

QUARTERLY ACTIVITIES REPORT

For the period ending 31 December 2023

Key Highlights

- 22 diamond holes for 2,240m completed, targeting resource growth at the Cerro Verde and Papayal prospects, at the Dynasty Gold Project.
- Julia vein system (Papayal), successfully confirmed by drilling, with several holes intersecting epithermal vein hosted mineralisation from shallow depths.
- Mapping and surface geochemistry continued to advance at Dynasty, unveiling new veins and a mineralisation footprint well beyond currently defined resources.
- Exploration programs at Dynasty included collection of 885 soil samples, 187 rock chip samples, the development of 24 trenches for 138 samples, the relogging of 6,336m of historical diamond core and 396 hectares of detailed surface mapping.
- An accelerated non-renounceable Entitlement offer successfully raised the maximum possible amount of A\$4.1 million at A\$0.030 per share, with strong support from existing institutional investors.
- A Retail Entitlement Offer raised approximately A\$0.67 million at A\$0.030 per share, with a further ~A\$3.0M able to be placed to institutional investors under the Shortfall component of the Entitlement Offer.
- The Company continued to engage with potential strategic partners for investment into its large-scale copper porphyry projects.

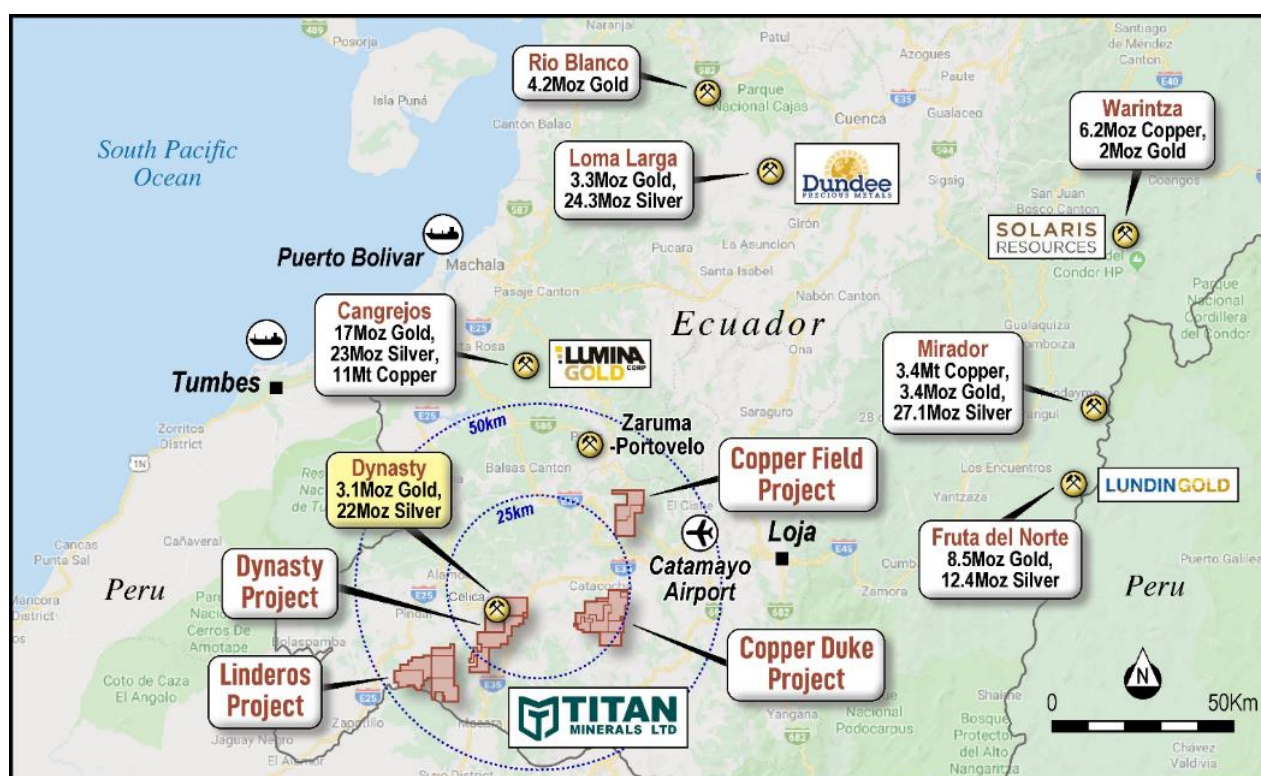


Figure 1. Titan Minerals southern Ecuador Projects, peer deposits and surrounding infrastructure

EXECUTIVE SUMMARY

Titan Minerals Limited (**Titan** or the **Company**) (**ASX:TTM**) is pleased to provide a summary of activities completed at its epithermal gold and copper porphyry projects in southern Ecuador, for the quarter ending 31 December 2023.

The Company has continued to advance its flagship Dynasty Gold Project (**Dynasty**), with resource development drilling and expanded mapping and surface geochemistry programs completed along the 9-kilometre epithermal gold corridor.

In total 22 diamond drill holes were completed for 2,240 metres across the Cerro Verde prospect (**Cerro Verde**) and Papayal prospect (**Papayal**) during the quarter. Of which, 9 diamond holes for 973 metres were drilled at Cerro Verde to test lateral extensions to existing resources, and 13 diamond holes for 1,267 metres were drilled at Papayal, to test newly discovered vein systems unveiled by recent mapping and surface geochemistry.

Generative exploration work at Dynasty included the collection of 885 soil samples and 187 rock chip samples, the development of 24 trenches for 138 samples, and the relogging of 6,336 metres of historical diamond core, and 396 hectares of detailed surface mapping.

