mapping and drillhole relogging campaign
- **Project Explorability is HIGH:**
 - 50% outcrop provides excellent exposure for exploration
 - Good project access, medium-hills terrain and
 - **ONLY 20% of project explored to date!**



Geological team collection channel samples at the Dynasty Project

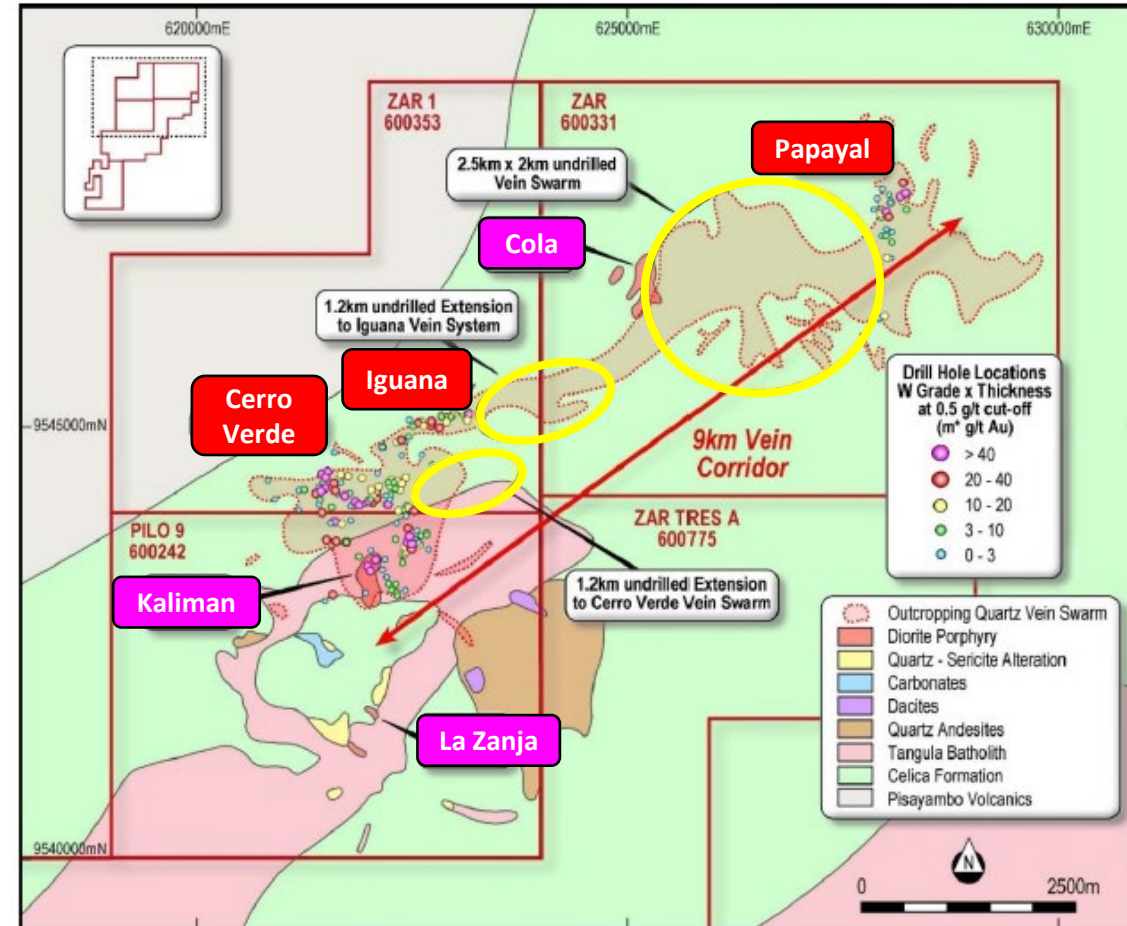
Dynasty Gold Project

CURRENT RESOURCE JUST THE BEGINNING...



2.1 million oz Gold
16.8 million oz Silver¹

- 9km x 1km epithermal corridor with intermediate sulphidation Au-Ag and evidence for Cu-Au porphyry mineralisation
- Validated by trial mining of ~600,000t @ 3.46g/t Au - 169% tonnes @ 85% grade = **40% more gold**
- Compilation of consistent geological datasets a focus, with **several new targets identified**
- 3D geological model being built to facilitate resource estimation and drill targeting
- Significant potential still remains** to extend high grade epithermal gold mineralisation- both lateral and depth extensions
- Preparations well advanced to commence **drill testing of extensional targets**



Project	Category	Tonnes	Au	Ag	Contained Au (oz)	Contained Ag (oz)
			(g/t)	(g/t)	(000's)	(000's)
Dynasty Gold Project	Indicated	6,622,000	4.65	36	991,000	7,673,000
	Inferred	7,824,000	4.42	36	1,113,000	9,151,000

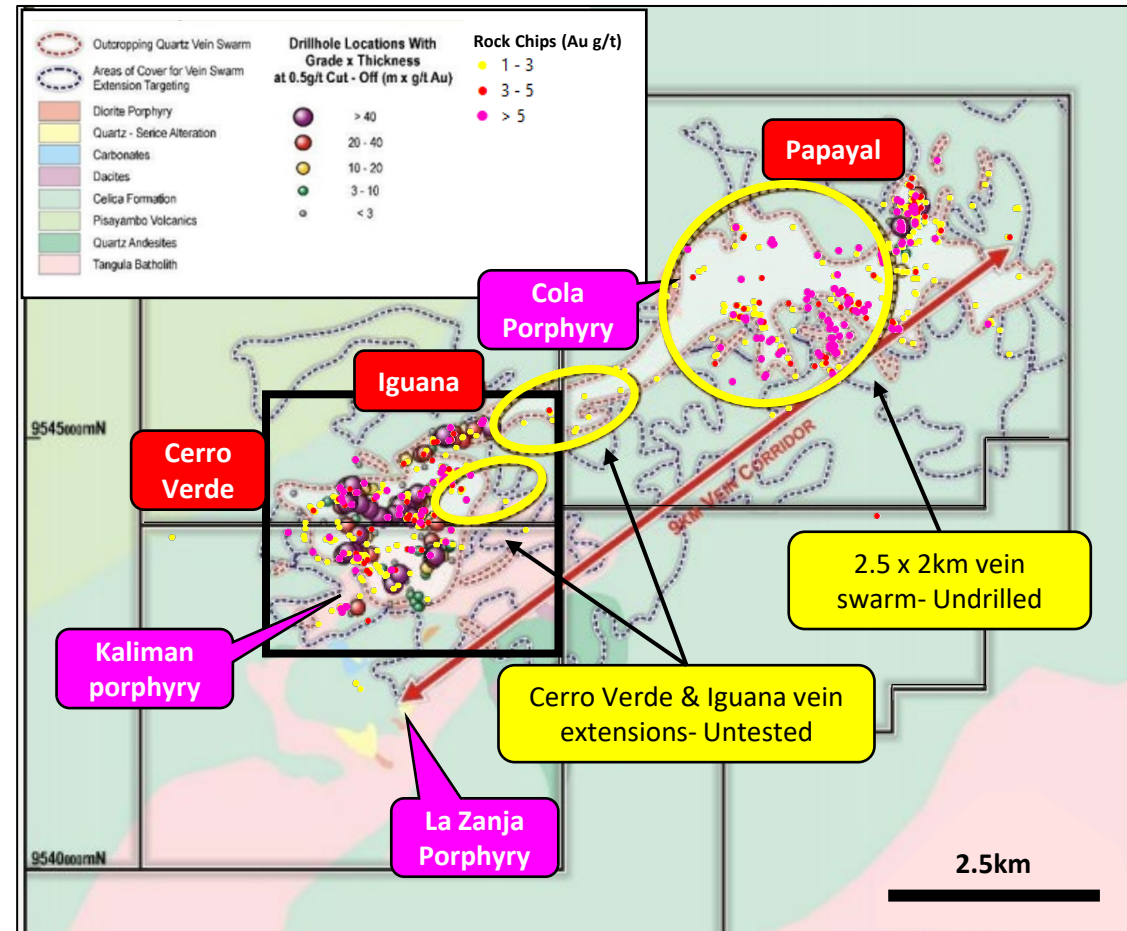
(1) These are total resource estimates of the zone estimated in the NI 43-101 filing of Core Gold dated May 6, 2019. They are considered a foreign resource under the ASX listing rules and are not purported to be compliant with JORC 2012.

