

Emerging Gold
Developer and
Porphyry Copper
Explorer in Ecuador

Investor Presentation

March 2024



ASX: TTM TITANMINERALS.COM.AU

# Disclaimer and Forward-Looking Statements



#### COMPETENT PERSON'S STATEMENTS

Exploration results referred to in this presentation have been previously reported by Titan in ASX announcements. Titan confirms that it is not aware of any new information or data that materially affects the information included in that announcement. The Competent Person for the presentation was Melanie Leighton. The Company 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.

The information in the presentation that relates to the Estimation and Reporting of the Dynasty Mineral Resources has been compiled and reviewed by Ms Elizabeth Haren of Haren Consulting Pty Ltd who is an independent consultant to Titan Minerals Limited and is a current Member and Chartered Professional of the Australian Institute of Mining and Metallurgy and Member of the Australian Institute of Geoscientists. Ms Haren has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code). Ms Haren consents to the inclusion in this report of the matters based on her information in the form and context in which it appears.

Dynasty	Indicated					Inferred					Total				
Project	Tonnes	Tonnes Grade 0		Contained Metal		Tonnes	Grade		Contained Metal		Tonnes	Grade		Contained Metal	
	(M)	(g/t)		(Moz)		(M)	(g/t)		(Moz)		(M)	(g/t)		(Moz)	
		Au	Ag	Au	Ag		Au	Ag	Au	Ag		Au	Ag	Au	Ag
Cerro Verde	15.17	2.01	13.51	0.98	6.59	13.63	2.15	12.44	0.94	5.45	28.80	2.08	13.00	1.92	12.04
Iguana	2.41	2.36	16.08	0.18	1.25	8.52	1.92	13.00	0.53	3.56	10.93	2.02	13.68	0.71	4.81
Trapichillo	0.05	1.89	9.28	0.00	0.01	2.89	3.83	39.80	0.36	3.70	2.94	3.80	39.31	0.36	3.71
Papayal	0.46	3.04	48.24	0.05	0.72	0.41	6.24	53.80	0.08	0.71	0.87	4.54	50.85	0.13	1.43
Total	18.09	2.09	14.73	1.21	8.57	25.44	2.33	16.40	1.90	13.41	43.54	2.23	15.70	3.12	21.98

lotes:

1.Reported ≥ 0.5 g/t Au. 2.Some rounding errors may be present. 3.Tables are rounded as the final steps. Totals are not calculated after rounding. 4.M − million. Oz- ounce. g/t − grams per tonne.

#### 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%, Mo = 80%. Cu Eq (%) was calculated using the following formula: ((Cu% x Cu price 1% per tonne x Cu recovery) + (Au(g/t) x Au price per g/t x Au recovery) + (Mo pm x Mo price per g/t x Mo recovery) + Ag ppm x Ag price per g/t x Ag recovery)) / (Cu price 1% per tonne x Cu recovery). Cu Eq (%) = Cu (%) + (0.54 x Au (g/t)) + (0.00037 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.

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#### **AUTHORISATION**

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

# **Titan Investment Proposition**

Unlocking the value of gold and copper projects in Ecuador



Large scale gold-copper projects in underexplored and highly prospective Andean Copper Belt



3.1 Moz Gold & 22 Moz Silver in JORC Resources at Dynasty Gold Project



Significant potential for rapid resource growth and new discovery



Ecuador- An emerging Tier 1 mining jurisdiction with significant government support



Strong community engagement and support with social license to operate



Experienced board, strong management and technical capability



# Emerging Gold Developer & Porphyry Copper Explorer



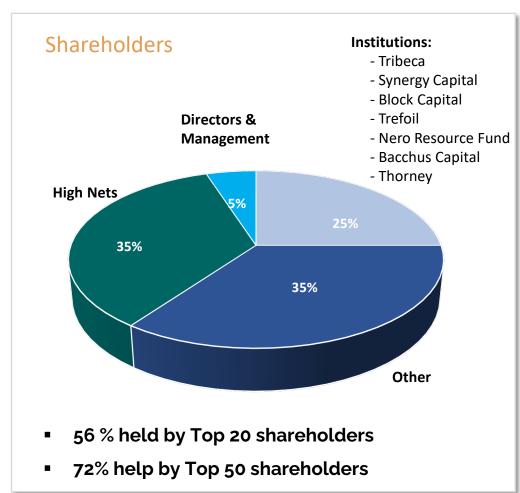
### Corporate Snapshot

### **Capital Structure**

TTM	ASX
\$0.030	Share Price
1.691B	Issued Shares
\$50M	Market Cap
\$0.017/\$0.076	52 week low/ high
\$2.91M*	Cash