Exploration activities were largely focussed on the Papayal and Trapichillo prospects, where the Company recently expanded its land access agreements to encompass new, prospective areas for targeting further resource growth.

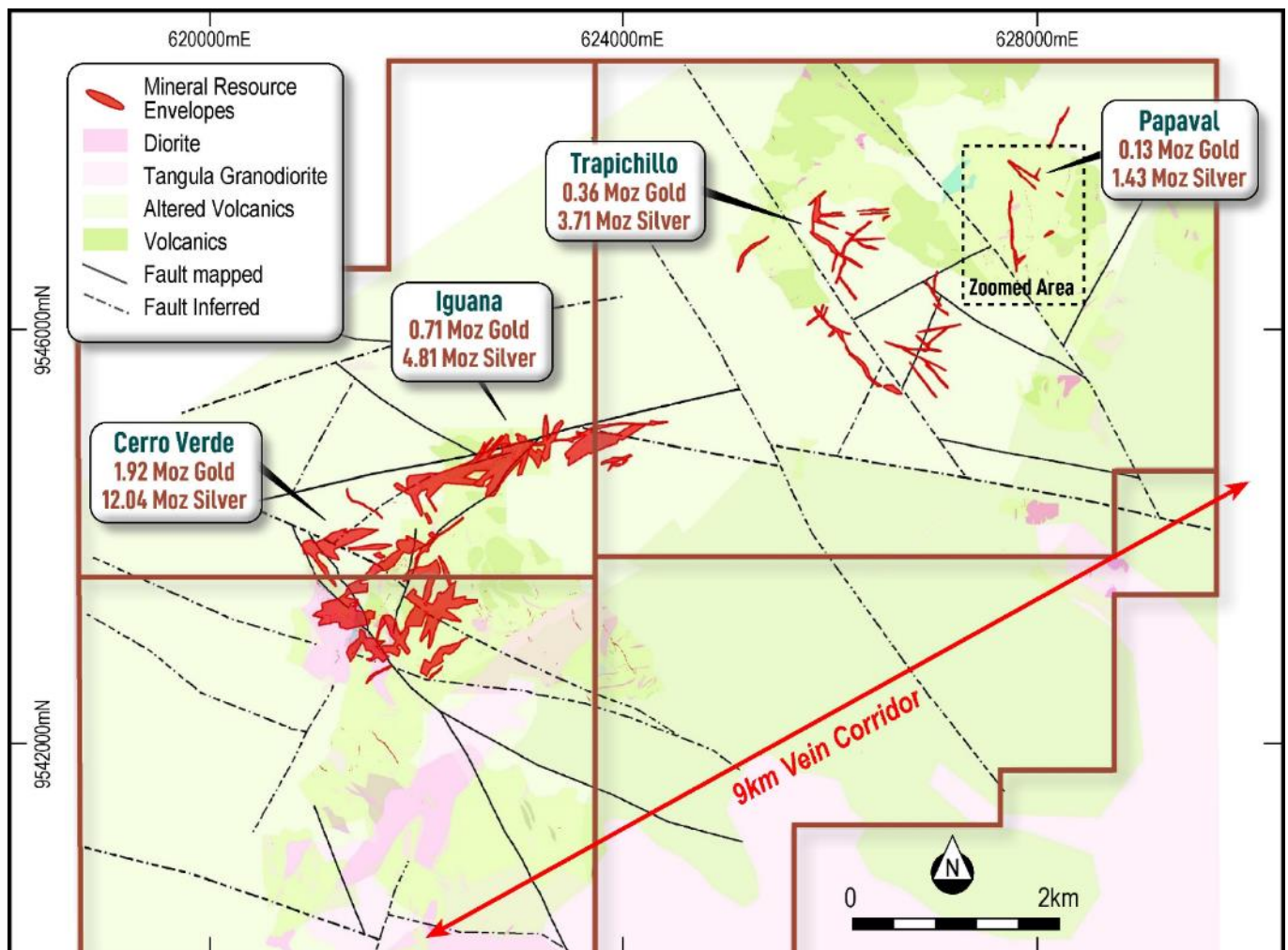


Figure 2. Dynasty Gold Project displaying simplified geology and prospect locations

EXPLORATION ACTIVITIES SUMMARY

DYNASTY GOLD PROJECT

Resource Growth Drilling

Nine diamond holes for 970 metres were completed at the Cerro Verde prospect.. Five drillholes were designed to test mineralisation extensions, while three drillholes were designed to confirm mineralisation continuity and improve grade within an area already contained within the mineral resource estimate.

Drilling intersected several thin quartz veins with mineralisation of pyrite, arsenopyrite, sphalerite and traces of marcasite, covellite, malachite, galena and abundant iron oxides. Brecciated white milky quartz veins were also observed with mineralisation consisting of pyrite, arsenopyrite and abundant iron oxides. Moderate to strong argillic alteration was also observed to be associated with vein hosted mineralisation.

Current Mineral Resources for the Cerro Verde prospect total **28.8 Mt grading 2.08 g/t Au, 13.00 g/t Ag** for a contained **1.92 Moz gold and 12.04 Moz silver**.

13 diamond holes for 1,267 metres were drilled at the Papayal prospect during the quarter, with the program completed on 20th December 2023.

Drilling at Papayal was designed to test the newly discovered Julia vein target (Julia). Julia is approximately 400 metres long by 200 metres wide and is located at a major structural intersection, where large-scale northeast, northwest and north-south trending faults are exposed, representing a damage zone with significant brecciation, veining and associated alteration.