Dynasty Gold Project

SIGNIFICANT POTENTIAL FOR ADDING SIGNIFICANT OUNCES

- Current Resource only includes mineralisation exposed at surface- **5km gap in drilling**
- Potential for extensions under cover confirmed** by geophysics and rock chip surface geochemistry
- Cerro Verde prospect-** 1.2km strike extension with numerous undrilled veins at surface
- Iguana prospect-** 1.2km strike extension, untested
- Papayal prospect-** 2.5km x 2km **undrilled vein swarm**
- Kaliman Au-Cu Porphyry confirmed** by drilling, surface mapping and geochemistry
- La Zanja Cu-Au Porphyry confirmed** by surface mapping and geochemistry

Integrated geological interpretation has highlighted epithermal-style vein and porphyry style targets



Cerro Verde Quartz vein with colloform and replacement textures, mineralisation includes pyrite, arsenopyrite, and sphalerite.



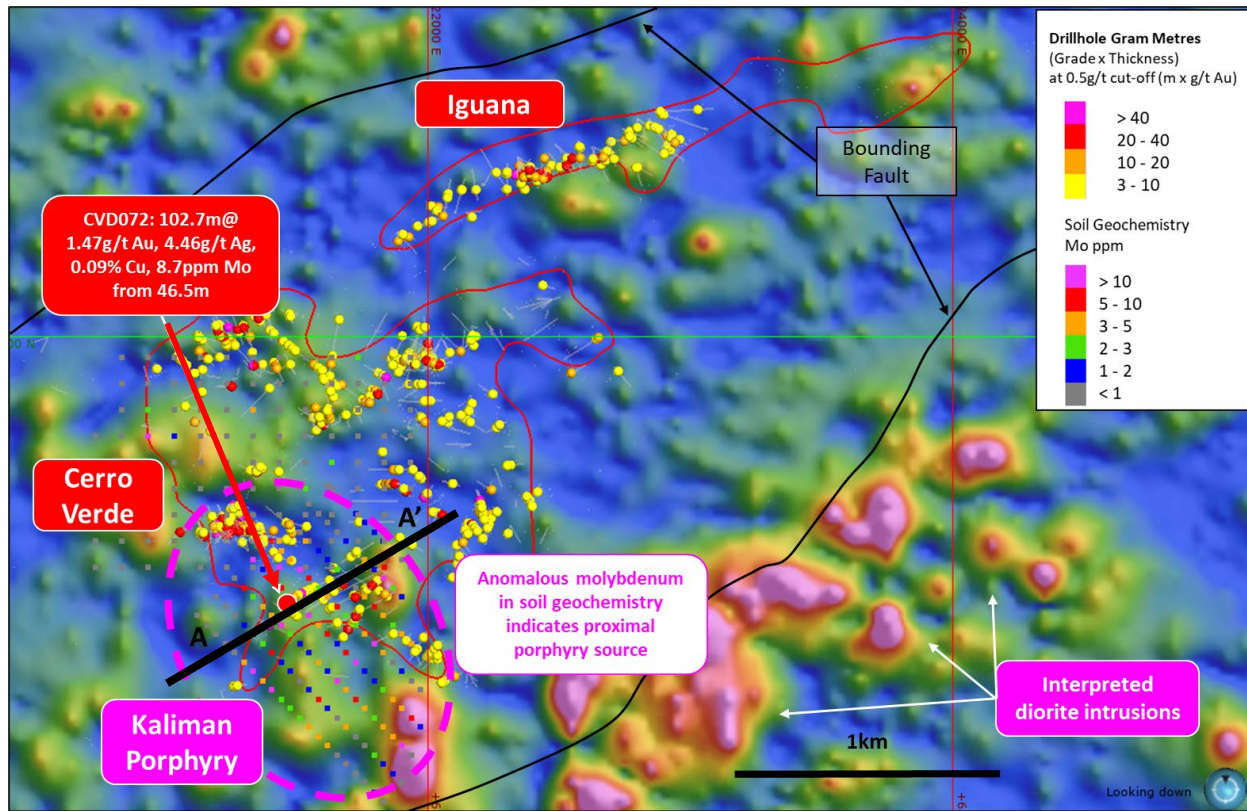
Kaliman Porphyry outcrop displaying strong stockwork veining

Kaliman Porphyry Prospect, Dynasty Gold Project

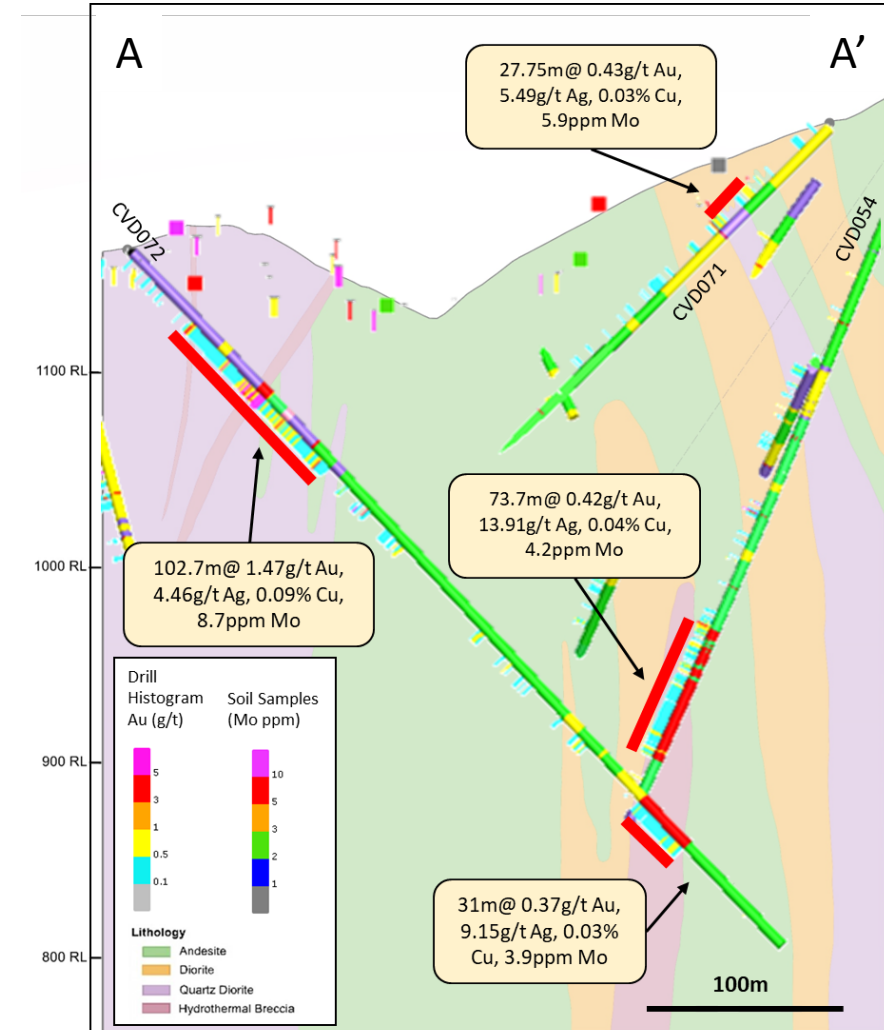
PORPHYRY DISCOVERED, POTENTIAL SCALE UNTESTED



