

# MORE HIGH-GRADE GOLD & SILVER CONFIRMED AT DYNASTY PROJECT

## Key Highlights

- **Dynasty Gold footprint substantially expanded, with new rock chip results confirming additional high-grade gold and silver well beyond existing resources:**
  - **8.71 g/t Au, 197 g/t Ag, 3.06% Cu, 20% Pb, 12.5% Zn located 1.7 kilometres south of current Mineral Resources at Papayal prospect.**
  - **8.73 g/t Au and 6.4g/t Ag, located 230m east of current Mineral Resources at Trapichillo prospect.**
- **Large-scale arsenic<sup>1</sup> soil anomalies have highlighted several new target areas for resource growth at Papayal and Trapichillo prospects, Dynasty Gold Project.**
- **Coherent large-scale copper soil anomalies have revealed two copper porphyry targets, adjacent to epithermal gold mineralisation at Dynasty.**
- **Trenching has commenced over high priority gold and copper target areas to determine mineralisation extent and controls to optimise drill design.**
- **Exploration work programs now complete at Papayal, focus will now turn to 1.8 kilometre gap zone between Trapichillo and Iguana, where recently executed agreements have provided access to highly prospective ground never previously explored.**
- **3D geological model updated for Dynasty with improved geological confidence and good potential for JORC classification upgrades for upcoming mineral resource update.**

### Titan's CEO Melanie Leighton commented:

*"Our expanded exploration programs have highlighted large-scale soil anomalies and coincident high-grade gold-silver rock chip results more than 1.7 kilometres from currently defined resources at Papayal.*

*"It's exciting that entirely new copper targets are being unveiled by our exploration. We believe that these new areas of copper mineralisation provide a growth opportunity and could add considerable value to the Dynasty Project.*

*"In the coming week we will commence work programs in the area between Iguana and Trapichillo, an area representing strong potential for lateral resource extensions, and a 1.8 kilometre strike extent of highly prospective land that has never seen exploration by Titan nor previous project owners.*

*"The gap zone is an exciting area that we consider to be an important piece of the puzzle that has the potential to connect gold mineralisation along the entire gkm epithermal corridor."*

<sup>1</sup> Arsenic shows a strong association with gold, and is a good proxy for gold mineralisation at the Dynasty Gold Project

## 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 field based exploration including mapping and surface geochemical sampling.

Recently returned rock chip results from the Papayal and Trapichillo prospects have confirmed the presence of high-grade gold and silver mineralisation well beyond currently defined resources. Significant results returned include:

- **8.71 g/t gold, 197 g/t silver with 3.06% copper and 20% lead and 12.5% zinc** in TM06951
- **8.73 g/t gold and 6.5 g/t silver** in TM052910
- **6.6 g/t gold and 28.2 g/t silver** in TM052905
- **5.9 g/t gold and 17.55 g/t silver** in TM053430
- **5.4 g/t gold and 13.9 g/t silver** in TM052908

Rock chip sample TM06951 is located within the newly discovered Gisell copper prospect. The sample was taken from a polymetallic vein located within a broader zone of strong illite-smectite alteration and associated copper oxide-pyrite-chalcopyrite mineralisation.

In addition to significant rock chip results, recent soil geochemical results have unveiled multiple extensive open-ended arsenic<sup>2</sup> anomalies within the Dynasty epithermal gold corridor.

At Papayal, the arsenic anomalies correspond with north-south and northwest-southwest trending epithermal veins, while at Trapichillo they correspond with northeast-southwest trending epithermal veins. The arsenic anomalies remain open to the east and west at Trapichillo, with further work underway to define the extent of these anomalies.

Arsenic (gold) mineralisation is mainly related to veins and halos with pyrite ± arsenopyrite ± galena, traces of chalcocite and iron oxides of jarosite, hematite, and goethite. Propylitic alteration dominates the area with an assemblage of chlorite, calcite ± epidote and argillic alteration related to halos of veins with an assemblage of pervasive quartz + illite.

