

Substantial Gold Development and Large-Scale Porphyry Copper Exploration in Ecuador

Investor Presentation
October 2023



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		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 world class gold and copper assets



Large Scale Resource at Dynasty-3.1 Moz Gold & 22 Moz Silver



Ecuador- An emerging Tier 1 mining jurisdiction



Strong
Management &
Technical
Capability



World-Class
Gold-Copper
Projectsmeaningful
exposure to largescale gold and
copper



Significant Potential for Rapid Resource Growth & New Discovery



Social License to Operate- strong community engagement and support



Potential Tier 1 Projects- Resource Growth and Exploration Upside



Corporate Snapshot



MELANIE LEIGHTON
CHIEF EXECUTIVE OFFICER
Geologist & Business Master

20 years' experience in mining, with considerable experience in Latin America. Held senior and executive management roles with Hot Chili Ltd and Harmony Gold. Non-Executive director for ASX listed companies GBR and IND.



PETER COOK
NON- EXEC CHAIRMAN
Geologist & Mineral Economist

experience in +35 years' exploration, mining and corporate management. Founded and served as Managing Director/ Chairman for many successful mining and exploration companies.



MATTHEW CARR EXECUTIVE DIRECTOR

Entrepreneur & Project Developer

Experienced company director, founder of Urban Capital Group, a private equity firm with a focus on property backed investment and security.



BARRY BOURNE
NON-EXEC DIRECTOR
Geologist and Geophysicist

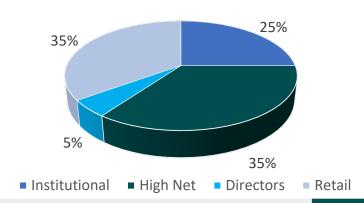
Principal Consultant at Terra Resources, specialising in exploration targeting.
Previously held senior and management roles with Barrick Gold and Homestake Gold.

Capital Structure

ТТМ	ASX
\$0.037*	Share Price
1.52B	Issued & Outstanding Shares
~\$56M	Market Cap
\$0.035/\$0.105	52 week low/ high
\$4.8M \$3.9M \$2.5M	Cash Receivables Debt

*AUD at 18 Aug 2023

Shareholders



Titan Management Team





PABLO MORELLI EXPLORATION MANAGER

Geologist with +15 years' experience in epithermal and porphyry systems. Recently worked on the Cerro Casale and Caspiche copper-gold projects in Chile, a JV between Newmont & Barrick Gold.

Previously held roles with Barrick, Newmont, Kinross and Rio Tinto working in northern and central Chile, and Mexico.



CECILIA PEÑAHERRERACSR MANAGER

25 years' experience in community relations, land negotiation and acquisition, population resettlement, of establishment community development plans, compensation policies, management of social conflicts, which has allowed her to strategic generate important communities, alliances with authorities and local governments.



FERNANDO INCAOPERATIONS MANAGER

Civil engineer with 14 years' experience in project management, public procurement, geotechnical engineering.

He has worked in public and private companies in design, construction and supervision of hydroelectric projects, metal structures and tunnels in South America.



KATHY SKEAD DATABASE MANAGER

Experienced GIS Specialist and Spatial Data Scientist with a demonstrated history of working in the geoscience industry.

Master of Applied Science in Spatial Analysis for Public Health from Johns Hopkins University.



JOHANNA YUNGA ENVIRONMENTAL MANAGER

Chemical engineer, with a master's degree in environmental management and a specialization in mining safety.

Experience in the application of environmental regulations for Mining Operations.