\*AUD at 31 Dec 2023

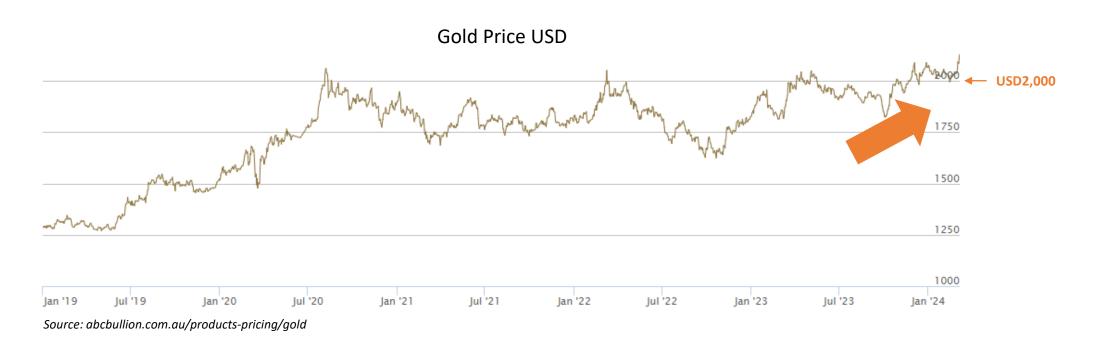




### Poised to Take Advantage of Forecast Gold Price



Significantly undervalued, development ready gold project with substantial resources set to grow



- Gold demand to hit record highs with central-bank buying
- Resources of 3.1Moz gold and 22Moz silver equates to and EV of ~US\$10/oz
- TTM significantly undervalued compared to peer ASX listed gold explorers and developers

# Advancing Gold Development and Copper Exploration



### Adding value through exploration, resource growth and development studies



✓ Dynasty Exploration programs expanding into new, highly prospective areas



✓ Dynasty Mineral Resource Update- resource growth and conversion



✓ Dynasty Pre-scoping study and preliminary metallurgical testworkdue Q3 2024



✓ Large-scale copper porphyry potential confirmed with drill ready targets at Linderos and Copper Duke Projects



✓ All environmental permits for exploration work and drilling in place



✓ Discussions with key potential strategic partners well advanced



# **Mining Investment Growing Momentum**

Investment in new jurisdictions to meet future metals supply





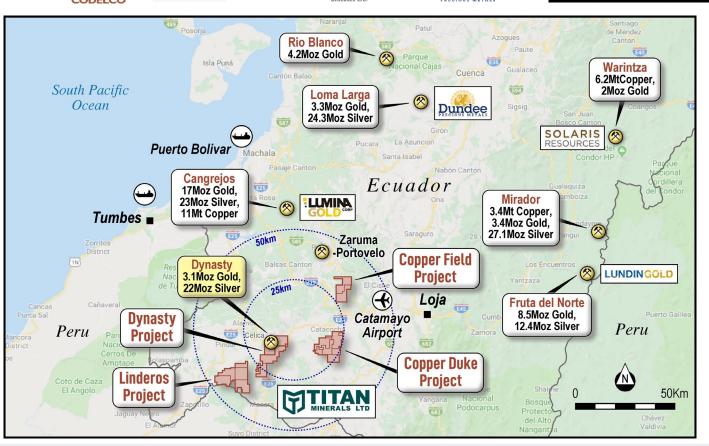


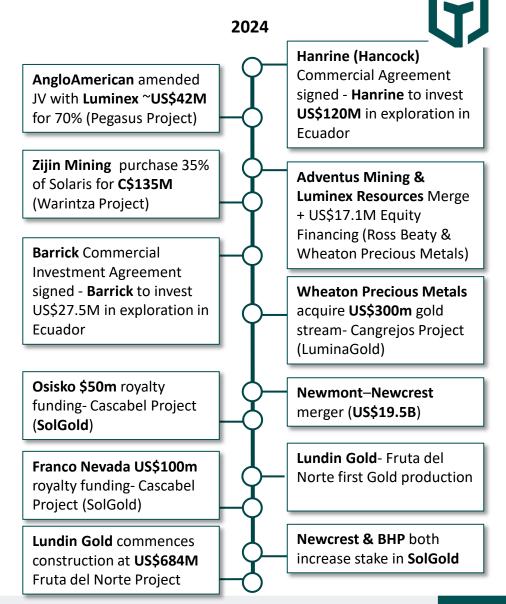






**HANCOCK PROSPECTING** 





2017

# **Government Supportive of Responsible Mining**

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#### Emerging Tier 1 mining jurisdiction



