17 June 2024

DYNASTY GOLD FOOTPRINT CONTINUES TO GROW

Key Highlights

- New targets highlighted by mapping and soil geochemistry, indicate a substantially larger gold footprint than defined by drilling and contained within current 3.1Moz gold and 22Moz silver resource at the Dynasty Gold Project
- Early mapping over 2 kilometre Gap Zone, has confirmed the presence of epithermal gold veining, providing evidence that mineralisation is potentially connected from Iguana to Trapichillo, an exciting development in an area which has never previously been drilled or explored
- Mapping and trenching over Gisell copper target has unveiled argillic and phyllic alteration and A-type veins, confirming Gisell as a new porphyry copper discovery, further trenching underway with results expected in the coming weeks
- Target assessment and ranking to be completed in the coming month in preparation for drill testing multiple new gold and copper targets as part of resource growth strategy
- Cerro Verde updated geological model handed over to independent resource geologist, resource estimation workstreams now underway, with resource update expected in July

Titan's CEO Melanie Leighton commented:

"Titan's dedicated exploration has rewarded us with multiple new gold and copper targets, which we are excited to soon drill test, as we aim to grow the 3.1Moz gold and 22Moz silver mineral resource.

"Our soil sampling continues to reveal further geochemical anomalies, indicating that the Dynasty gold system is significantly larger than what is currently defined by drilling and contained in resources.

"It's exciting that the Gisell copper target has been confirmed as a porphyry copper system, with phyllic and argillic alteration and porphyry style A-type veining and abundant copper oxide mineralisation observed in our latest mapping and trenching.

"We are now fully focused on exploring the 2 kilometre Gap Zone, an area which has seen very limited exploration and has never been drill tested. It represents a direct extension, linking the Iguana and Trapichillo epithermal gold vein systems. The Company believes that there is strong potential to add resources in this highly prospective, underexplored area."







Plate 1: Meetings held with various communities at the Dynasty Gold Project to discuss access and work programs

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Dynasty Activities Update

Titan Minerals Limited (Titan or the Company) (ASX:TTM) is pleased to provide an update on the Company's 100% held Dynasty Gold Project (Dynasty) in southern Ecuador, where it has been conducting extensive exploration in new areas outside the current mineral resource.

Since commencing expanded mapping and surface soil sampling at Dynasty earlier this year, the epithermal gold footprint has been substantially expanded and several new drill targets identified that are set to be tested in drilling in the coming months. The Company believes that these new targets have significant potential to grow the Dynasty mineral resource, which currently stands at 3.1Moz gold and 22Moz silver.

Latest results returned from pXRF analysis of soil samples have confirmed the presence of several new epithermal gold targets¹, while also further extending previously recognised targets within the Dynasty epithermal gold corridor.

In relation to disclosure of pXRF results, the Company advises that an audit of 245 pXRF results in comparison with laboratory assay results was recently conducted, with results showing excellent correlation for pathfinder elements used for epithermal gold and porphyry copper exploration. However, the Company cautions that estimates of arsenic mineral abundance from pXRF results should not be considered a proxy for quantitative analysis of laboratory assay results. Assay results are required to determine the actual grade of the visual mineralisation.

Soil sampling and mapping recently commenced over the 2 kilometre Gap Zone between the Iquana and Trapichillo prospects. Early mapping observations indicate that the epithermal gold vein system in fact continues from Iquana and extends to the east. This is an extremely positive development giving good confidence that further resources are likely to be added in this area.

Importantly, the Gap Zone has never been drilled, and to date has seen very limited exploration, representing an area with strong potential to grow resource directly along strike of the existing Iguana mineral resource which contains 0.7Moz gold and 4.8Moz silver.

Results for soil sampling in the Gap Area are expected in the coming 2-3 weeks, and the Company is confident that the results will continue to grow the Dynasty gold footprint.

Epithermal veins mapped at Iguana and Iguana east are predominantly formed within pre-existing shear zones, which have later been infilled with quartz ± sulphides + iron oxides. Vein textures vary from granular-massive, comb, to bladed, and are surrounded by illite-smectite±sericite alteration halos, ranging from centimetres to metres in thickness.

The +2 kilometre gap zone was recently made accessible following execution of a land access agreement with the Yaraco Community. The agreement is a results of the Company's dedicated CSR strategy, which aims to bring mutual benefits, with a view to fostering a strong and long relationship with the communities and landholders at the Dynasty Gold Project.