Soil sampling results were also successful in revealing the presence of two coherent large-scale copper anomalies adjacent to gold mineralisation, at the Cola and Gisell prospects.

The Gisell copper prospect represents an exciting new copper porphyry discovery, approximately 1 kilometre in diameter, associated with a quartz diorite intrusion exhibiting argillic and phyllic alteration. The copper anomaly shows a distinct outer halo of lead and zinc, as typically observed in porphyry systems. Strong copper mineralisation also shows a strong negative correlation with manganese, indicating hydrothermal (phyllic) alteration, whereby manganese is removed from the system due to acidic conditions creating greater solubility.

The Cola prospect is characterised by an ~800 metre diameter copper anomaly centred on a granodiorite intrusion that remains open to the southeast and also features a halo of elevated lead and zinc.

Further mapping and trenches are being developed over these new target areas of arsenic and copper to provide further information on mineralisation style, extent, and controls. Information from trenching and more detailed mapping will be used to optimise drill design.

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<sup>2</sup> Arsenic shows a strong correlation with gold and is a good proxy for gold mineralisation at the Dynasty Gold Project



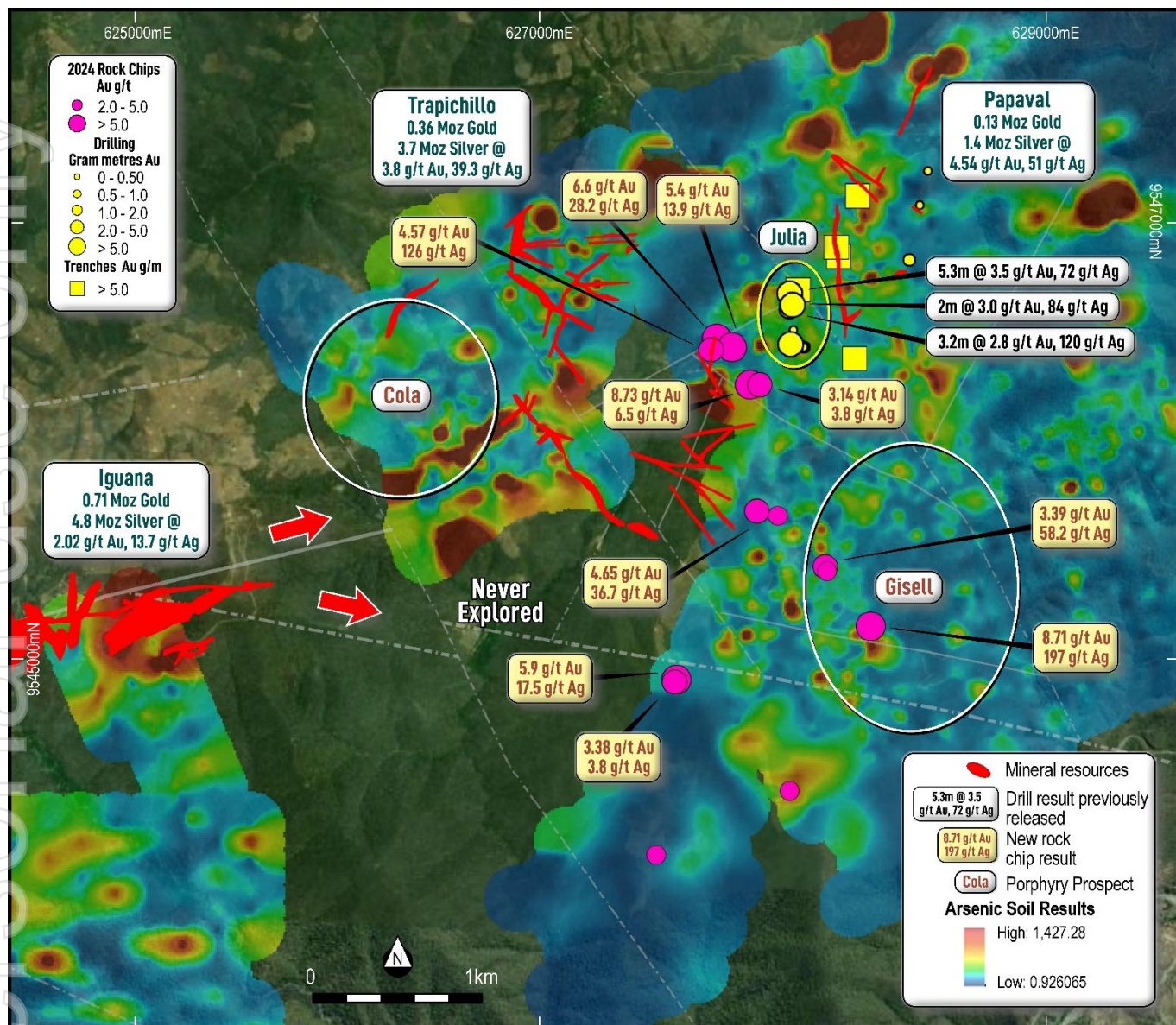


Figure 1. Zoom into Papaval and Trapichillo prospects highlighting recent significant rock chip samples, and previously reported significant drill and trench intercepts for the Julia and Papaval vein systems. Note extensive areas to the east of Iguana and the southwest of Trapichillo that remain unexplored, representing significant opportunity to define further gold mineralisation.

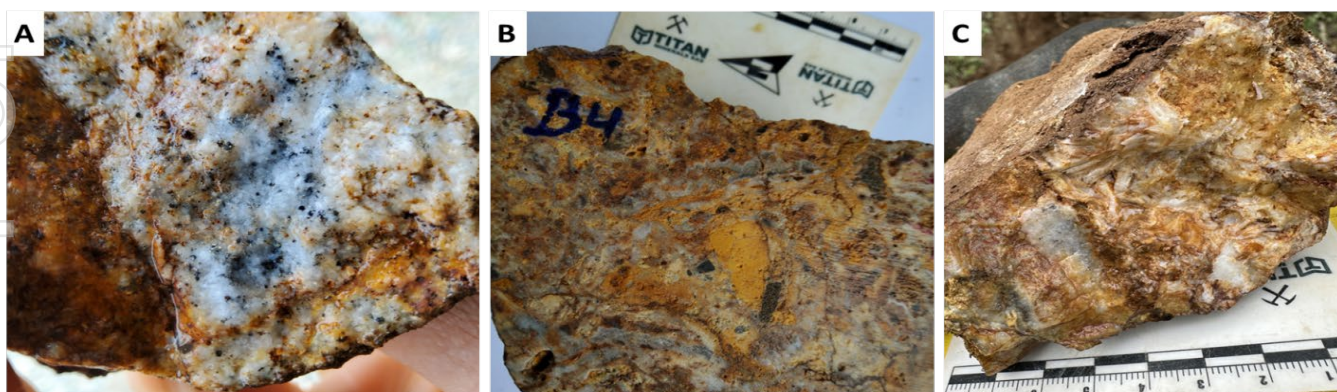


Plate 1: Trapichillo Prospect – A) Epithermal vein, massive texture with pyrite, arsenopyrite, chalcocite. B) Epithermal vein, brecciated texture with pyrite, jarosite. C) Barite vein, bladed texture with quartz and pyrite.