- **Kaliman Au-Cu Porphyry confirmed** by drilling: **102.7m @ 1.47g/t Au** and 4.46g/t Ag, 0.09% Cu and 8.7ppm Mo from 46.5m in CVD072
- Surface mapping and geochemistry has highlighted a **1km diameter porphyry**



Dynasty Project displaying Analytic Signal, drill gram metres, targets and soil samples (molybdenum)



Cross Section A-A' displaying drilling (Au histogram), interpreted geology and mineralised intersections

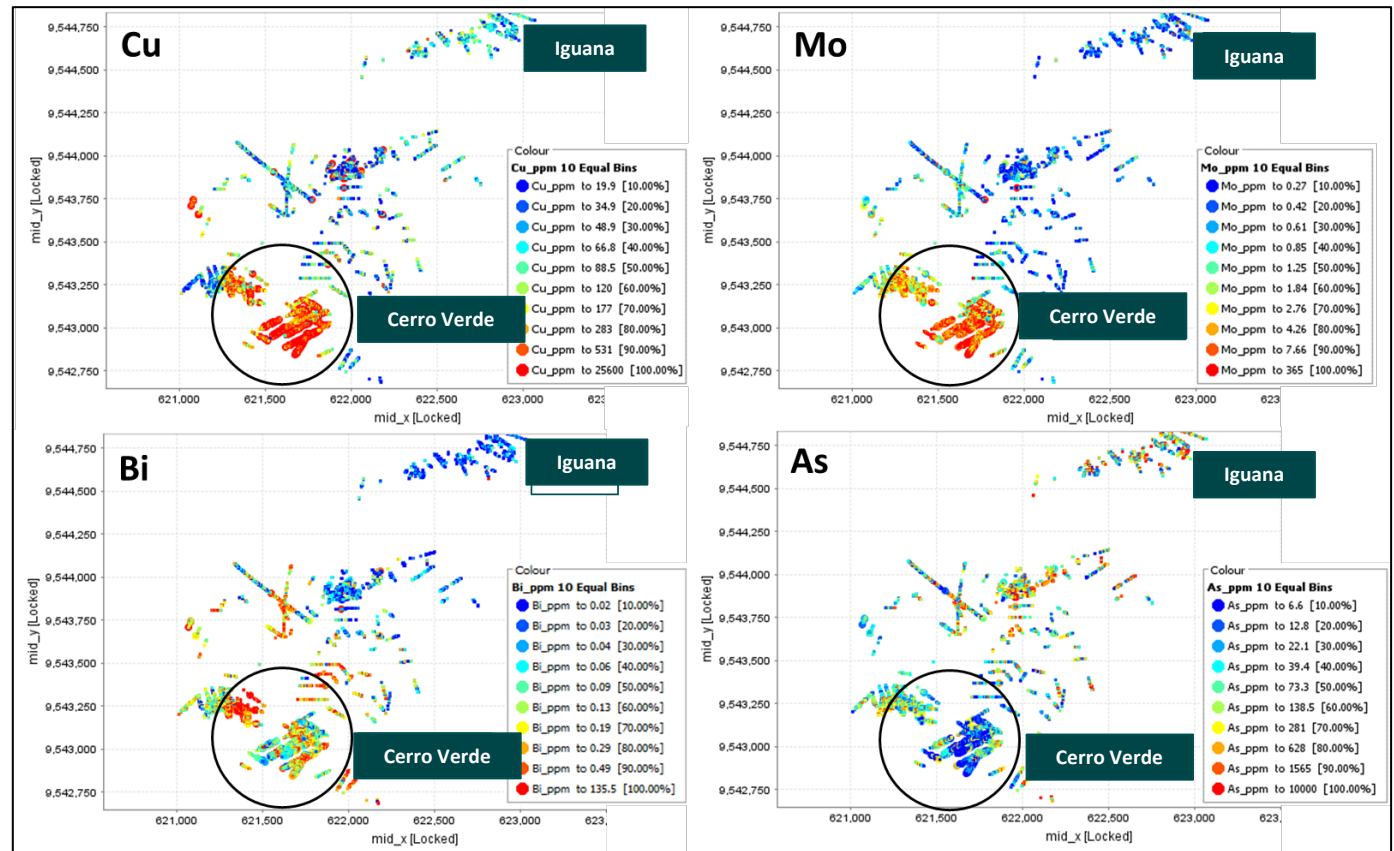
Cerro Verde Prospect, Dynasty Project

CLASSIC PORPHYRY SIGNATURE, UNDERSTANDING GEOCHEMISTRY IS KEY



- Geochemistry has identified two styles of mineralisation at Cerro Verde:
 - Porphyry gold-copper** potassic alteration overprinted by pervasive phyllic (sericite-chlorite)
 - Intermediate Sulfidation** epithermal Au-Ag (base-metal carbonate)
- Cerro Verde shows classic porphyry metal zonation
- Cerro Verde is located on apophyses of diorite intrusions
- Iguana contains diorite dykes with the same composition as Cerro Verde, so has potential for porphyry mineralisation also
- Iguana has the same chemical signature as western epithermal zone at Cerro Verde