Drillholes completed at Julia were successful in intersecting wide zones of mineralisation in quartz ± carbonate ± base metal veins with halos of phyllic-argillic alteration from shallow depths. Vein styles observed include comb, crustiform, and brecciated quartz veinlets and carbonate veinlets with disseminated pyrite-galena-sphalerite±chalcopyrite, and massive sulphide veinlets (mostly pyrite).

The Julia target represents the first of several high priority targets that are set to be tested in resource growth drilling at the Papayal prospect.

Current resources at Papayal comprise **0.9Mt @ 4.54 g/t Au, 50.85 g/t Ag** for a contained **0.13 Moz gold, 1.43 Moz silver**, representing a high-grade part of the 9 kilometre epithermal system and a high priority area for resource growth.

Assay results for Cerro Verde and Papayal drilling were pending at the quarter's end.



Plate 1: Drill hole PPDD23-002 displaying typical vein styles observed in diamond core between 22m and 39m at the Julia target.

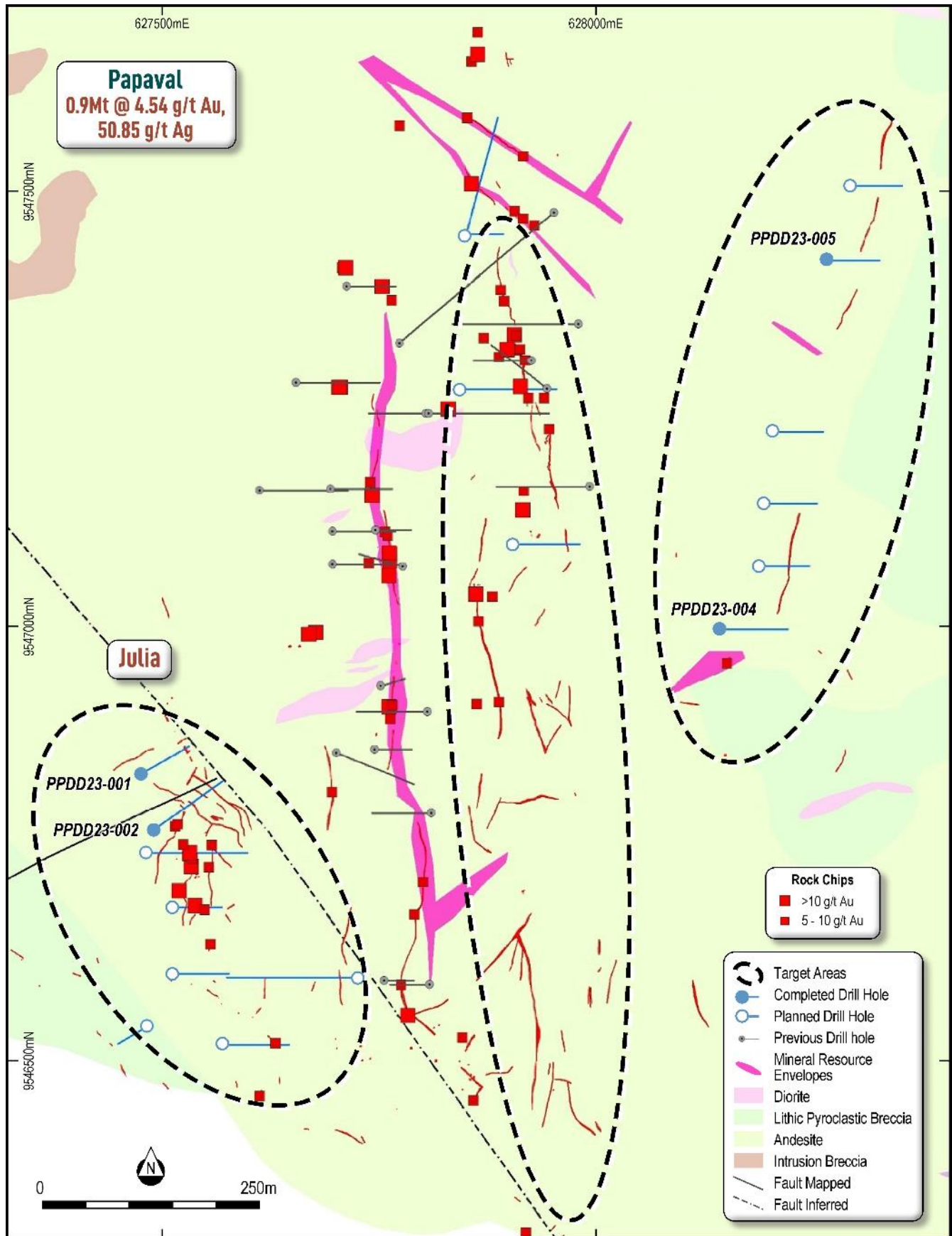


Figure 3. Papaval prospect displaying mineral resources, mapped geology and veins, rock chips > 5 g/t Au, planned and recently completed drillholes

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Dynasty Generative Exploration Activities

The geology team continued to advance exploration work programs across the Papayal and Trapichillo prospects, located at the north-eastern extent of the 9km epithermal vein corridor. Until now, these areas have seen limited exploration and drilling, providing Titan with a significant opportunity to grow Mineral Resources. Generative work programs completed during the quarter are detailed below.

Mapping

396 hectares of 1:500 scale mapping was completed at the Papayal and Trapichillo prospects, taking total mapping at the Dynasty Project to 9,000 hectares. Much of the terrain is overlain by a thin veneer of soil, masking the presence of underlying veins, but nonetheless good progress has been made and further veins identified.