Mapping and trenching over the newly discovered Gisell copper target has successfully confirmed mineralisation to be related to a porphyry copper system, with mapping unveiling argillic and phyllic alteration, abundant copper oxide mineralisation and A-type porphyry veins.

A summary of alteration observed at Gisell is below:

- Phyllic (quartz-illite±pyrite): strong pervasive phyllic alteration of diorite porphyry
- Argillic (illite-smectite-kaolin ±quartz): selective alteration of diorite porphyry and andesite

¹ Arsenic is strongly associated with gold, and represents a good proxy for gold mineralisation at the Dynasty Project



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Propylitic (chlorite-epidote-carbonates ±primary magnetite): widespread alteration of andesite

Strong, coherent lead and zinc anomalies are also observed in soil geochemistry on the western periphery of the Gisell target, with these anomalies likely related to an epithermal or mesothermal system with massive sulphide veins.

Further mapping and development of trenches over the Gisell porphyry copper prospect is ongoing and will provide valuable information on mineralisation controls and extent, which will be used to optimise drill targeting.

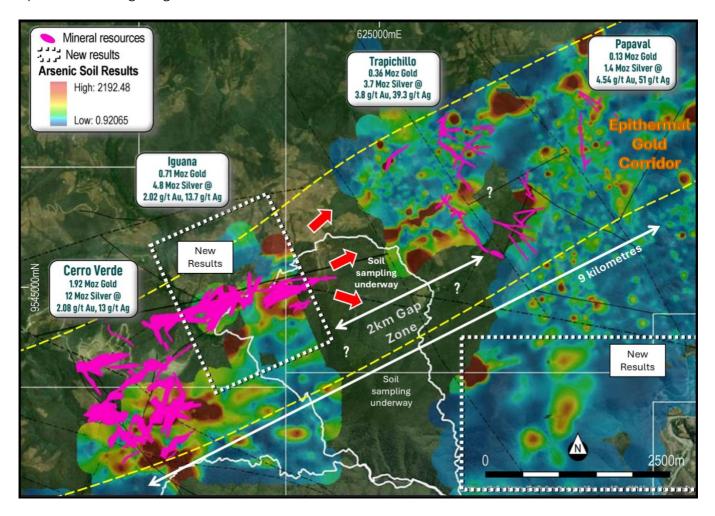


Figure 1. Dynasty Gold Project displaying surface soil geochemistry (arsenic ppm) in relation to current mineral resources. Note extensive open-ended arsenic anomalies at the Papayal and Trapichillo and Iguana prospects. Soil sampling currently underway in the 2km Gap Zone.









Plate 2. Hand specimens taken from the Iguana prospect. A: Epithermal quartz vein, comb texture with jarosite, goethite, traces of hematite. B: Epithermal quartz vein, massive texture, traces of pyrite, goethite, and hematite. C: Epithermal quartz-barite vein with goethite, the quartz shows massive texture, while the barite shows bladed texture.

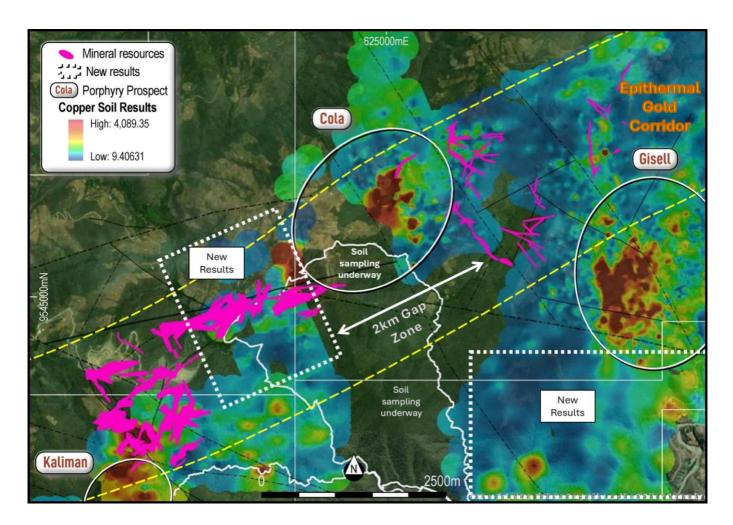


Figure 2. Dynasty Gold Project displaying surface soil geochemical geochemistry (copper ppm) in relation to current mineral resources. Note large-scale copper anomalies defined by soil sampling at the Gisell and Cola prospects, the copper anomaly at Cola remains open to the southwest. Soil sampling is underway in the Gap Zone to understand scale of Cola copper target.