**Government supports responsible mining** as part of Ecuador's economic revitalization



**New president vowed** "to return peace, to give education, to provide employment"



**Mining Investment Attractiveness** Index improved from 45 (2015) to 69 (2022)<sup>1</sup>



Lowest effective tax rates, low inflation, USD economy and fastest permitting in Latam



Mining and exploration contributing significantly to taxes, employment, infrastructure and communities, currently 1% GDP, targeting 10-12%



Several major projects advancing through development and into production, with 2 major mines now in full production

#### Government agreements in support of mining 2023 **Dundee Precious Metals** announces Investment SolGold PLC announces Protection Agreement for **Exploitation Protection** Loma Larga copper-gold Agreement with project in Ecuador Government of Ecuador for \$35B Cascabel Project Salazar Resources. President of Ecuador Signs SolGold PLC announces Environmental renewal for the Cascabel Consultation Decree Project concession Clearing the Path for the Final Stage of **Environmental Licensing** Solaris Resources and for El Domo – Curipamba Government of Ecuador **Gold Project** Announce Investment Protection Agreement for Warintza Project Salazar Resources. Government of Ecuador Commits to Investment Protection Agreement for **SolGold PLC** announces the Curipamba - El Domo **Investment Protection** Copper-Gold Project Agreement for the Cascabel Project in northern Ecuador 2021

1. Fraser Institute Annual Survey of Mining Companies 2022

# Ecuador, Ready for Mining Revolution

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#### Infrastructure Rich



#### Good Access & Explorability

- Low Elevation (600-1300m RL)
- ✓ Catamayo Airport ~80 km east, daily flights
- ✓ Pan-American Highway runs alongside Dynasty Project providing good project access
- Existing tracks and roads within projects allow good access for exploration

#### Infrastructure Rich

- ✓ Tumbes Port ~90km NW and Guayaquil Port, ~200km N
- ✓ Power- Majority of Ecuador's electricity sourced from Hydropower

#### Workforce Ready

- ✓ Loja City ~100 km by road, skilled workforce
- ✓ Nearby towns provide labour and facilities to support exploration and mining

# The Projects



### Large-scale, advanced gold-copper exploration projects in emerging Tier 1 mining jurisdiction

#### Dynasty Gold Project (100%, 139km2)

- □ Substantial Mineral Resource of **3.1Moz gold and 22Moz silver** established
- Large epithermal gold district, opportunity to substantially grow resources

#### Linderos Project (100%, 143km2)

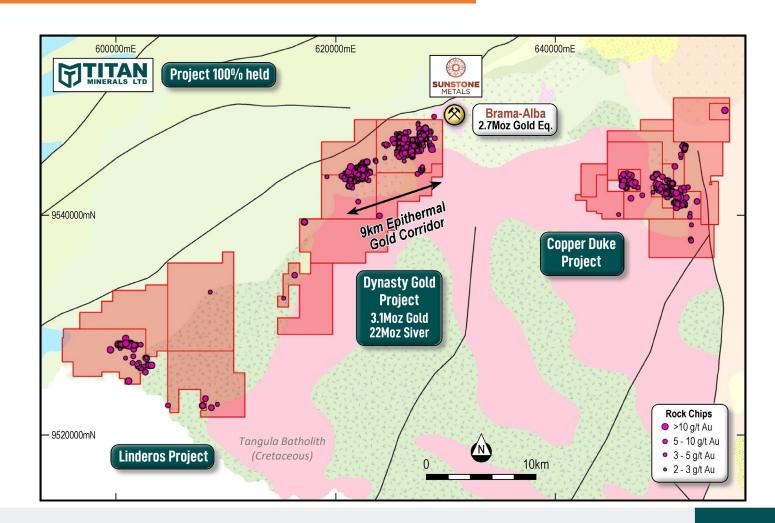
 Porphyry copper and epithermal goldsilver systems confirmed by drilling