Key Consultants



MIKE SKEAD
CHIEF TECHNICAL ADVISOR
Ex. Gold Corp, Randgold,
Newmont



FREDDY VILLAO LEGAL COUNSEL & GOVERNMENT AFFAIRS ADVISOR

Ecuadorian Government Supportive of Mining



Recent government agreements in support of mining

Emerging Tier 1 mining jurisdiction



Government supports responsible mining, considered critical to Ecuador's economic revitalization



New president elected 15 Oct 2023 who has vowed "to return peace to the country, to give education to the youth, to provide employment to the many people who are seeking it"



Mining Investment Attractiveness Index improved from 45 (2015) to 69 (2022)¹



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



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



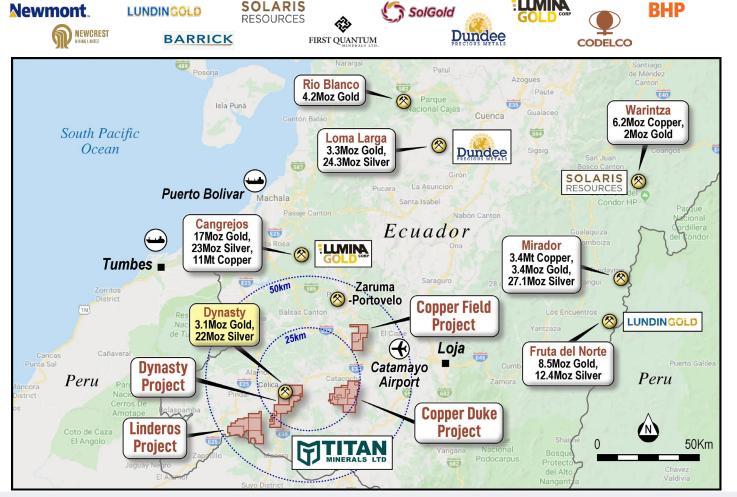
Several major projects advancing through development and into production, with **2 major mines now in full production**



1. Fraser Institute Annual Survey of Mining Companies 2022

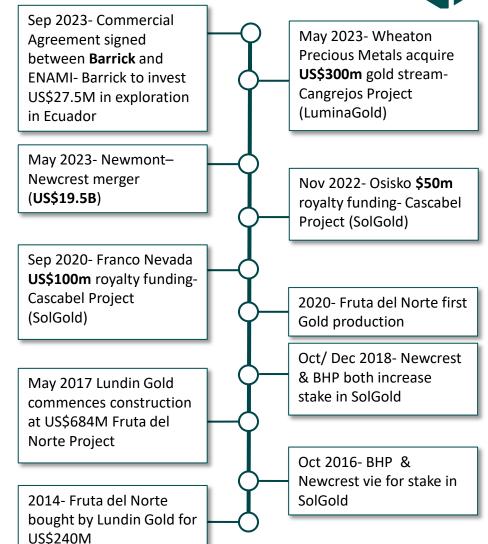
Mining Investment Growing Momentum

Investment in new jurisdictions to meet future metals supply



Foreign investment in Ecuador over recent years





The Projects



Large-scale, well located, gold-copper projects in Tier 1 jurisdiction

Dynasty Gold Project (100%, 139km2)

- □ Substantial Mineral Resource of **3.12Moz gold and 22Moz silver** established
- Large epithermal gold district, opportunity to substantially grow resources

Linderos Project (100%, 143km2)

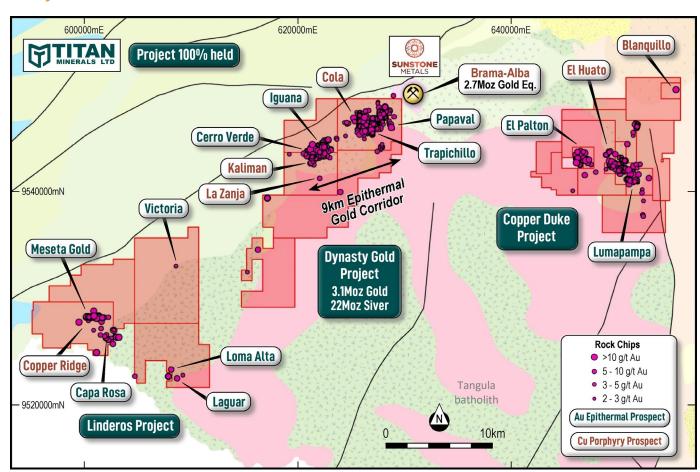
 Porphyry copper and epithermal gold-silver systems confirmed by drilling