Plate 3. Trench and hand specimens taken from the Gisell prospect. A: Oxidised sulphide (iron oxide) veins revealed in trenching. B: A-type vein uncovered in trenching. C: Oxidised sulphide (iron oxide) veins with irregular boxworks texture.

Dynasty Mineral Resource Update

Titan is pleased to advise that following incorporation of refinements as recommended by the independent resource geologist, the Cerro Verde geological model is now complete and has been handed for resource estimation work to commence.

The Papayal geological model is also nearing completion and is expected to be handed over to the independent resource geologist in the coming week. The updated Papayal geological interpretation incorporates drilling and trenching from the newly discovered Julia vein system, which Titan unveiled though its mapping and surface geochemical programs late last year.

A maiden drilling campaign of 13 diamond holes for 1,360 metres was completed in December 2023, which delineated epithermal gold mineralisation over a 250m strike down to a depth of 80-100 metres at the Julia vein system.

Titan's detailed surface mapping, drill core relogging in conjunction with multielement geochemistry have enabled a robust litho-structural model to be developed for the Dynasty Project. Epithermal veins and associated alteration halos exposed and mapped at surface have been confirmed down dip by diamond drilling, giving very good confidence in the orientation and continuity of interpreted mineralisation wireframes.

The updated geological model is expected to aid resource classification upgrades and will ultimately provide a more robust mineral resource estimate to be used as the basis of future Dynasty development studies.

The Company has taken a significant number of bulk density measurements on available diamond core, and this will also be used to update densities in the resource update, which again will lead to a more robust resource estimate for use in any future development studies.

Oxidation surfaces are also being refined as part of the resource update, with geological observations and geochemical ratios being used to better understand the level of oxidation across the Dynasty Project. This update to oxidation surfaces will lead to improved assignment of oxide, transitional and fresh domains in the resource estimate.

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Dynasty Gold Project Next Steps

- Soil sampling and mapping over the Gap Zone between Iguana and Trapichillo to identify extent of epithermal vein hosted gold mineralisation. Further soil geochemical results due in the coming 2-3 weeks.
- Continue trenching and detailed mapping over newly identified arsenic and copper targets to better understand mineralisation extent and controls, and to optimise drill design-initial trench results due in the coming 4 weeks.
- Rank and prioritise new targets defined by Titan's exploration, to determine the best targets to be drill tested- resource growth drilling planned to commence early Q3 2024
- Dynasty Mineral Resource Estimate Update, targeting modest resource growth and improved confidence and upgrade to JORC classification. Several resource workstreams are advancing, however the anticipated due date for the resource update is now early Q3 2024.
- Dynasty pre-scoping study results- due Q3 2024.

The Company looks forward to providing further updates as exploration and resource development work programs advance at the Dynasty Gold Project.

ENDS-

Released with the authority of the Board.

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About the Dynasty Gold Project

The Dynasty Gold Project is an advanced stage exploration project comprising five contiguous concessions and is 139km² in area. Three of these concessions received Environmental Authorisation in 2016 and are fully permitted for all exploration activities.

Exploration works at the Dynasty Gold Project have outlined an extensive zone of epithermal veining over a nine kilometres strike and over one kilometre in width. There is also considerable potential for porphyry copper mineralisation as identified by surface mapping, trenching, and drilling at the Kaliman prospect and by surface geochemistry and mapping at the Cola and Gisell prospects.

Table 1. Dynasty Mineral Resource Estimate, July 2023

| Dynasty | | | Indicated | | | Inferred | | | _ | | | | Total | | |
|----------------|---------------|------|-------------|-----------------|------|---------------|------|-------|------|-------------------|---------------|----------------|-------|--------------------------|-------|
| Project | Tonnes (M) | | ade g/t) | Containe (Mo | | Tonnes (M) | | | | ned Metal Moz) | Tonnes (M) | Grade (g/t) | | Contained Metal (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 |

Notes: 1. Reported \geq 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.