4 acid digest ICP geochemistry and SWIR data from drilling



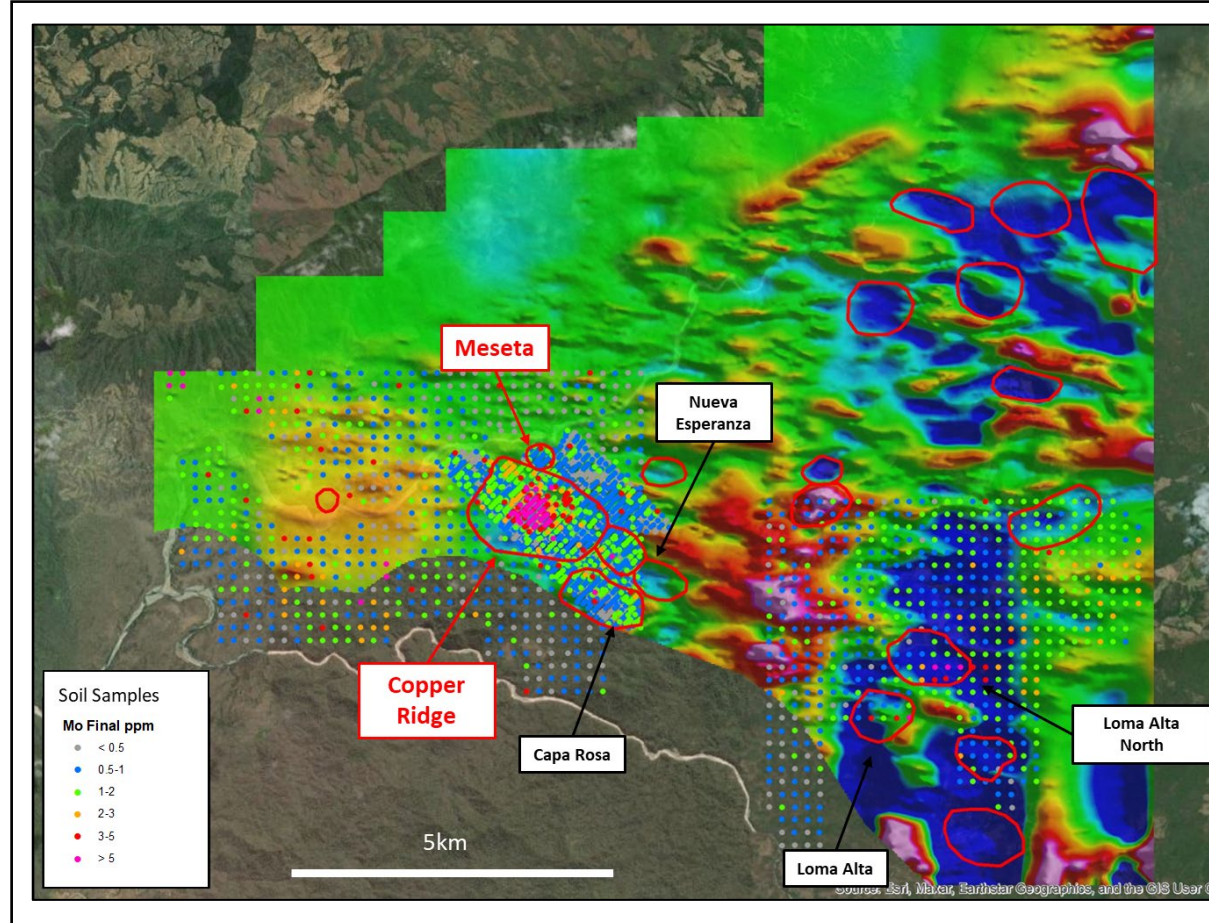
Linderos Project Overview

COPPER PORPHYRY AND EPITHERMAL GOLD STYLE MINERALISATION



- **Largely underexplored**- several prospects identified, but exploration primarily directed at Copper Ridge & Meseta
- Substantial porphyry copper-gold system at Copper Ridge- **now proven by drilling**
- Intermediate sulphidation epithermal gold system at Meseta- **now proven by drilling**
- Intermediate sulphidation epithermal gold-silver systems at Loma Alta, Victoria and other anomalies
- Geochemistry indicates presence of further porphyry centres
- **Pipeline of high conviction targets to feature in exploration work programs in 2023**

Linderos Project displaying Total Magnetic Intensity RTP, Soil Sampling (molybdenum) and Targets



Outcropping porphyry style vein mineralisation



Hand specimen displaying azurite and malachite copper oxide mineralisation

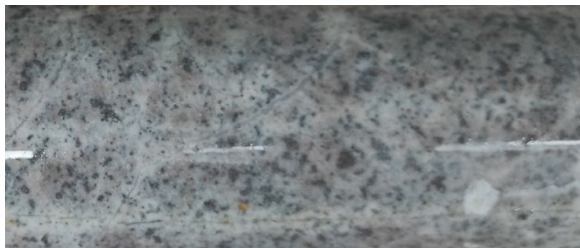
Linderos Project- Copper Ridge Prospect

STRONG EVIDENCE FOR SUBSTANTIAL PORPHYRY COPPER MINERALISATION

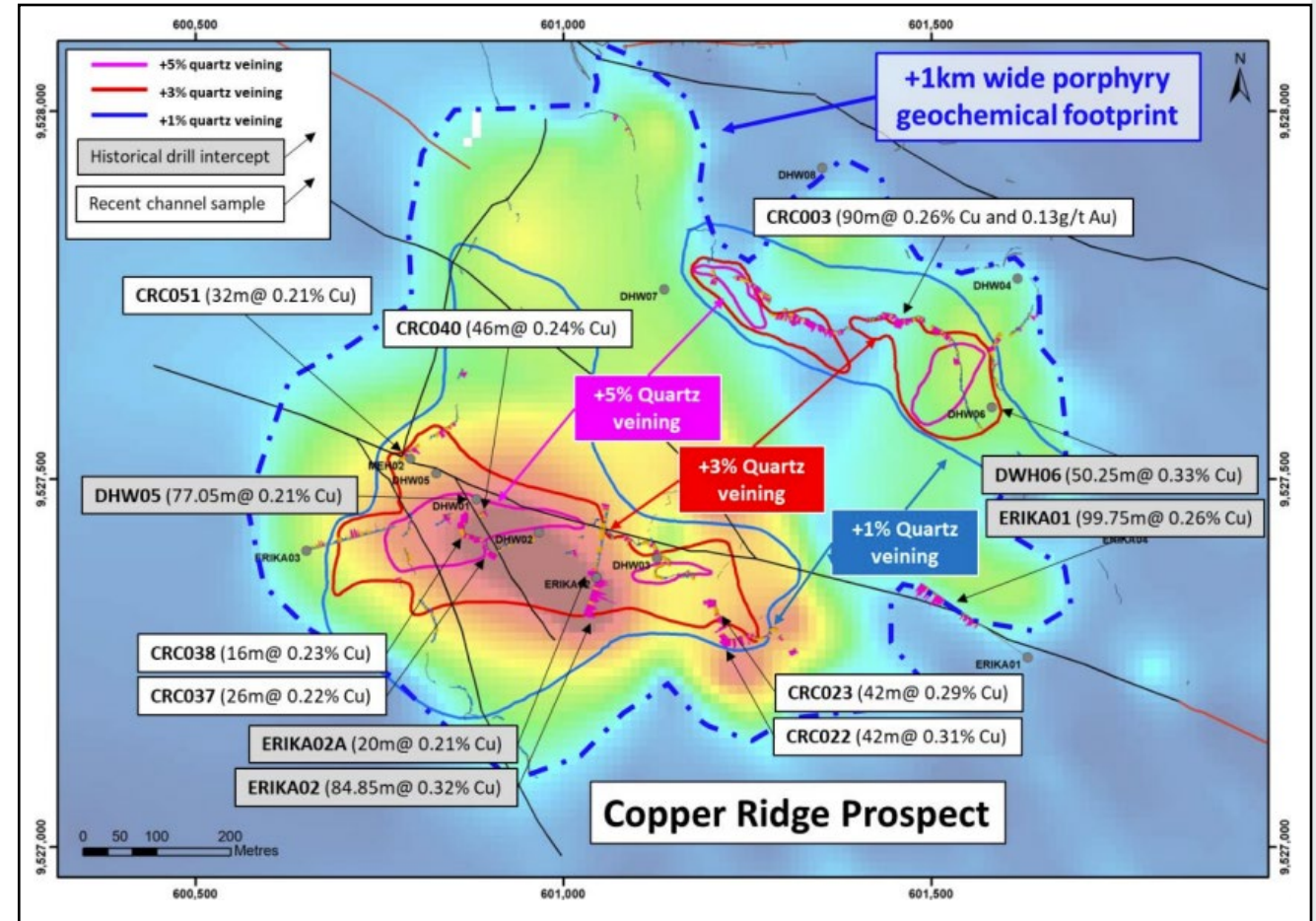


- +1km diameter textbook porphyry signature- central coincident Au-Cu-Mo, and distal zoned base metal anomalism
- Surface mapping and historical drilling confirmed the presence of diorite intrusions with porphyry style veining and mineralisation
- Some better results channel sampling include:
 - 46m @ 0.24% Cu, 9.71 ppm Mo in CRC040,
 - 32m @ 0.21% Cu, 3.91 ppm Mo in CRC051, and
 - 26m @ 0.22% Cu, 9.76 ppm Mo in CRC037
- **Drilling by Titan in late 2022 discovered wide mineralised diorite porphyry from shallow depths**