#### Copper Duke Project (100%, 131km2)

■ Evidence for large-scale porphyry copper systems and epithermal gold in geophysics, surface mapping and geochemistry

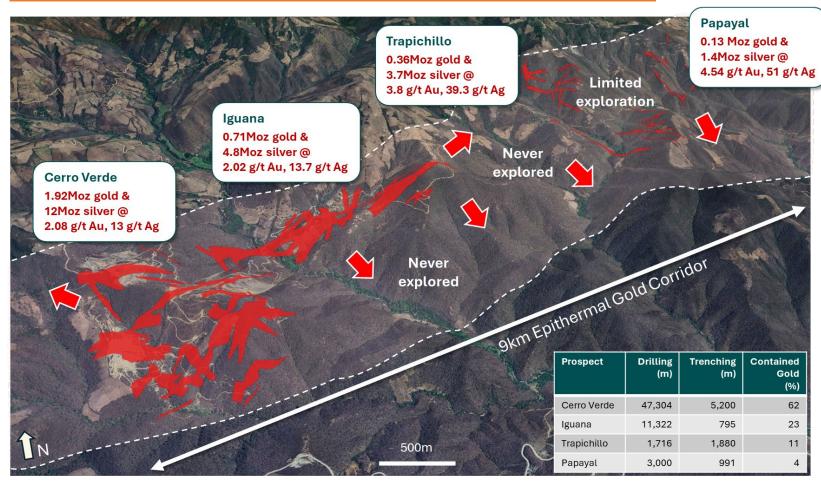
#### Copper Field Project (100%, 65km2)

■ Early-stage, evidence for precious and base metal epithermal systems





### Flagship project with substantial resources set to rapidly grow



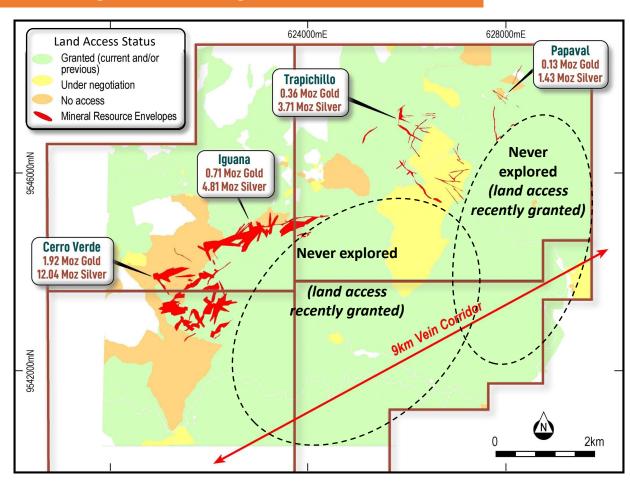
Dynasty Project displaying Indicated and Inferred Mineral Resources. NB. Resources Extend from Surface

- 9km epithermal gold corridor hosting substantial resource of 3.1Moz gold and 22Moz silver @2.23 g/t Au, 15.7 g/t Ag extending from surface
- High-grade resources of 2.09Moz gold and 13.33Moz silver @ 3.77 g/t Au, 24.0g/t Ag
- 52% of resources (1.62Moz) contained within top 100m from surface
- 82% of resources (2.55Moz) contained within top 200m from surface
- 39% Indicated, 61% Inferred
- Cerro Verde- 51% Indicated Resources with preliminary pit optimisation indicating pit depths of 350-400m



#### Relationships with communities continue to grow, unlocking substantial new areas

- Land agreements recently executed providing access to high priority areas of the Dynasty epithermal gold corridor, including areas never previously explored
- Land agreements creating mutually beneficial partnerships, providing employment and training opportunities to communities at Dynasty
- Mapping and surface geochemistry programs now expanded into new, highly prospective areas never previously explored