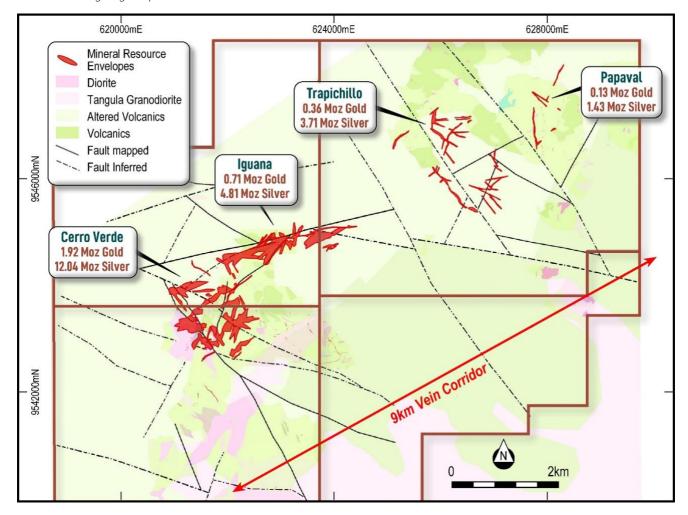


Figure 3. Dynasty plan view displaying Mineral Resources, prospects and geological interpretation.

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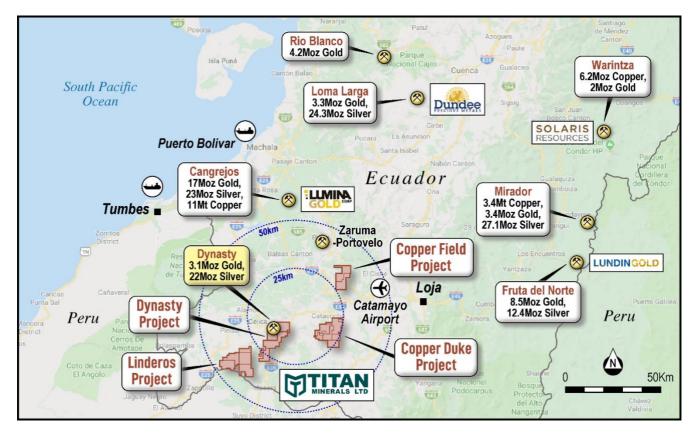


Figure 4. Titan Minerals southern Ecuador Projects, peer deposits and surrounding infrastructure

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

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Competent Person's Statements

The information in this report that relates to Exploration Results is based on and fairly represents information compiled by Ms Melanie Leighton, who is an experienced geologist and a Member of The Australian Institute of Geoscientists. Ms Leighton is a full-time employee at Titan Minerals and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the JORC 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves'. Ms Leighton consents to their inclusion in the report of the matters based on this information in the form and context in which it appears.

With respect to estimates of Mineral Resources, announced on 6 July 2023, (MRE Announcement) the Company confirms that it is not aware of any new information or data that materially effects the information in the MRE Announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Forward-looking Statements

This announcement may contain "forward-looking statements" and "forward-looking information", including statements and forecasts. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", 'outlook", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgments of Titan's directors and management regarding future events and results.

The purpose of forward-looking information is to provide the audience with information about Titan's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Titan and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Forward-looking information and statements are based on the reasonable assumptions, estimates, analysis and opinions of Titan directors and management made in light of their experience and their perception of trends, current conditions and expected developments, as well as other factors that Titan directors and management believe to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. Titan believes that the assumptions and expectations reflected in such forward-looking statements and information are reasonable.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Titan does not undertake to update any forward-looking information or statements, except in accordance with applicable securities law.



APPENDIX B

Dynasty Project - 2012 JORC Table 1

Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|--------------------------|---|--|
| Sampling techniques | Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. | No drilling included in this announcement. Soil samples are obtained by excavating soil pits, allowing for the identification of soil profile layers in the area. The average sampling depth is 0.5m, where the B horizon remains intact and there is minimal influence or contamination from organic matter. Once collected, the sample is quartered and passed through a 2mm sieve, the portion passing through the sieve is retained, ensuring a minimum weight of 250g. Soil samples were dried at a temperature < 60°C, sieve sample to 180 microns (80 mesh), and pulverized up to 250g of the sample to achieve 85% passing through 75 microns mesh to form a pulp sample. 50g charges were split from each pulp for super trace gold and multielement in soils analysis. |
| Drilling techniques | Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc). | No drilling included in this announcement. |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | No drilling included in this announcement. |



| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. | No drilling included in this announcement. Geological observations have been routinely recorded for rock chip samples as part of detailed surface geological mapping. |
| | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. | |
| | The total length and percentage of the relevant intersections logged. | |
| Sub-sampling techniques and | If core, whether cut or sawn and whether quarter, half or all cores taken. | • Soil samples are obtained by excavating soil pits, allowing for the identification of soil profile layers in the area. The average sampling depth is 0.5m, where the B horizon remains intact and there is minimal influence or |
| sample preparation | • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. | contamination from organic matter. Once collected, the sample is quartered and passed through a 2mm sieve, the portion passing through the sieve is retained, ensuring a minimum weight of 250g. |
| | For all sample types, the nature, quality, and appropriateness of the | • pXRF Analysis: The samples were directed to the internal laboratory situated at the company's offices. Upon entry into the digital sample inventory, they undergo splitting, and a 50g portion is selected for further processing. This |
| | sample preparation technique. | 50g portion is then dried in an oven at 60°C for 8 hours to remove moisture. Subsequently, the dried sample undergoes crushing under pressure with a glass roller. The pulverized sample is then pelletized and is prepared |
| | Quality control procedures adopted for all sub-sampling | for analysis using the handheld p-XRF. |
| | stages to maximise representivity of samples. | • Laboratory Assay Analysis: Au was analysed by Aqua regia extraction with ICP-MS finish. An additional charge is |
| | Measures taken to ensure that the sampling is representative of the in-situ material collected, including | split from sample for four acid digests with ICP-MS reporting a 48-element suite. |
| | for instance results for field duplicate/second-half sampling. | Several duplicate soil samples have been evaluated using laboratory assay and also pXRF analysis with excellent correlation returned for arsenic, copper, lead and zinc. Arsenic is a very good proxy for gold at the Dynasty Gold Project, hence pXRF arsenic data being a valuable tool and vector when exploring for gold mineralisation. |
| | Whether sample sizes are appropriate to the grain size of the material being sampled. | |
| Quality of assay data and laboratory tests | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. | Assaying and Laboratory procedures reported are completed by certified independent labs and considered to be appropriate and in accordance with best practices for the type and style of mineralisation being assayed for. Gold Fire Assay technique used is a total recovery technique for gold analysis. This technique is considered an |
| | For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. | appropriate method to evaluate total gold and silver content of the samples. |
| | | In addition to the laboratory's own quality control ("QC") procedure(s), Titan Minerals Ltd- regularly inserts its own Quality assurance and QC samples, with over 15% of samples in reported results corresponding to an inserted combination of certified reference materials (standards), certified blank material, field duplicate, lab duplicates (on both fine and coarse fraction material. |
| | Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory | • Au was analysed by Aqua regia extraction with ICP-MS finish. An additional charge is split from sample for four acid digests with ICP-MS reporting a 48-element suite. |
| | checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established. | • Soil samples analysed by the company pXRF follow a strict sample preparation as outlined in the above section. The pXRF used is a SciAps X505-446 consisting of SC-910-500066 NCMINING - SciAps X-505 Mining Analyzer, SC-114-700019 Rh Soil App-Environmental Rh tube, SC-114-700014 (precious metals app). |
| | | Forty elements are analysed, with their respective detection limits outlined below: |