Diorite Porphyry with potassic alteration overprinted by phyllic alteration, disseminated chalcopyrite, pyrite 3% and trace of molybdenite, and stockwork quartz veinlets



Copper Ridge molybdenum soil anomaly, vein abundance, significant drilling and channel samples



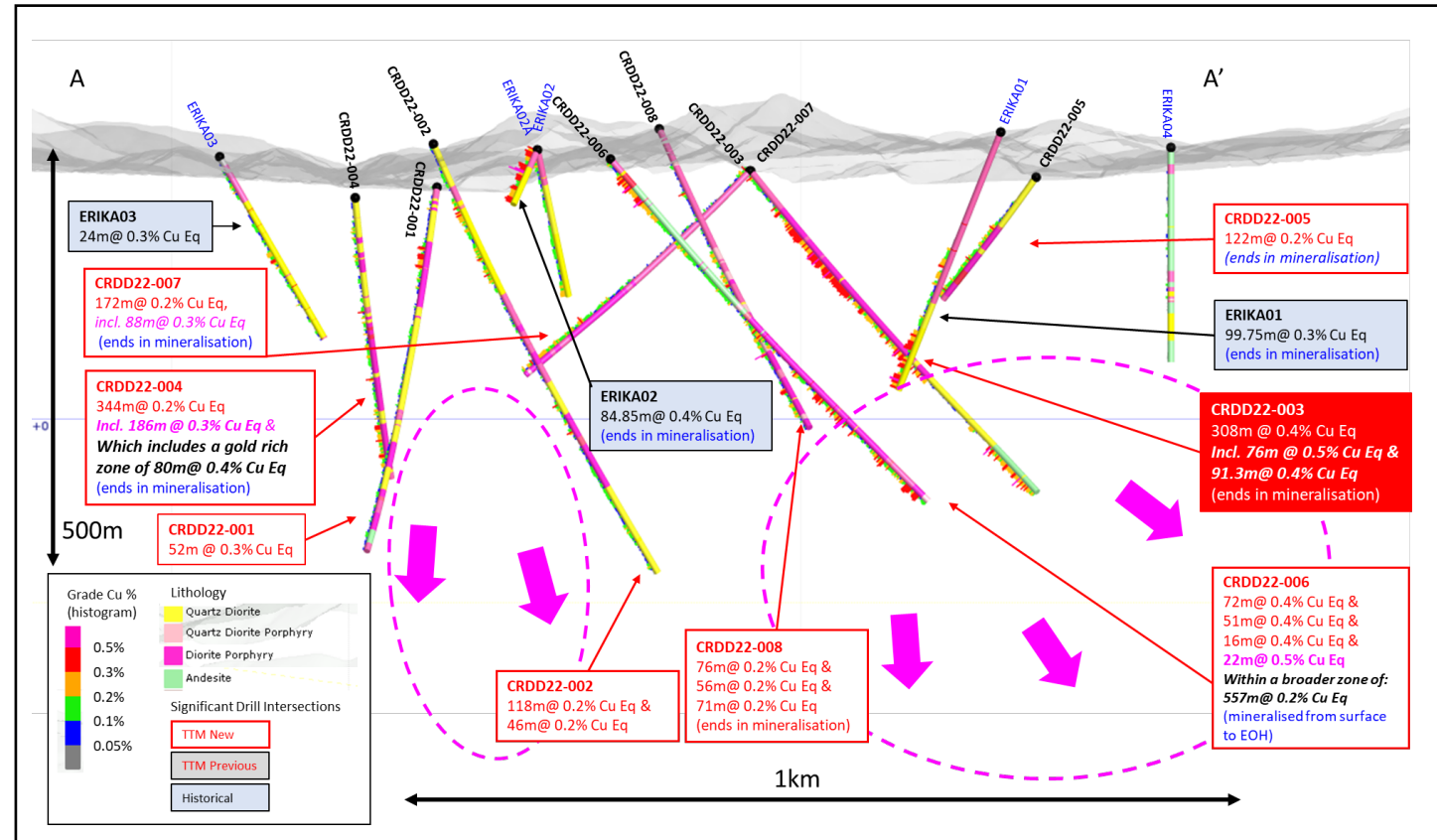
Linderos Project- Copper Ridge Prospect

MAIDEN DRILLING HIGHLIGHTS MINERALISED PORPHYRY FROM SHALLOW DEPTHS



- Maiden campaign of 8 diamond holes drilled to test porphyry potential in late 2022
- Wide intervals of mineralised copper-molybdenum ± gold ± silver porphyry intersected from shallow depths, with 6 out of 8 holes ending in mineralisation
- Significant results include:
 - **308m @ 0.4% Cu Eq** from 54m, including a higher-grade intercept of **76m@ 0.5% Cu Eq** from 132m; **mineralised to end of hole.**
 - **558m @ 0.2% Cu Eq** from surface to end of hole, including a higher-grade intercept of **72m grading 0.4% Cu Eq¹** from 21m; **mineralised to end of hole**
- Higher copper-gold grades associated with inter-mineral diorite porphyry with potassic green-grey sericite alteration