Copper Duke Project (100%, 131km2)

■ Evidence for epithermal gold and largescale porphyry copper systems in geophysics, surface mapping and geochemistry

Copper Field Project (100%, 65km2)

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

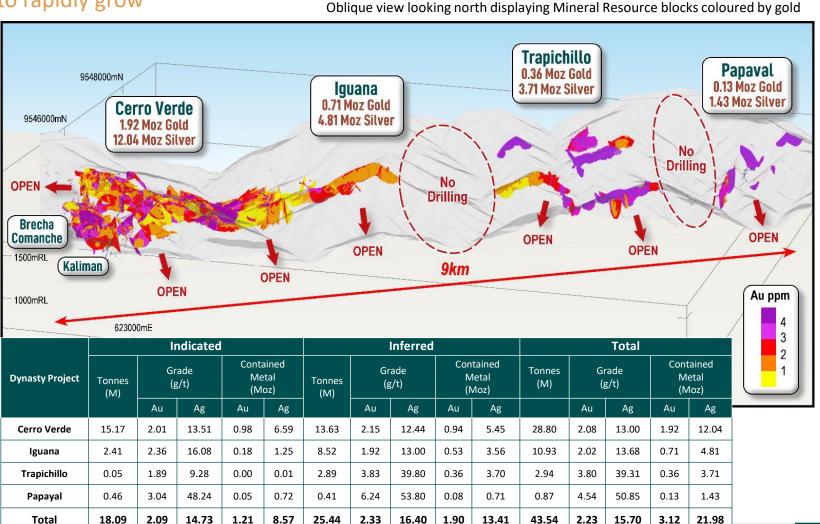


Dynasty Gold Project



Substantial resource with potential to rapidly grow

- 9km epithermal vein corridor hosting substantial resource of 3.12
 Moz gold and 22 Moz silver
- High-grade component of 17.3Mt
 3.77 g/t Au, 24.0g/t Ag 2.09
 Moz gold and 13.33 Moz silver
- More than half Mineral Resources (1.67Moz) contained within top 100 metres
- Preliminary optimisation studies indicate robust economics at 0.5 g/t Au cut-off
- Significant potential to grow resources and upgrade classification through moderate drilling and geological workstreams

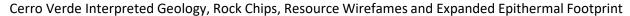


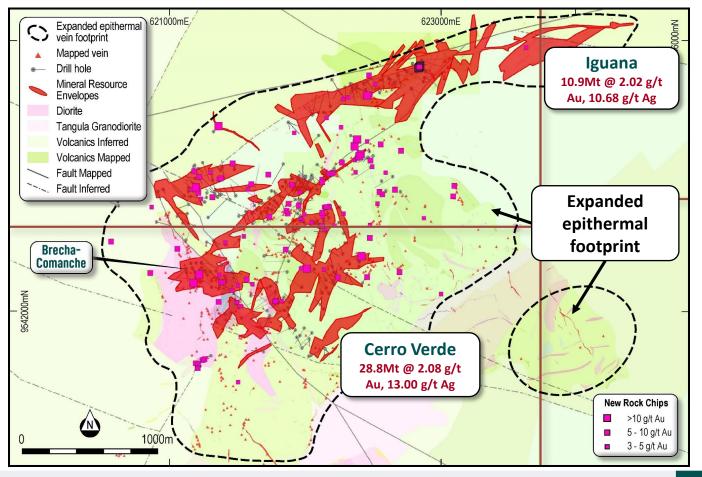
Dynasty Epithermal Footprint Expanded



Resource growth drilling underway

- Surface mapping and geochemistry has expanded epithermal gold mineralisation footprint well beyond currently defined resources
- Soil geochemistry has highlighted new high priority areas exhibiting large-scale coincident gold- silver- arsenic- antimony anomalies
- Presence of elevated antimony suggest strong depth potential, implying mineralisation at surface is at a high level in the mineral system
- Papayal and Trapichillo prospects exhibit extremely high gold and silver grades, albeit low tonnes, due to sparse drilling
- Excellent opportunity to grow high grade, high margin gold resources