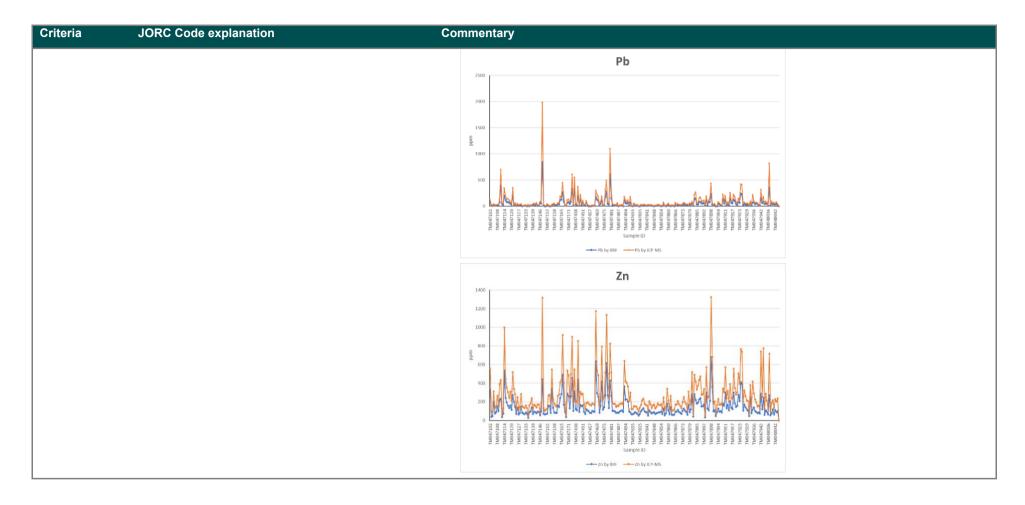


| Criteria | JORC Code explanation Commentary | | | | | ry | | | | | |
|---------------------------------|----------------------------------|---|---|--|---------------------|----------------------|----------------------|---------------------|----------------------|--------------------|--|
| | | | Element | Detection limit | Element | Detection limit | Element | Detection limit | Element | Detection limit | |
| | | | Ag (ppm) | < 5 ppm | Cs (ppm) | < 10 ppm | Nd (ppm) | < 50 ppm | Si (ppm) | < 300 ppm | |
| | | | Al (ppm) | < 300 ppm | Cu (ppm) | < 5 ppm | Ni (ppm) | < 5 ppm | Sn (ppm) | < 5 ppm | |
| | | | As (ppm) | < 5 ppm | Fe (ppm) | < 25 ppm | P (ppm) | < 300 ppm | Sr (ppm) | < 5 ppm | |
| | | | Ba (ppm) | < 10 ppm < 10 ppm | Hg (ppm) | < 5 ppm < 25 ppm | Pb (ppm) Pr (ppm) | < 5 ppm < 25 ppm | Te (ppm) | < 5 ppm < 5 ppm | |
| | | | Ca (ppm) Cd (ppm) | < 10 ppm < 5 ppm | K (ppm) La (ppm) | < 25 ppm < 25 ppm | Rb (ppm) | < 25 ppm < 5 ppm | Th (ppm) Ti (ppm) | < 5 ppm < 5 ppm | |
| | | | Ce (ppm) | < 25 ppm | Mg (ppm) | < 2000 ppm | S (ppm) | < 50 ppm | V (ppm) | < 5 ppm | |
| | | | CI (ppm) | < 50 ppm | Mn (ppm) | < 25 ppm | Sb (ppm) | < 5 ppm | Y (ppm) | < 5 ppm | |
| | | | Co (ppm) | < 10 ppm | Mo (ppm) | < 5 ppm | Sc (ppm) | < 10 ppm | Zn (ppm) | < 5 ppm | |
| | | | Cr (ppm) | < 5 ppm | Nb (ppm) | < 5 ppm | Se (ppm) | < 5 ppm | Zr (ppm) | < 5 ppm | |
| Verification of | • | The verification of significant intersections by either | • No o | drilling repo | rted, only | y surface so | oil samp | le results | | | |
| sampling and | | independent or alternative company personnel. | • No s | adjustment | i etch of | s made in tl | he renoi | ted results | | | |
| assaying | • | The use of twinned holes. | 1108 | adjustificiti | o data k | inade in u | пс тероі | icu results | | | |
| | • | Documentation of primary data, data entry procedures, | | | | | | | | | |
| | | data verification, data storage (physical and electronic) | | | | | | | | | |
| | | protocols. | | | | | | | | | |
| | | Discuss any adjustment to assay data. | | | | | | | | | |
| Location of data | | · · · · · · · · · · · · · · · · · · · | NI. | L-200 L | 4 1 | | | | | | |
| points | • | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. | No drillholes reported | | | | | | | | |
| points | | | Soil samples were located using a GPS | | | | | | | | |
| | | | Grid system used for all undertakings at the Dynasty Project is WGS84 Zone 17 South | | | | | | | | |
| | • | Specification of the grid system used | | | | | | | | | |
| | • | Quality and adequacy of topographic control. | | | | | | | | | |
| Data spacing | • | Data spacing for reporting of Exploration Results. | • Data | a spacing fo | r report | ed soil sam | ıpling ge | eochemical | results | was on a 20 | 00m x 50m spacing and in some are |
| and distribution | | Whether the data spacing, and distribution is sufficient to | down to an infill grid of 50m x 50m spacing. | | | | | | | | |
| | • | establish the degree of geological and grade continuity | No Sample compositing has been applied in reported exploration results. | | | | | | | | |
| | | appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. | | No cample compositing has been applied in reported exploration results. | | | | | | | |
| | | | | | | | | | | | |
| | | Whether sample compositing has been applied. | | | | | | | | | |
| Orientation of | | 7 7 3 77 | N1 - 1 | | : | | | | | | |
| Orientation of data in relation | | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which | | | | | | | | | ntation, as the soil samples were tak |
| to geological | | this is known, considering the deposit type. | on a | on a systematic grid spacing, considered to be perpendicular to, and appropriate for, the style of mineralisation. | | | | | | | |
| structure | | | | | | | | | | | |
| | • | If the relationship between the drilling orientation and the | | | | | | | | | |
| | | orientation of key mineralised structures is considered to | | | | | | | | | |
| | | have introduced a sampling bias, this should be | | | | | | | | | |
| | | assessed and reported if material. | | | | | | | | | |
| Sample security | • | The measures taken to ensure sample security. | | | | | | | | | ans and held in a secure yard prior |
| | | | ship | ment for lal | oratory | analysis. S | Samples | are enclos | sed in p | olyweave sa | acks for delivery to the lab and weigh |
| | | | | | | | | | | | ent is completed through a commerce |