The Trapichillo prospect, located to the west of the Papayal prospect, is comprised of andesite lavas with small diorite dikes, and pyroclastic units. The volcanic host rocks are altered by weak propylitic alteration, dominated by chlorite + calcite +/- epidote.

Structural data collected from surface mapping and historical drill core relogging, has identified that epithermal veins are steeply dipping and predominantly orientated NE-SW. Similarly, veins that trend NW-SE and N-S are of equal importance, due to their association with good mineralisation.

Epithermal veins vary from centimeters to metres with thicknesses ranging between 0.20 to 1.0 metres. The quartz veins are polymetallic and exhibit crustiform, brecciated and massive textures. The veins contain pyrite-arsenopyrite-galena-sphalerite, and silver sulphides, which are mostly oxidised and contain good values of Au, Ag, As, Pb. The epithermal quartz veins are bordered by alteration halos ranging from centimeters to meters made up of illite, smectites +/- sericite.

Structures observed to be preferentially E-W oriented, are associated with vein-fault type systems, exhibiting 0.10 cm to 0.15 cm quartz veins with variable halos up to 1.50 m wide.

Soil Sampling

A total of 885 soil samples were collected in the Papayal prospect over the Bramaderos-Lucarqui areas. Soil samples were mainly infill 50 x 50 metre spaced samples over areas of interest with elevated Au-As and other pathfinder elements shown in initial wider spaced soil sampling results.

A N-S trend was observed in coincident Au-As-Ag-Sb, interpreted to be related to N-S striking epithermal veins mapped in Papayal (La Uva sector), and representing a relationship between gold and arsenopyrite.

A NW-SE trending coincident Pb-Zn-Mn-Bi-Mo-Cu-Se-Te-Au anomaly was also observed, with a core of Bi-Cu-Mo interpreted to represent phyllic alteration in intrusive rocks, and while a coincident Pb-Zn-Se-Mn-Se-Te anomaly is observed on the periphery.

Mapping in the area has confirmed NW-SE trending veins with minerals such as galena, sphalerite, and pyrite consistent with the soil values. In areas with deeper soil coverage (>0.5-1.0 metres) where the veins are not exposed, the soil results have been used for developing trenches to understand underlying geology.

To the south of Papayal a higher concentration of copper is also observed in soils, with zinc and manganese rimming the copper. It is interpreted that the copper values may be associated with mapped intrusive quartz-diorite and diorite bodies in the area ie. associated with an intrusive porphyry source.