Dynasty Depth Extensions Confirmed

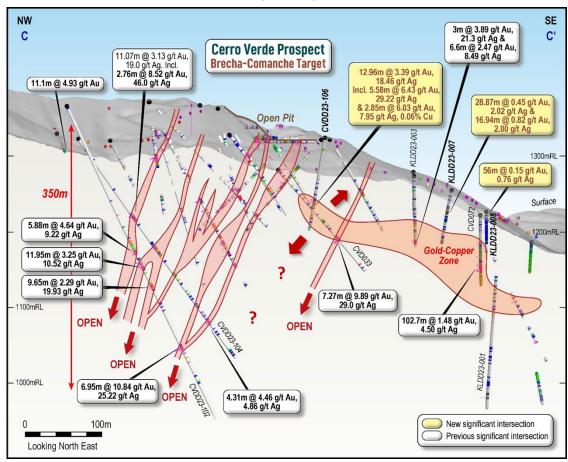


Depth extensions open along 9km epithermal system

- Majority of Dynasty vein system drilled to less than 200m
- Substantial depth extensions to epithermal gold system confirmed at Brecha-Comanche, Cerro Verde prospect
- Brecha-Comanche mineralisation defined by drilling to
 +350m below surface, and still remains open
- Potential to add substantial resources by targeting and delineating depth extensions across 9-kilometre vein system



Brecha-Comanche Cross Section with Interpreted Epithermal Vein Mineralisation



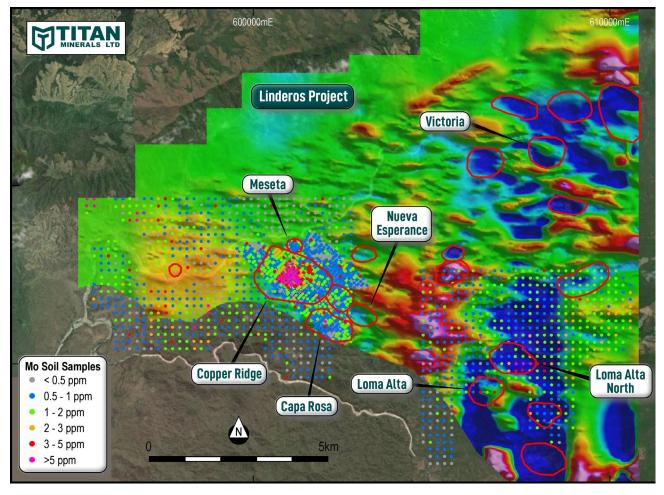
Linderos Project



Pipeline of compelling porphyry and epithermal targets

- Substantial porphyry copper system confirmed by drilling from surface at Copper Ridge prospect
- High grade epithermal gold system confirmed by drilling from shallow depths at Meseta Gold prospect
- Exploration focus on defining further high grade copper porphyry and epithermal gold mineralisation
- Soil geochemistry indicates presence of multiple porphyry copper and epithermal gold systems across the project
- Pipeline of high conviction targets to feature in forthcoming exploration work programs

Linderos Project Overview showing magnetics, soil geochemistry (molybdenum) and targets