Dynasty Land Access Map, updated February 2024



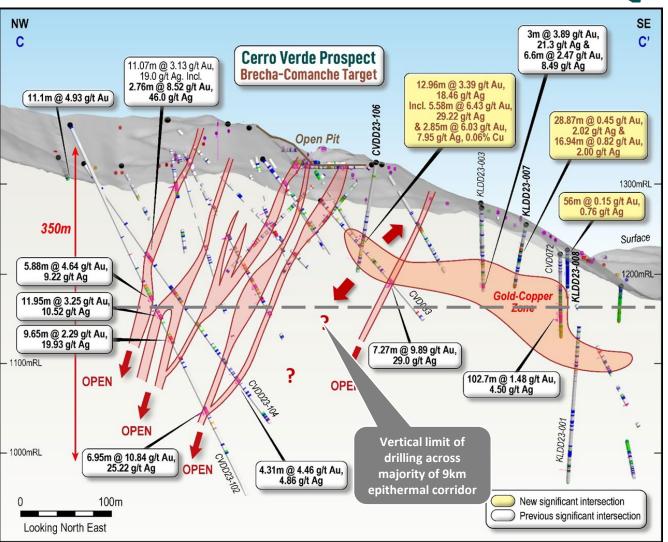






Mineralisation open along entire 9km corridor

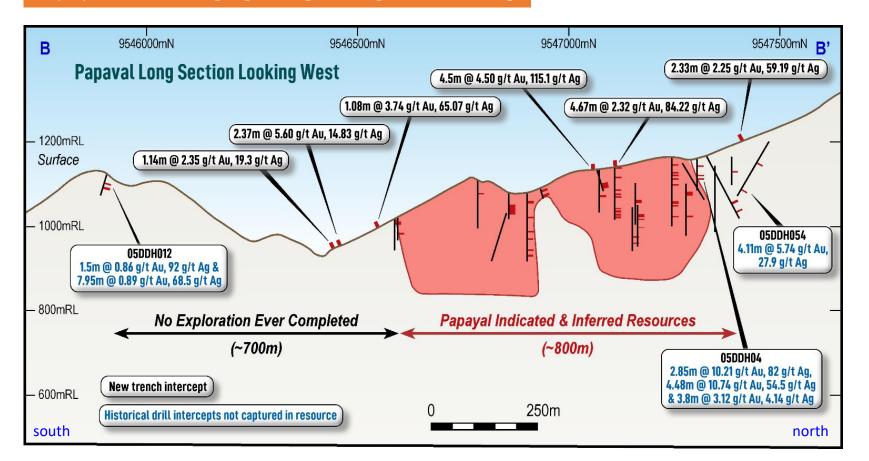




Brecha-Comanche Cross Section (Cerro Verde) displaying significant drill intercepts



### Papayal delivers high grade gold in growth drilling



 Drill and trench results highlight presence of strong gold and silver mineralisation outside current resources at Papayal

- First drilling into Julia vein system returned:
  - > 5.27m @ 3.53 g/t Au, 72.3 g/t Ag from 85.81m,
    - incl. 0.66m @ 25.1 g/t Au, 492 g/t Ag.
  - > 0.40m @ 65.5 g/t Au, 83.2 g/t Ag from 81.62m.
  - > 2.00m @ 5.29 g/t Au, 32.4 g/t Ag from 12.0m
- Trench results have extended Papayal mineralisation south and north:
  - > 2.37m @ 5.6 g/t Au, 14.8 g/t Ag
  - > 2.33m @ 2.25 g/t Au, 59 g/t Ag



Early workstreams underway to optimise development strategy and define future workstreams

### Pre-Scoping Study

- ABGM Mining Engineers have commenced prescoping study workstream including:
  - ✓ Pit optimization/ pit envelopes
  - ✓ Techno Model Economic assessment
  - ✓ Optimal mining rates and grade cut-offs
  - Mine scheduling- stockpile optimisation, mining and grade control
  - ✓ Viability of ore pre-concentration
  - Areas for underground development, ore stope wireframes
  - ✓ Determine additional exploration/ resource extension areas
  - ✓ Scoping Study recommendations report

### **Preliminary Metallurgy**

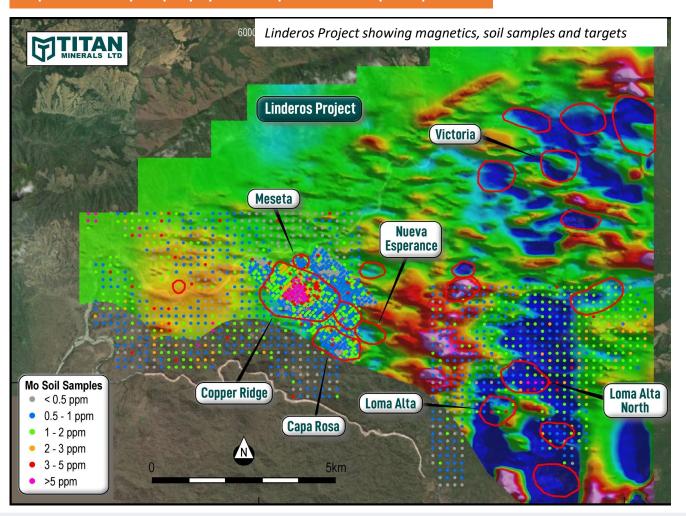
- Preliminary metallurgical testwork has commenced on Cerro Verde<sup>1</sup> samples to assess potential recoveries for Au, Ag and Cu in oxide and sulphide ore
- Metallurgical testwork includes:
  - ✓ Grind establishment
  - ✓ Rougher Floats
  - ✓ Cleaner Float
  - Cyanide Bottle Rolls- Feed and float tails