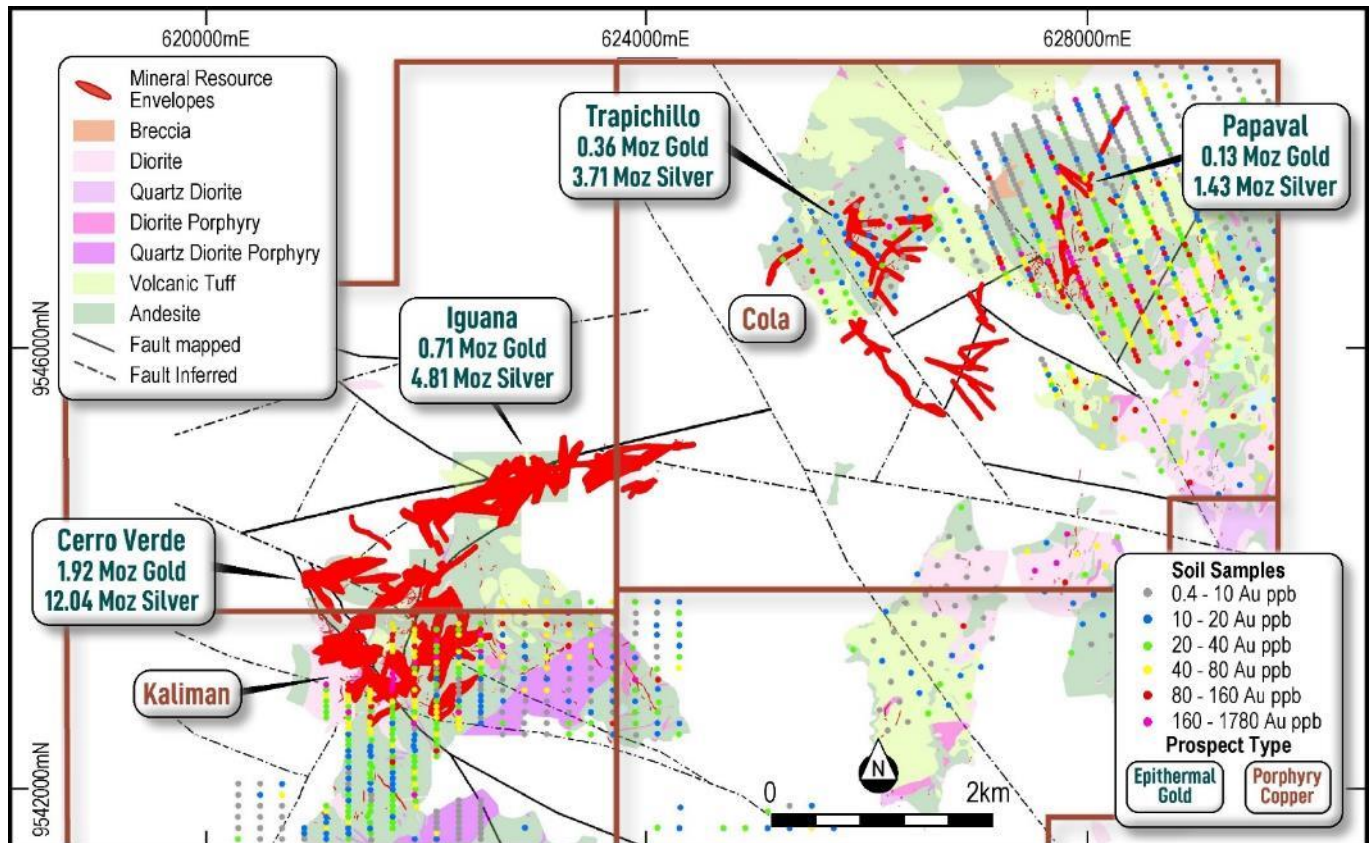


Figure 4. Plan view displaying extent of Titan's geological mapping and soil geochemical sampling (Au ppb) in relation to existing Mineral Resources at the Dynasty Project. Note that the central part of the project has seen limited exploration and represents significant opportunity to grow resources.

Diamond Core Relogging

During the quarter, historical diamond core relogging focused mainly on the Cerro Verde prospect in the Mullunama area including the Venado and Ensilada epithermal veins. This relogging has led to improvement in the geological model in the Mullenama area.

Planned activities for the upcoming quarter/s include:

- Further surface mapping and geochemical sampling to identify resource growth targets along the Dynasty 9-kilometre epithermal gold corridor.
- Development of trenches and channel sampling to refine geochemical and geological understanding in new areas of mineralisation.
- Update Dynasty 3D geological model with latest drill results to facilitate further resource growth drilling and the planned Mineral Resource Estimate update.
- Dynasty preliminary metallurgical testwork studies to commence in January, with an initial focus being on Cerro Verde gold-silver mineralisation (which represents ~60% of the Mineral Resources).
- Dynasty Pre-scoping optimisation studies to commence in February, with studies to assist in understanding the optimal process/ throughput rates, mining advance rates, mining method/s and will also test pre-concentration technologies and their potential value.

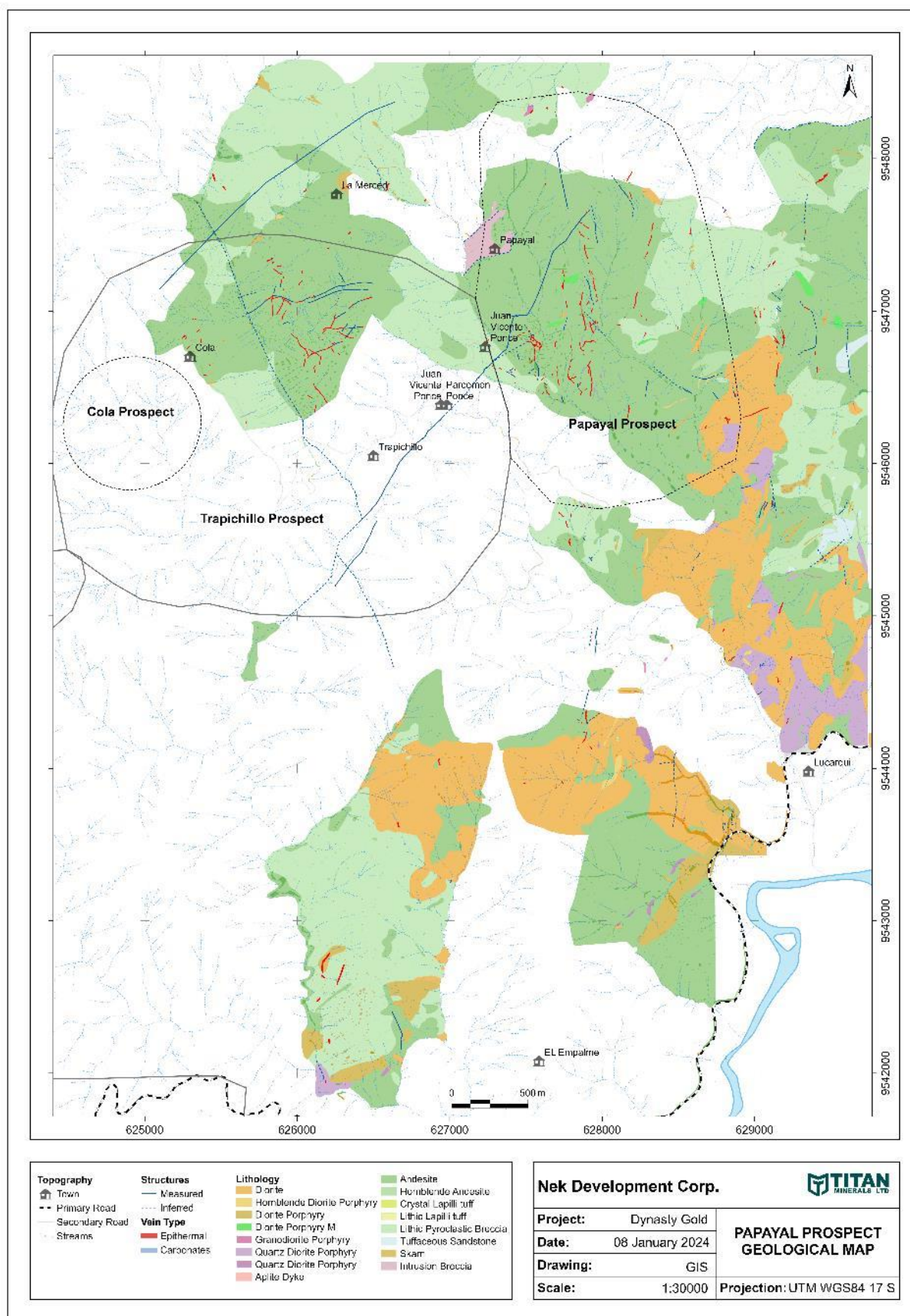


Figure 5. Updated geological map displaying mapping progress in the Papayal and Trapichillo prospects, Dynasty Gold Project