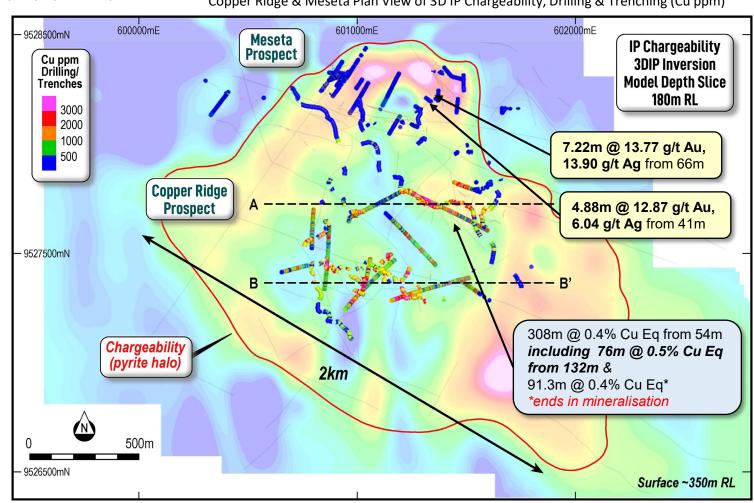
Linderos Project



2km chargeability halo highlights large-scale porphyry footprint

Copper Ridge & Meseta Plan View of 3D IP Chargeability, Drilling & Trenching (Cu ppm)

- **Substantial** porphyry copper system **confirmed** by drilling from surface to 500m at Copper Ridge, mineralisation remains open in all directions
- Significant results include 308m @ 0.4% Cu Eq from 54m, with a higher-grade intercept of 76m @ 0.5% Cu Eq from 132m
- epithermal system Hiah grade gold confirmed by drilling from shallow depths at Meseta Gold, mineralisation remains open.
- Significant results include:
 - 7.22m grading 13.77 g/t Au, 12.90 g/t Ag from 66m
 - 4.88m grading 12.87 g/t Au, 6.04 g/t Ag from 41m
- Large-scale 2km 3D IP chargeability anomaly indicates larger porphyry system than recognised by drilling to date

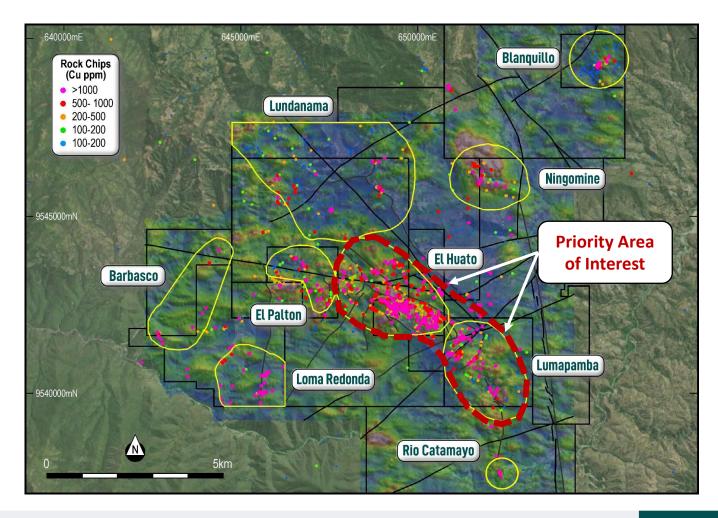


Copper Duke Project



Tier 1 porphyry copper potential supported by multiple datasets

- 7km porphyry alteration footprint highlighted by magnetics, soil geochemistry (coincident goldcopper-molybdenum), trenching and surface mapping
- Corridor hosting multiple clusters of intrusive centres identified in geophysics
- Diorite and quartz diorite intrusive phases mapped at surface with abundant stockwork and sheeted veins
- Strong copper oxide and iron oxide mineralisation from surface
- Multi-phase outcropping targets:
 - ☐ Porphyry copper-gold mineralization
 - Breccia copper mineralisation
 - ☐ Epithermal gold / quartz-magnetite vein system