1. Cerro Verde represents 2/3 of Dynasty Mineral Resources

# **Linderos Project**

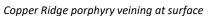


### Pipeline of porphyry and epithermal prospects



- Substantial porphyry copper system at Copper Ridge and high-grade epithermal gold system at Meseta Gold
- Exploration focus on defining further porphyry copper mineralisation
- Soil geochemistry indicates presence of multiple porphyry copper and epithermal gold systems across the project







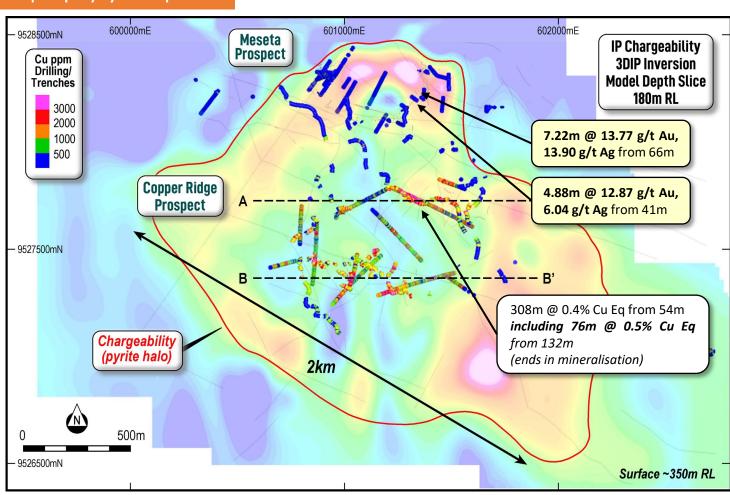
Copper Ridge hand specimen with Cu oxides

### **Linderos Project**



#### 2km chargeability halo highlights large-scale copper porphyry footprint

- Porphyry copper system confirmed from surface to 500m depth, mineralisation remains open.
- Significant porphyry drill intercepts include:
  - 308m @ 0.4% Cu Eq from 54m, including
     76m @ 0.5% Cu Eq from 132m
- High grade epithermal gold system confirmed at Meseta Gold prospect, mineralisation remains open
- Significant epithermal gold results include:
  - 7.22m grading 13.77 g/t Au, 12.9 g/t Ag from 66m
  - 4.88m grading 12.87 g/t Au, 6.0 g/t Ag from 41m
- Large-scale (2km) 3D IP chargeability anomaly indicates larger porphyry system than recognised by drilling



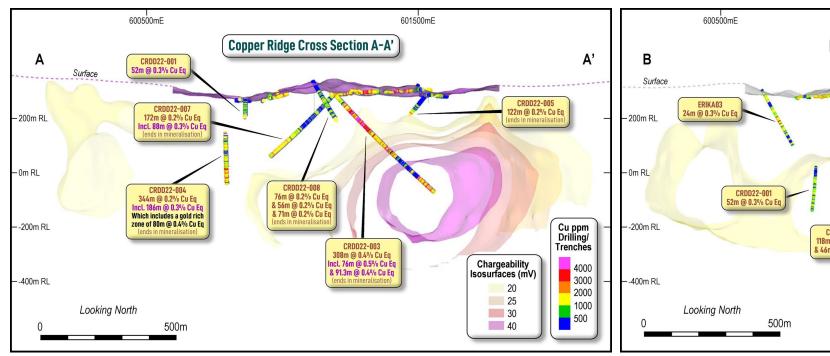
3D IP Chargeability Depth Slice at 180mRL, approximately 170m below surface