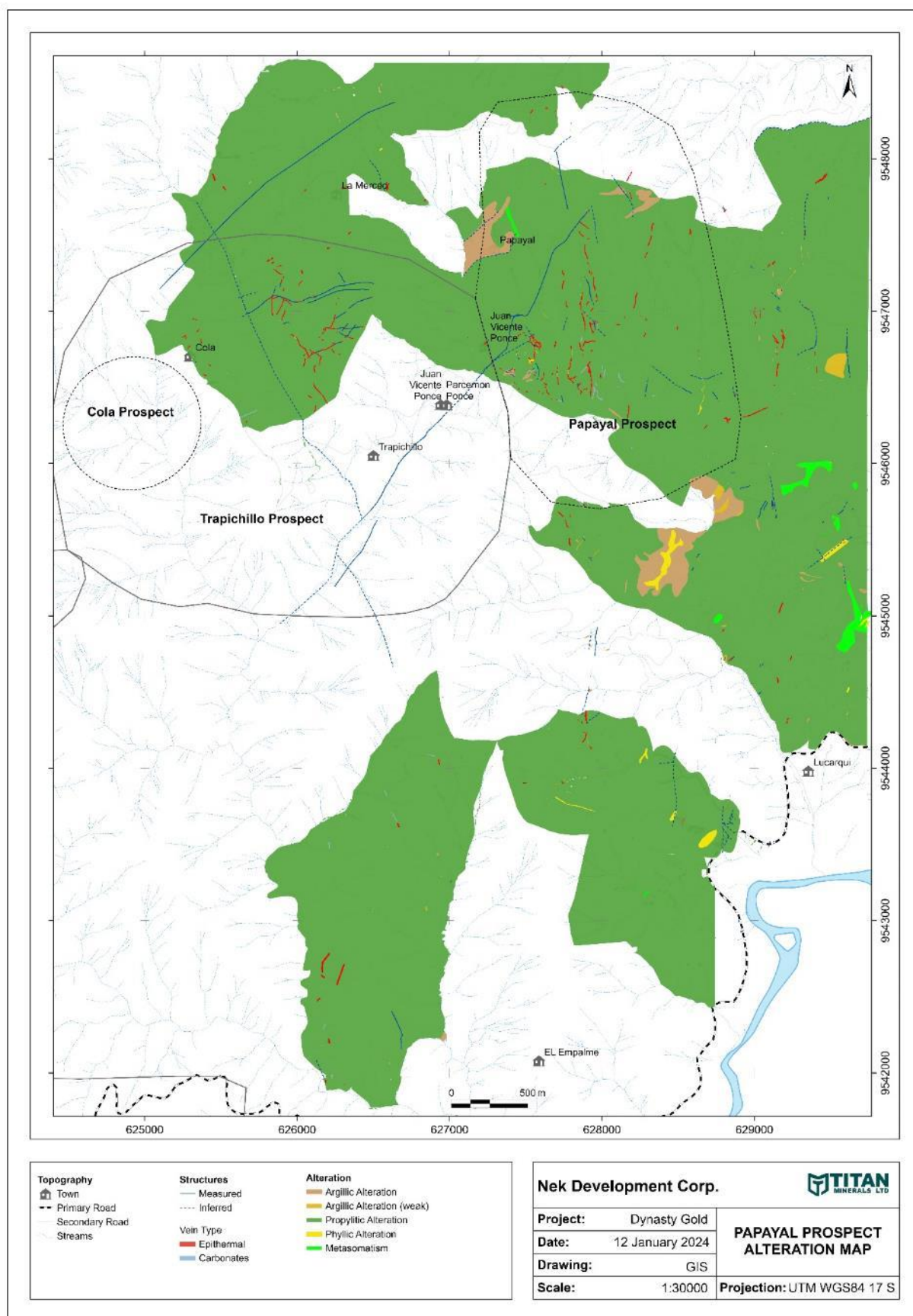


Figure 6. Updated alteration map displaying mapping progress at the Papayal and Trapichillo prospects, Dynasty Gold Project