Long Section displaying drilling and porphyry extensional targets



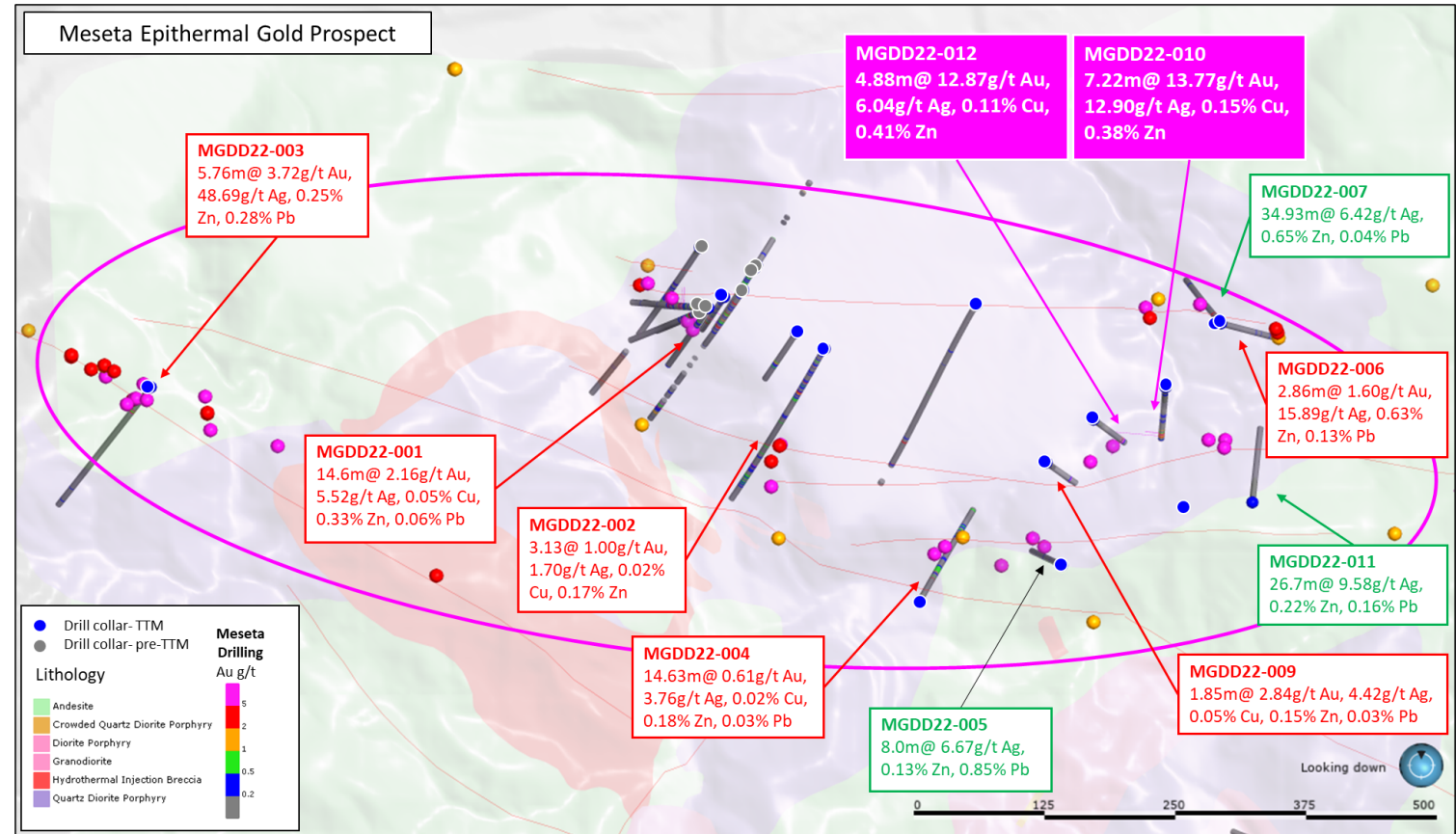
Linderos Project- Meseta Prospect

INTERMEDIATE SULPHIDATION SYSTEM ADJACENT TO COPPER RIDGE PORPHYRY SYSTEM



- Higher grade gold hosted in sub-vertical structures at margins of diorite porphyry stock
- Extensive hydrothermal alteration
- Metal zonation and alteration assemblages typical of intermediate sulphidation systems related to proximal porphyry systems
- 14 holes drilled in late 2022 intersected multiple narrow massive veins
- Significant gold results:
 - 7.22m grading 13.77g/t Au, 12.90g/t Ag, 0.15% Cu, 0.38% Zn from 66.28m**
 - 4.88m grading 12.87g/t Au, 6.04g/t Ag, 0.11% Cu, 0.41% Zn from 41.0m**

Meseta Plan View displaying drilling (Au), surface rock chips (Au), geological Interpretation



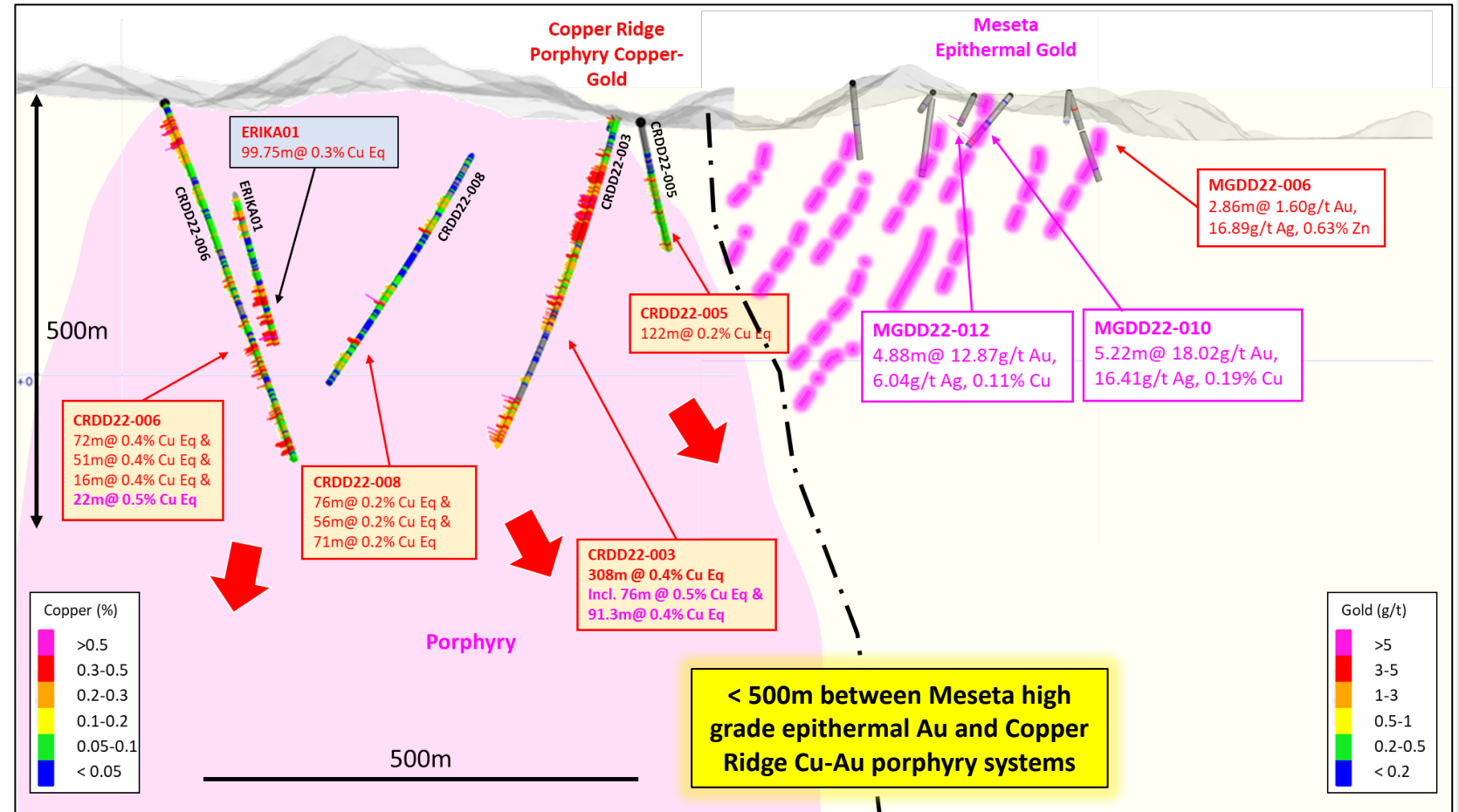
Linderos Project- Copper Ridge & Meseta

PORPHYRY & EPITHERMAL SYSTEMS LINKED



- Shallow epithermal system remains preserved, adjacent to recently discovered Copper Ridge Porphyry system
- Systems are linked- less than 500m between Copper Ridge Porphyry and Meseta epithermal gold systems
- Excellent potential for extending mineralisation with strong vectors towards higher grade gold, silver and copper mineralisation