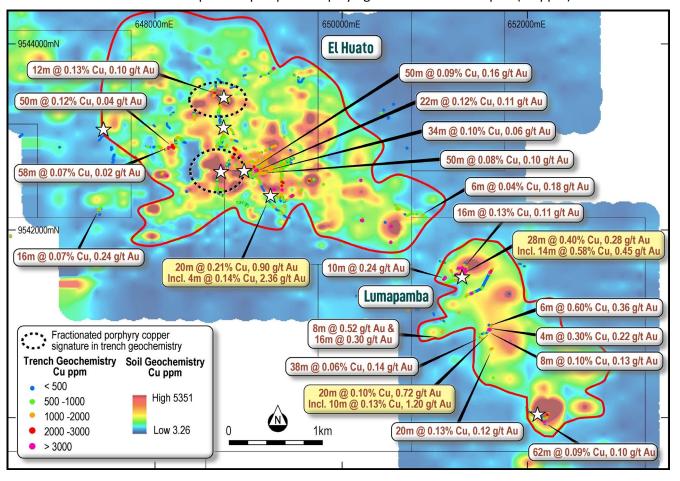


Copper Duke Project



Porphyry signature akin to Tier 1 porphyry deposits

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



- Wide intervals of copper and gold from surface highlighted in trenching at El Huato and Lumapamba:
 - 20m @ 0.21% Cu, 0.90 g/t Au
 - 28m @ 0.40% Cu, 0.28 g/t Au
 - 20m @ 0.10% Cu, 0.72 g/t Au
- Fractionated quartz diorite intrusive phase with distinct porphyry copper signature highlighted by geochemistry
- Quartz diorite derived from high pressure hydrous melt ie. magma type required for large long-lived porphyry copper deposits
- Age dating confirms mineralisation as Palaeocene- the same age as giant copper porphyry deposits in Peru
- Only 4 shallow holes ever drilled!

Titan- A New Era in Exploration & Development



Long term partnerships developed with key stakeholders







Responsible exploration ensuring minimal disturbance to native vegetation and natural landscape

COMMUNITY BENEFIT

Working to benefit local communities, skills training, economic opportunities, 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 and best practice, to safety, scientific excellence and responsible planning and management of resources

Responsible Exploration



Commitment to transparency, education, employment and inclusion







Community involvement and consultation at each step, to define development projects for win-win outcomes

- Titan employs locally whenever possible, many geologists and field technicians hired from local communities
- Significant improvement in land access across all projects thanks to dedicated efforts of CSR team

Titan & The Communities



Improving the quality of life for communities in which we operate- now and for the future!



Repowering of water treatment plants and maintenance of septic tanks



Donation of grains to local farmers



Medicines and vitamins supplied for children with chronic malnutrition



Materials provided for maintenance of churches, and Community Centres



Pro- mineral exploration and mining rally, local community showing support for Titan Minerals

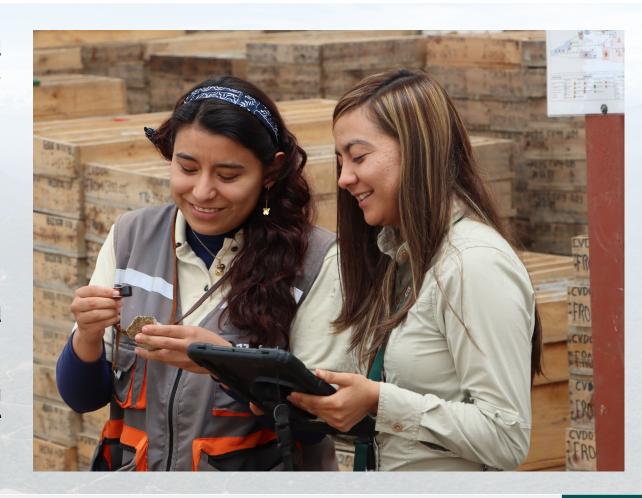
Communities previously opposed to mining are changing their attitude, after seeing the benefits generated by Titan's presence, through the generation of jobs and community development initiatives.

Next Steps



Development ready gold project with resources set to rapidly grow

- Determine ultimate size of Dynasty Epithermal Gold System- lateral and vertical extensions to be tested over 9km of strike
- Resource growth drilling at Dynasty Q3-Q4 2023
- Dynasty Resource Upgrade- Q1 2024
- Dynasty Feasibility studies to commence- Q1 2024
- Continue advancing low cost, high value add exploration activities across all projects
- Secure the right partner for exploring and developing large-scale porphyry projects to unveil their true potential





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