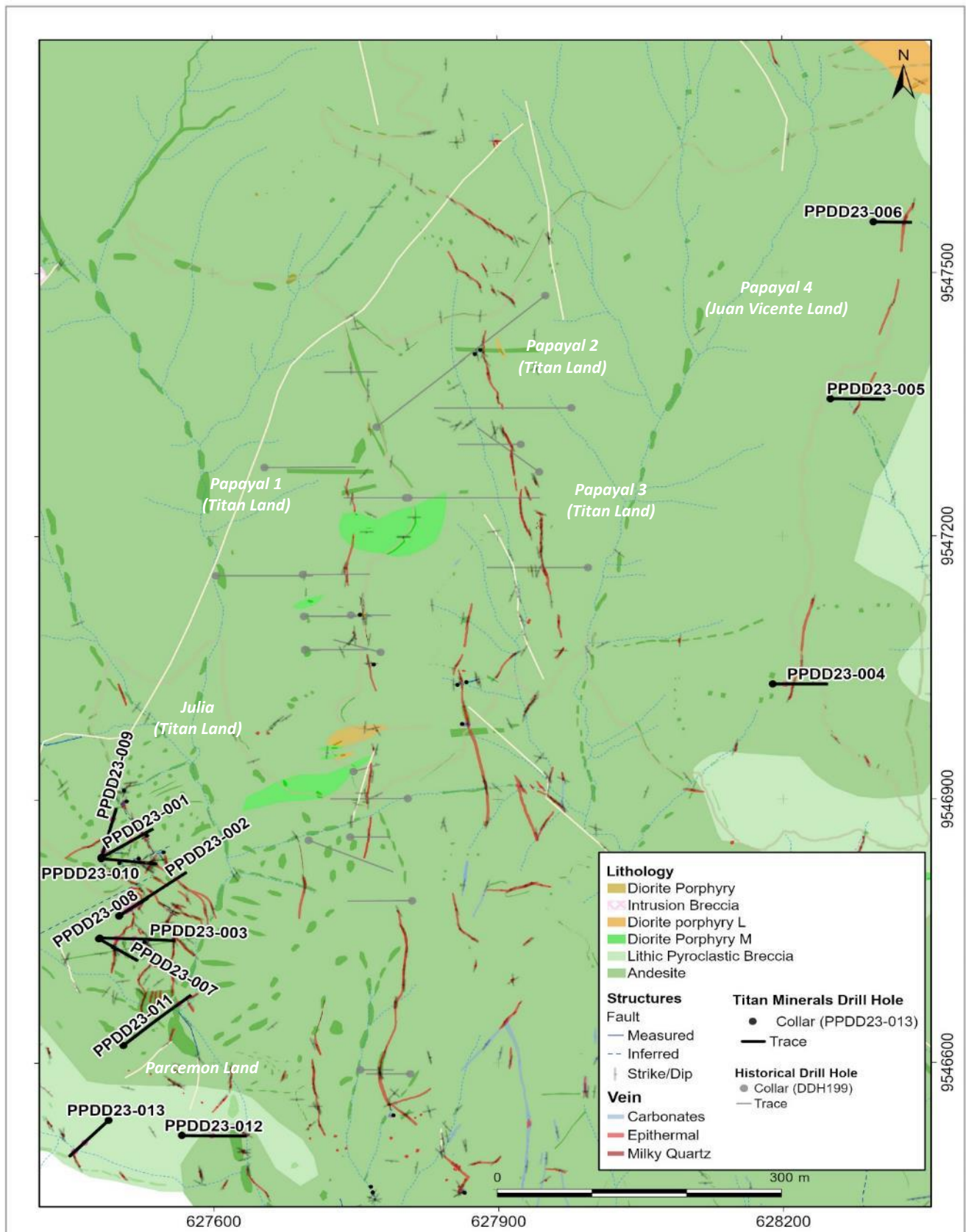


Figure 7. Papayal geological map with drilling completed, Q4 2023 drilling displayed as black traces (PPDD prefix).

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



CORPORATE

Titan announced the successful completion of both the Institutional and Retail Entitlement components of an accelerated non-renounceable pro rata Entitlement Offer.

Under the Entitlement Offer, eligible shareholders will also receive one (1) free attaching option for every New Share issued, exercisable at \$0.035 per option and expiring on 31 January 2025 (**Attaching Option**). For every two (2) Attaching Options subscribed for and issued, eligible shareholders will also receive, for nil consideration, one (1) additional option exercisable at \$0.07 per option and expiring on 31 January 2027 (subject to the satisfaction of the vesting condition as detailed in the Prospectus) (**Bonus Option**).

Institutional Entitlement Offer

The Institutional Entitlement Offer and Bookbuild raised the maximum possible of approximately A\$4.1 million at the offer price of \$0.03 (**Offer Price**).

The Institutional Entitlement Offer was strongly supported by existing institutional shareholders with the Company also receiving significant demand for the shortfall by new institutional investors.

The New Shares, Attaching Options and Bonus Options together comprise the **New Securities**.

The New Securities that were not allocated to eligible institutional shareholders under the Institutional Entitlement Offer were allocated to institutional investors under a bookbuild process managed by Canaccord Genuity (Australia) Limited as the lead manager to the Entitlement Offer (Bookbuild).

The New Shares issued pursuant to the Institutional Entitlement Offer and Bookbuild will rank equally with the Company's existing shares on issue.

Retail Entitlement Offer

The retail component of the Entitlement Offer (**Retail Entitlement Offer**) is to raise up to approximately A\$3.5 million under the same conditions as the Institutional Entitlement Offer.

The Retail Entitlement Offer closed on Wednesday, 20 December 2023 and raised gross proceeds of approximately A\$670,000 at the offer price of \$0.03 per New Share (Offer Price).

Together with the institutional component of the Entitlement Offer (Institutional Entitlement Offer) that raised approximately A\$4.1 million, the total amount raised is approximately A\$4.77 million.

The New Securities that were not taken up by Eligible Retail Shareholders (as defined in the Prospectus) under the Retail Entitlement Offer may be allocated to institutional investors under the shortfall component of the Entitlement Offer managed by Canaccord Genuity (Australia) Limited as the lead manager to the Entitlement Offer for a period of up to three months from the Closing Date.

Other Business

The Company still awaits the final tranche of the settlement from the sale of Zaruma Project which is accruing interest and is expected to be received in the ensuing quarter. Titan retains default senior security over the Project.

At the end of the quarter the Company had 1.691 billion shares on issue and had working capital of US\$1.92m (approx. A\$2.91 million).