Schematic Long Section of Copper Ridge and Meseta mineral systems, drilling at Copper Ridge (histogram coloured by Cu %) and Meseta (histogram coloured by Au g/t), significant intercepts and geological interpretation



Copper Duke Project

LIMITED MODERN EXPLORATION PROVIDES OPPORTUNITY

- Multi-phase outcropping targets:
 - Porphyry copper-gold mineralization
 - Breccia copper mineralisation
 - Epithermal gold bearing quartz-magnetite vein system

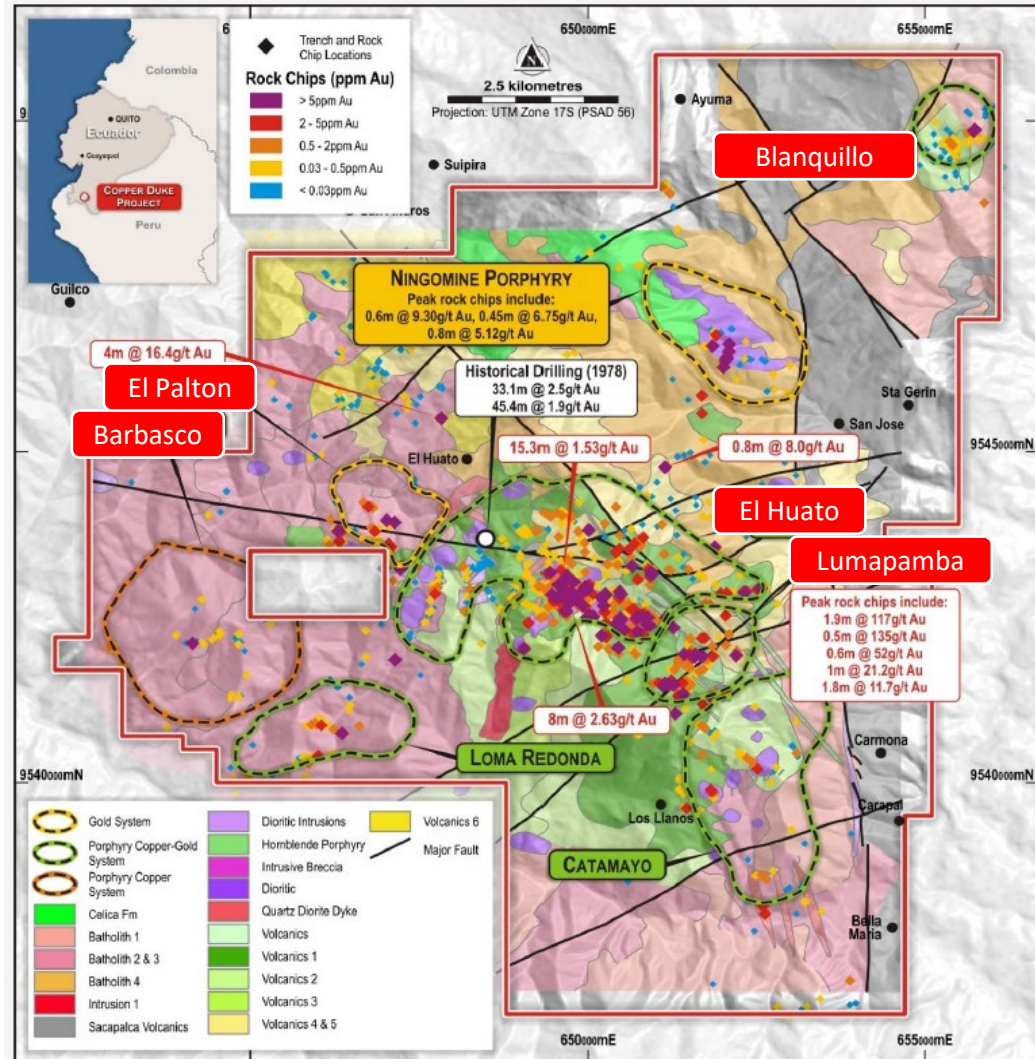
- Geophysical survey completed in 2020 identified corridor hosting multiple clusters of intrusive centres

- Open-ended surface geochemistry anomalism in soil and rock sampling indicate **7km porphyry corridor** with **coincident gold, copper, molybdenum**

- **Untested by drilling- only 4 shallow holes ever drilled!**



Surface sample locations with gold assays on revised geology interpretation following interpretations of high-resolution airborne geophysics dataset



Copper Duke Project

DATA POINTS TOWARDS TIER 1 PORPHYRY POTENTIAL!



Magnetic anomalies correspond with high-grade gold and copper geochemistry associated with porphyry style mineralisation observed at surface

Airborne geophysical survey confirmed and extended a corridor hosting multiple clusters of intrusive centers

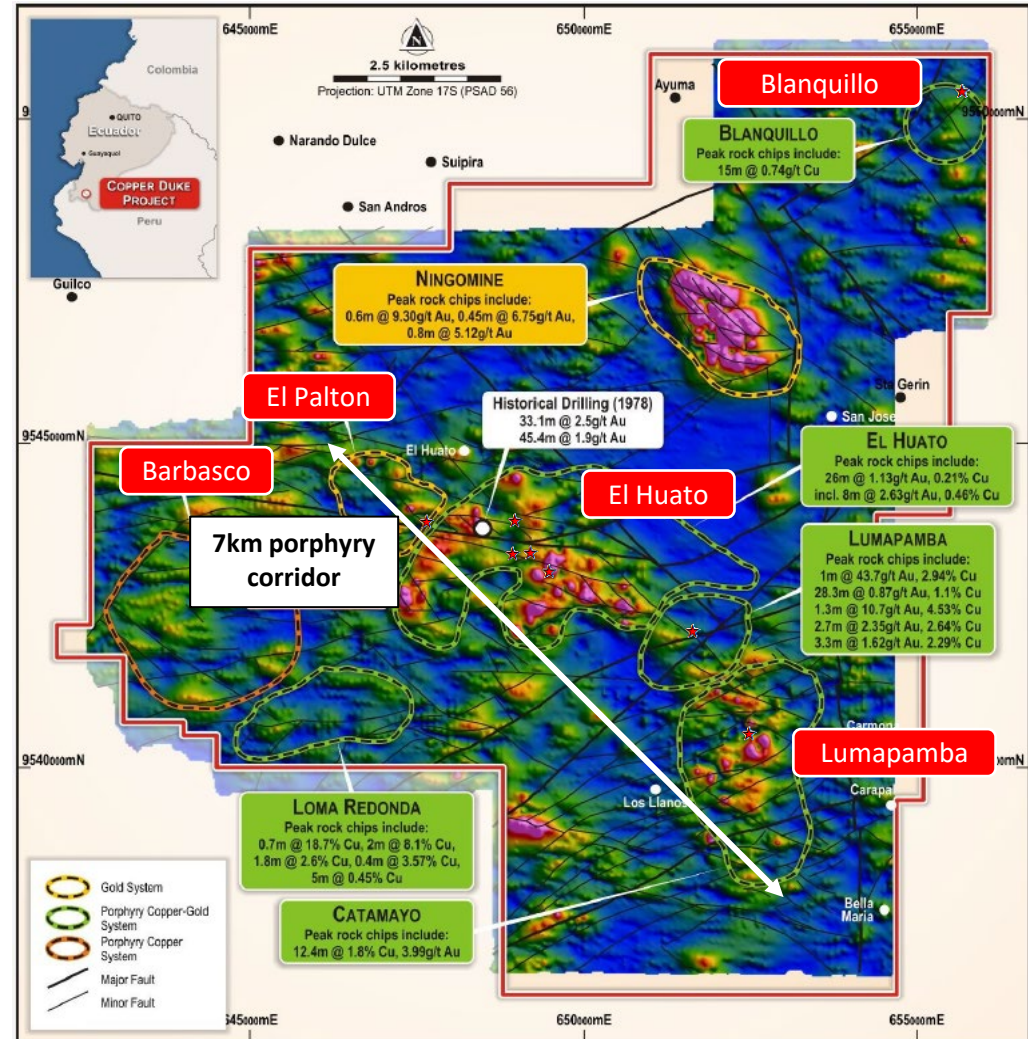
Clusters of intrusion related anomalism cover an area greater than 12km²