| Criteria | JORC Code explanation | Commentary |
|-------------------|---|---|
| | | transport company with closed stowage area for transport. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | An audit of pXRF results in comparison with laboratory assay results was conducted, with results showing excellent correlation for pathfinder elements used for epithermal gold and porphyry copper exploration. A comparative analysis was conducted on 245 soil pulp sample assays using both ICP-MS and p-XRF methods for arsenic, copper, lead, and zinc. The results show a significant correlation between the two methods (refer to the charts below). Although the accuracy of both methods may not be identical, the trends observed in the results for each sample are similar. Consequently, it can be inferred that the results obtained through p-XRF are adequate for exploration purposes. |
| | | As |
| | | 1000 1000 1000 1000 1000 1000 1000 100 |
| | | Cu |
| | | 450 400 350 300 150 400 150 150 150 150 150 150 150 150 150 1 |







Section 2 - Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| Mineral tenement and land tenure status | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | Titan Minerals Ltd, through its indirect wholly owned Ecuadorian subsidiaries, holds a portfolio of exploration properties in the Loja Province of Ecuador. Amongst these, Titan holds a 100% interest in the Pilo 9, Zar, Zar 1, Zar 3A and Cecilia 1 concessions forming the Dynasty Project and totalling an area of 13,909 hectares. Mineral concessions in Ecuador are subject to government royalty, the amount of which varies from 3% to 4% depending on scale of operations and for large scale operations (>1,000tpd underground or >3,000tpd open pit) is subject to negotiation of a mineral/mining agreement. Pilo 9, Zar and Zar 1 are subject to a 3% royalty payable to the Ecuador Government as part of the Small Scale Mine Licensing regime currently issued in favour of the Dynasty Goldfield Project but may be subject to change in the event economic studies after exploration indicate a need to apply for a change of regime. Concessions, Zar 3A and Cecilia 1 have not yet completed the environmental permitting process and require the grant of an Environmental Authorisation. Mineral concessions require the holder to (i) pay an annual conservation fee per hectare, (ii) provide an annual environmental update report for the concessions including details of the environmental protection works program to be followed for the following year. These works do not need approval; and (iii) an annual report on the previous year's exploration and production activity. Mineral Concessions are renewable by the Ecuadorian Ministry of Oil, Mining and Energy in accordance with the Mining Law on such terms and conditions as defined in the Mining Law. |
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties. | Dynasty Gold Project Exploration done by other parties set out in further detail in the Titan ASX release dated 19 May 2020, and summarised below: 1977, the Spanish-Ecuadorian joint venture company, Enadimsa, claimed 1,350ha in the La Zanja (Cerro Verde) area for exploration - no results included in reporting. During the 1970s the United Nations explored the "Curiplaya" area, 2 km east of the Dynasty Project. Copper and gold were detected in small quantities, data not included in reporting. 1991–92, BHP Exploration Ltd. covered the general area with concessions, but the tenements eventually lapsed after minimal work. 2001 to 2003, a private prospecting company, Ecuasaxon, undertook investigations in the general area and discovered anomalous gold and silver in quartz-sulphide veins in what is now the concession area. 2003 until 2007 Dynasty Mining and Metals (later Core Gold) completed mapping, limited ground geophysical surveys and exploration sampling activity including 201 drill holes totalling 26,733.5m and 2,033 rock channel samples were taken from 1,161 surface trenches at Cerro Verde, Iguana Este, Trapichillo and Papayal in support of a maiden resource estimation. 2008 to 2009, the Ecuadorian Government introduced an exploration moratorium, where on April 18, 2008, Ecuador's Constitutional Assembly passed a Constituent Mandate resolution (the "Mining Mandate"), which provided, among other provisions, for the suspension of mineral exploration activities for 180 days, or until a new Mining Act was approved. The Mining Act was published in late January 2009. The mining regulations to supplement and provide rules which govern the Mining Act were issued in November 2009, after which time the Mining Act and Regulations (collectively, the "Mining Law") were enacted. 2017 to 2020 Core Gold Inc. (formerly Dynasty Mining and Metals) commenced small scale mining on a |