Related Party Payments

In line with its obligations under ASX Listing Rule 5.3.5, Titan Minerals Limited notes that the payments to related parties of the Company, as advised in the Appendix 5B for the period ended 31 December 2023, pertain to payments to directors for fees, salary, and superannuation.

ENDS-

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Released with the authority of the Board.

For further information on the company and our projects, please visit: www.titanminerals.com.au

Contact Details

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QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Tenement Schedule

Titan held the following tenements as at 31 December 2023.

Project	Tenement	Location	Interest	Expiry
Dynasty Gold	Cecilia 1	Loja, Ecuador	100%	12/11/2034
Dynasty Gold	Pilo 9	Loja, Ecuador	100%	13/10/2034
Dynasty Gold	ZAR	Loja, Ecuador	100%	2/12/2034
Dynasty Gold	ZAR 1	Loja, Ecuador	100%	5/12/2034
Dynasty Gold	ZAR 3A	Loja, Ecuador	100%	11/12/2034
Linderos	Chorrera	Loja, Ecuador	100%	13/10/2034
Linderos	Dynasty 1	Loja, Ecuador	100%	11/06/2035
Linderos	Linderos E	Loja, Ecuador	100%	27/07/2034
Linderos	Narango	Loja, Ecuador	100%	27/09/2034
Copper Duke	Barbasco	Loja, Ecuador	100%	5/10/2034
Copper Duke	Barbasco 1	Loja, Ecuador	100%	22/11/2034
Copper Duke	Barbasco 2	Loja, Ecuador	100%	10/11/2034
Copper Duke	Barbasco 4	Loja, Ecuador	100%	19/11/2034
Copper Duke	Carol	Loja, Ecuador	100%	17/04/2035
Copper Duke	Catacocha	Loja, Ecuador	100%	25/05/2034
Copper Duke	Colanga	Loja, Ecuador	100%	19/09/2034
Copper Duke	Colanga 2	Loja, Ecuador	100%	13/11/2034
Copper Duke	Gloria	Loja, Ecuador	100%	12/11/2034
Copper Duke	Gloria 1	Loja, Ecuador	100%	7/11/2034
Copper Duke	Gonza 1	Loja, Ecuador	100%	16/01/2035
Copper Duke	LumaPamba	Loja, Ecuador	100%	31/10/2034
Copper Duke	LumaPamba 1	Loja, Ecuador	100%	31/10/2034
Copper Field	Cooper 1	Loja, Ecuador	100%	10/11/2034
Copper Field	Cooper 4	Loja, Ecuador	100%	19/12/2034

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Titan Minerals Limited

ABN

97 117 790 897

Quarter ended ("current quarter")

31 December 2023

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (12 months) \$US'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(69)	(348)
(e) administration and corporate costs	(351)	(2,341)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	5
1.5 Interest and other costs of finance paid	-	(6)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(419)	(2,690)

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation	(1,034)	(6,121)
(e) investments	-	-
(f) other non-current assets	-	-

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Consolidated statement of cash flows		Current quarter \$US'000	Year to date (12 months) \$US'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	3,293
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other		
2.6	Net cash from / (used in) investing activities	(1,034)	(2,828)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,567	5,842
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(20)	(198)
3.5	Proceeds from borrowings	26	2,812
3.6	Repayment of borrowings	(26)	(1,539)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	2,547	6,917

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	772	655
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(419)	(2,690)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,034)	(2,828)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,547	6,917

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Consolidated statement of cash flows		Current quarter \$US'000	Year to date (12 months) \$US'000
4.5	Effect of movement in exchange rates on cash held	56	(132)
4.6	Cash and cash equivalents at end of period	1,922	1,922

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$US'000	Previous quarter \$US'000
5.1	Bank balances	1,922	772
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	1,922	772

6. Payments to related parties of the entity and their associates

6.1 Aggregate amount of payments to related parties and their associates included in item 1

6.2 Aggregate amount of payments to related parties and their associates included in item 2

Current quarter
\$US'000

80

-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$US'000	Amount drawn at quarter end \$US'000
7.1	Loan facilities	2,291	2,291
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	2,291	2,291

7.5	Unused financing facilities available at quarter end	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

Sophisticated and Professional Investors (unsecured):

The material terms of the loan facility are:

- Amount: AUD \$1,500,000
- Interest: 15% interest per annum payable at the repayment date.
- Security: Unsecured
- Repayment: 1 July 2024

Loan (unsecured):

The material terms of the loan facility are:

- Amount: AUD \$1,850,000
- Interest: 15% interest per annum
- Security: Unsecured
- Repayment: 31 December 2026

8.	Estimated cash available for future operating activities	\$USD'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(419)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(1,034)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,453)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,922
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,922
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.3
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>		

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

Yes, the Company expects to have negative operating cash flows for the time being as it is in the exploration stage and does not generate income.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

As described in the ASX Announcement on 22 December 2023, the Company completed the retail component of the entitlement offer raising approximately \$670,000 AUD. The funds from this component of the entitlement offer were received after the end of the quarter.

The Company can raise an additional ~\$3 million AUD under the same terms as the abovementioned Entitlement Offer and has up to 3 months to complete the shortfall offer.

Furthermore, the Company anticipates receiving additional payments for the Zaruma Project, with US\$2.5M currently owing and accruing interest.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Yes. Refer to the above.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:30 January 2024.....

Authorised by:The Board of Titan Minerals Limited.....
(Name of body or officer authorising release – see note 4)

QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2023



Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.