3D geophysical modelling of airborne magnetic surveys with target review and ranking is underway

Characteristics similar to many major porphyry districts in the world

Geophysical signature analogous to project such as Cerro Casale and Reko Diq

Copper Duke Total Magnetic Intensity Analytic Signal, prospects and significant results



Copper Duke

SYSTEMATIC EXPLORATION COMPLETED AND DRILL TARGETS DEFINED

- Systematic foundation geological datasets collected across the project
- Mineralised outcrops identified:
 - Porphyry style stockwork quartz veins
 - Intrusive semi-massive sulphide breccias
 - Cu-Au bearing skarns
 - Cu bearing veins/breccias
 - Oxidised gossanous structures
 - Massive sulphide filled structures
- Channel and trench sampling completed over anomalies and areas of interest
- **High conviction targets ready to drill test!**

Priority targets set to be drill tested in 2023!



Barbasco 1 North Prospect: Quartz diorite porphyry with B veins



Blanquillo Prospect: Quartz diorite porphyry with B veins



Barbasco Guayacan Prospect: Quartz diorite porphyry, stockwork of B and D veins, Channel Sample HTC015: 44m@ 0.21 g/t Au and 0.18% Cu



Why Titan?

OUTLOOK BULLISH FOR COPPER & GOLD A SAFE HAVEN IN UNCERTAIN TIMES

- **Meaningful, large scale and high grade gold and copper projects in an emerging Tier 1 jurisdiction**
- Copper supply predicted to struggle meeting rising demand, in drive for low-carbon economy- bullish outlook for copper
- Gold sector attracting investor attention and constructive outlook for the gold price in the coming years
- Majors investing in new jurisdictions in challenge to supply metals required to shift to low-carbon economy.



“... data shows a looming mismatch between the world’s strengthened climate ambitions and the availability of critical minerals that are essential to realising those ambitions.”

Exec Director, IEA

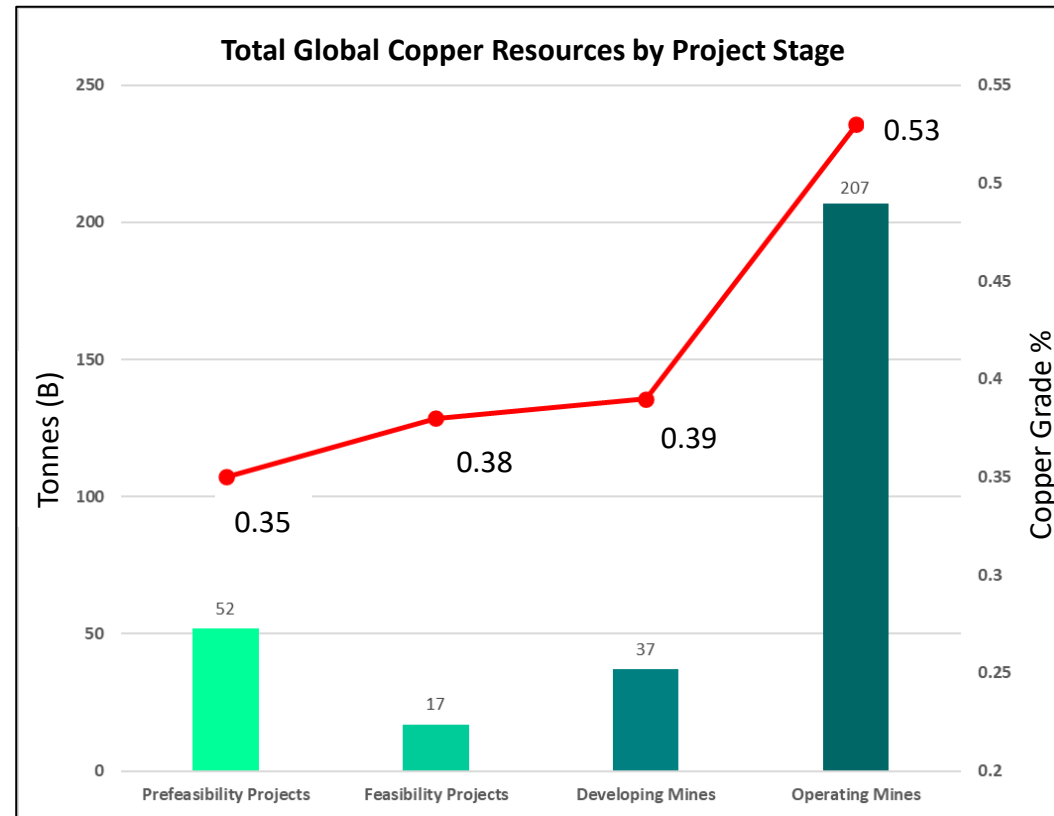
Copper Development Pipeline

THE FUTURE LANDSCAPE IS CHANGING AT A RAPID PACE

- The average age of the world's top 10 copper mines is **95 years old!!**
- Average copper grade of:
 - operating mines **0.53%**
 - projects under development **0.35-0.39%**
- Incentive price to attract investment in world's top 50 copper projects is **US\$13,000/t (~US\$5.50/lb)**
- **US\$150B investment** in development of copper projects required to meet net zero targets
- **Project development lead times long- 17 years!**
- Global copper demand forecast to be **25Mt in 2030**, implying a looming **7Mt copper deficit**
- **Meeting ambitious climate goals will turbo-charge demand for minerals such as copper**



Drastic change in copper pricing environment required to incentivise investment in next wave of copper projects





Investment Synopsis

WELL POSITIONED TO CREATE VALUE

- Excellent projects in Tier 1 Jurisdiction with exposure to high grade gold and large-scale copper
- Management and technical capability established to unlock project value
- +2Moz gold resource already defined with potential to substantially grow
- Excellent chance for significant porphyry-copper-gold discoveries with high conviction targets defined and ready to drill in 2023
- Opportunities to farm-out to expedite progress and create wealth under consideration-significant inbound interest





THANK YOU

 @titanminerals
 info@titanminerals.com.au
 +61 8 6375 2700

Key Contacts

Investor Relations:

Australia: melanie@titanminerals.com.au

North America: tamara.brown@titanminerals.com.au