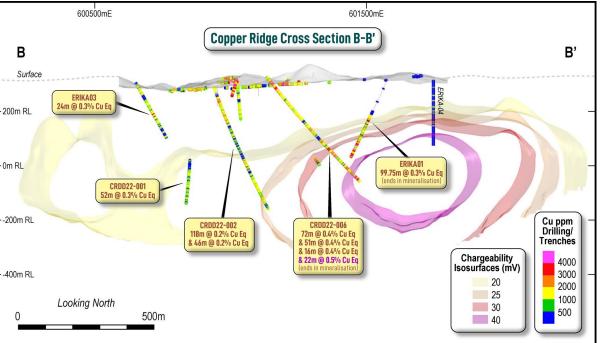
### **Linderos Project**



#### Copper Ridge drilling ends in porphyry copper mineralisation, open laterally and at depth

- IP survey confirms Copper Ridge Porphyry and Meeta epithermal gold systems linked
- Much larger porphyry system potential confirmed by IP survey- chargeability mapping phyllic (pyrite) alteration well beyond currently defined porphyry mineralisation
- Meseta trenching and mapping has unveiled phyllic altered diorite porphyry, suggesting proximal to porphyry copper system.



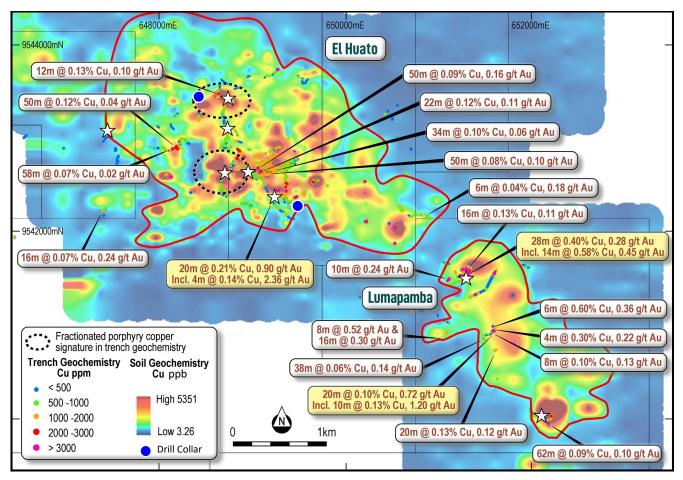


Cross Sections are east-west oriented and show IP chargeability isosurfaces, drillholes and trenches displaying copper.

### **Copper Duke Project**

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#### Geochemical signature akin to Tier 1 porphyry deposits



Plan View of El Huato and Lumapamaba prospects displaying soil and trench samples (Cu ppm)

- 7km porphyry alteration footprint highlighted by magnetics, soil geochemistry, and mapping
- Diorite porphyry host rock derived from high pressure hydrous melt ie. same magma type of global Tier 1 porphyry systems
- Age Dating confirms Palaeocene- same age as giant porphyry copper deposits of Peru
- Multi-phase outcropping targets copper porphyry, intrusion related gold, breccia copper and epithermal gold







# Long Term Partnerships Developed with Key Stakeholders



Commitment to transparency, education, employment and inclusion



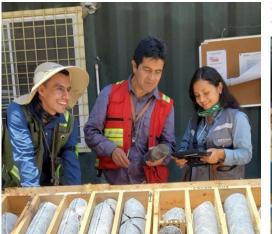




Responsible exploration ensuring minimal disturbance to native vegetation and natural landscape

COMMUNITY BENEFIT

Working to benefit local communities, skills training, local partnerships and community initiatives





BIG IDEAS

Exploring blue-sky opportunities in fertile systems for game changing discoveries and sustainable projects

RESPONSIBLE STEWARDSHIP

Commitment to integrity, safety, best practice and responsible planning and management of resources

Communities previously opposed to mining are changing their attitude, after seeing the benefits generated by Titan's presence, through the generation of jobs and community development initiatives.

### **Directors & Management**



Track record of creating shareholder value through discovery, development & deal making



### **Next Steps and Upcoming Milestones**



### Exploration in new areas, resource growth and development studies

1. Q1 + Q2 2024- Dynasty exploration work programs in new, highly prospective areas. New results and definition of new resource growth targets.

Q2 2024- Dynasty Mineral Resource Update targeting growth and classification upgrades through improved geological confidence.

3. Q3 2024- Dynasty preliminary metallurgical testwork results.

Q3 2024- Dynasty Pre-scoping study results.

Drill ready, fully permitted targets at Linderos and Copper Duke Projects-discussions with key potential strategic partners well advanced.



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