| Criteria | J(| ORC Code explanation | С | ommentary |
|---------------------------|----|---|---|---|
| | | | | small portion of the Dynasty Project. Operations exposed a number of veins of the Canadian NI 43-101 compliant resource estimate, and operations discovered several veins of varying orientations not previously identified in drill and trench exploration activities requiring further exploration activity to quantify. |
| Geology | • | Deposit type, geological setting, and style of mineralisation. | • | Regionally, the Dynasty gold project lies within the compressional Inter-Andean Graben that is bounded by regional scale faults. The graben is composed of thick Oligocene to Miocene aged volcano- sedimentary sequences that cover the Chaucha, Amotape and Guamote terrains. This structural zone hosts several significant epithermal, porphyry, mesothermal, S-type granitoid, VHMS and ultramafic/ophiolite precious metal and base metal mineral deposits. |
| | | | • | At the project scale, the intermediate volcanic hosted mineralised veins mainly occur along a faulted zone near and sub-parallel to the contact with the Cretaceous aged Tangula Batholith that extends north from Peru and is found outcropping in the east and south of the concessions. |
| | | | • | Porphyry intrusion style mineralisation hosting gold and copper mineralisation has also been mapped and intersected by drilling by at the Kaliman porphyry within the Dynasty Project area. |
| | | | • | Gold occurs in its native form along with sulphides, including pyrite, sphalerite, galena, arsenopyrite, marcasite, chalcopyrite and bornite. |
| Drill hole Information | • | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: | • | Not Applicable |
| | | o easting and northing of the drill hole collar | | |
| | | elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar | | |
| | | o dip and azimuth of the hole | | |
| | | down hole length and interception depth | | |
| | | o hole length. | | |
| | • | If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | | |
| Data aggregation | • | In reporting Exploration Results, weighting averaging | • | Not applicable |
| methods | | techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated | | |
| | | Where aggregate intercepts incorporate short lengths of high- grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. | | |
| | • | The assumptions used for any reporting of metal equivalent values should be clearly stated. | | |



| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| Relationship between mineralisation | These relationships are particularly important in the reportir of Exploration Results. | Additional mapping, trenching, drilling and modelling of results is required to confirm the true width and orientation of mineralised zones. |
| widths and intercept lengths | If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. | |
| | If it is not known and only the down hole lengths are reported there should be a clear statement to this effect (e.g., 'down hole length, true width not known'). | d, |
| Diagrams | Appropriate maps and sections (with scales) and tabulation of intercepts should be included for any significant discover being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | y |
| Balanced reporting | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and hig grades and/or widths should be practiced avoiding misleads reporting of Exploration Results. | h are included in Figures provided in their entirety. |
| Other substantive exploration data | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation geophysical survey results; geochemical survey results; but samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | ns; results include orientation studies for ground magnetics, IP Geophysics, and soil sampling grids, however |
| Further work | The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-odrilling). The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-odrilling). | ······································ |
| | Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations an future drilling areas, provided this information is not commercially sensitive. | |