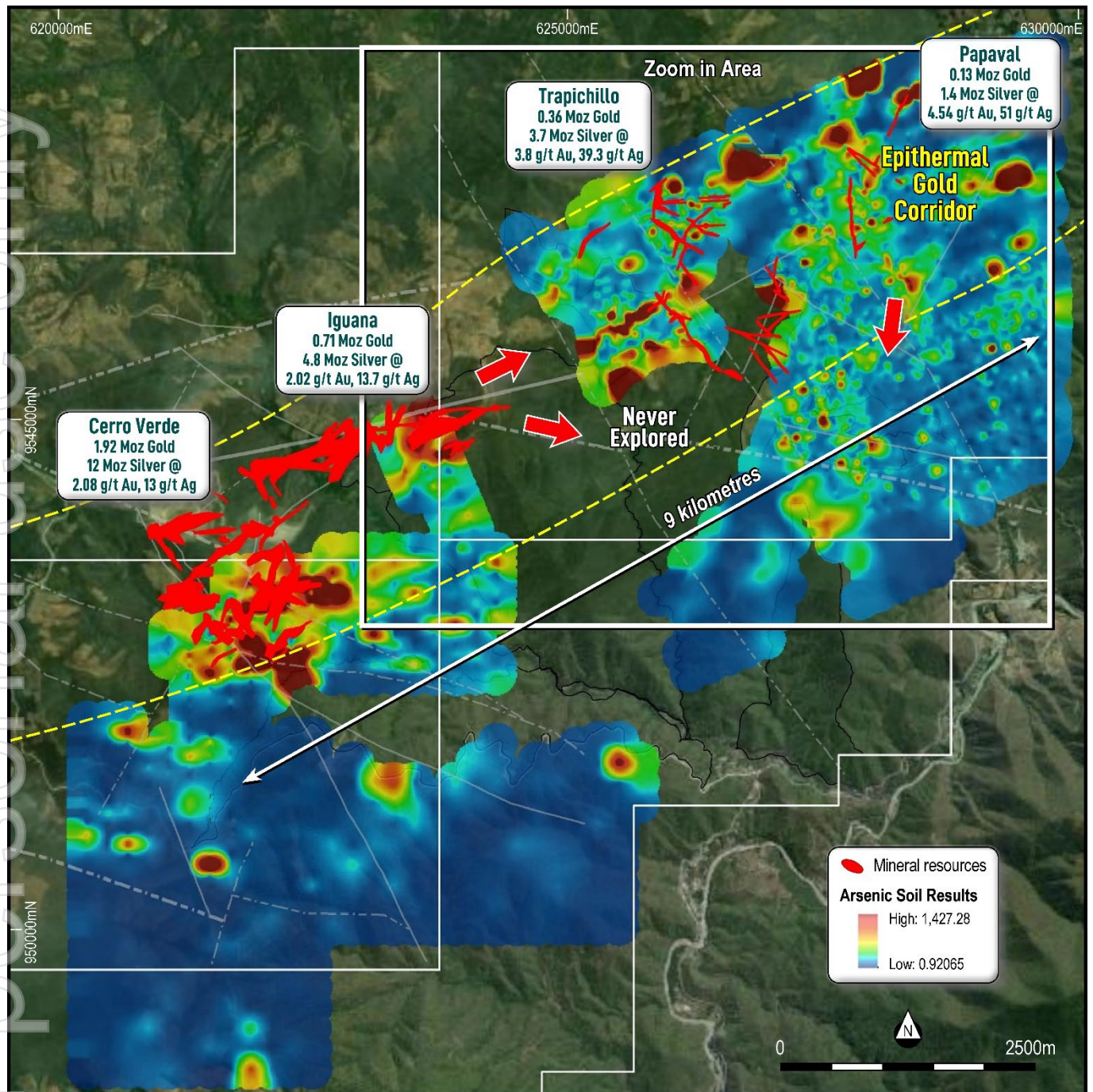


Figure 2. Dynasty Gold Project displaying surface soil geochemistry (arsenic ppm) in relation to current mineral resources. Note extensive open-ended arsenic anomalies at the Papaval and Trapichillo prospects, with arsenic anomalies open to the east, west and south at Trapichillo in areas that have never previously been explored.



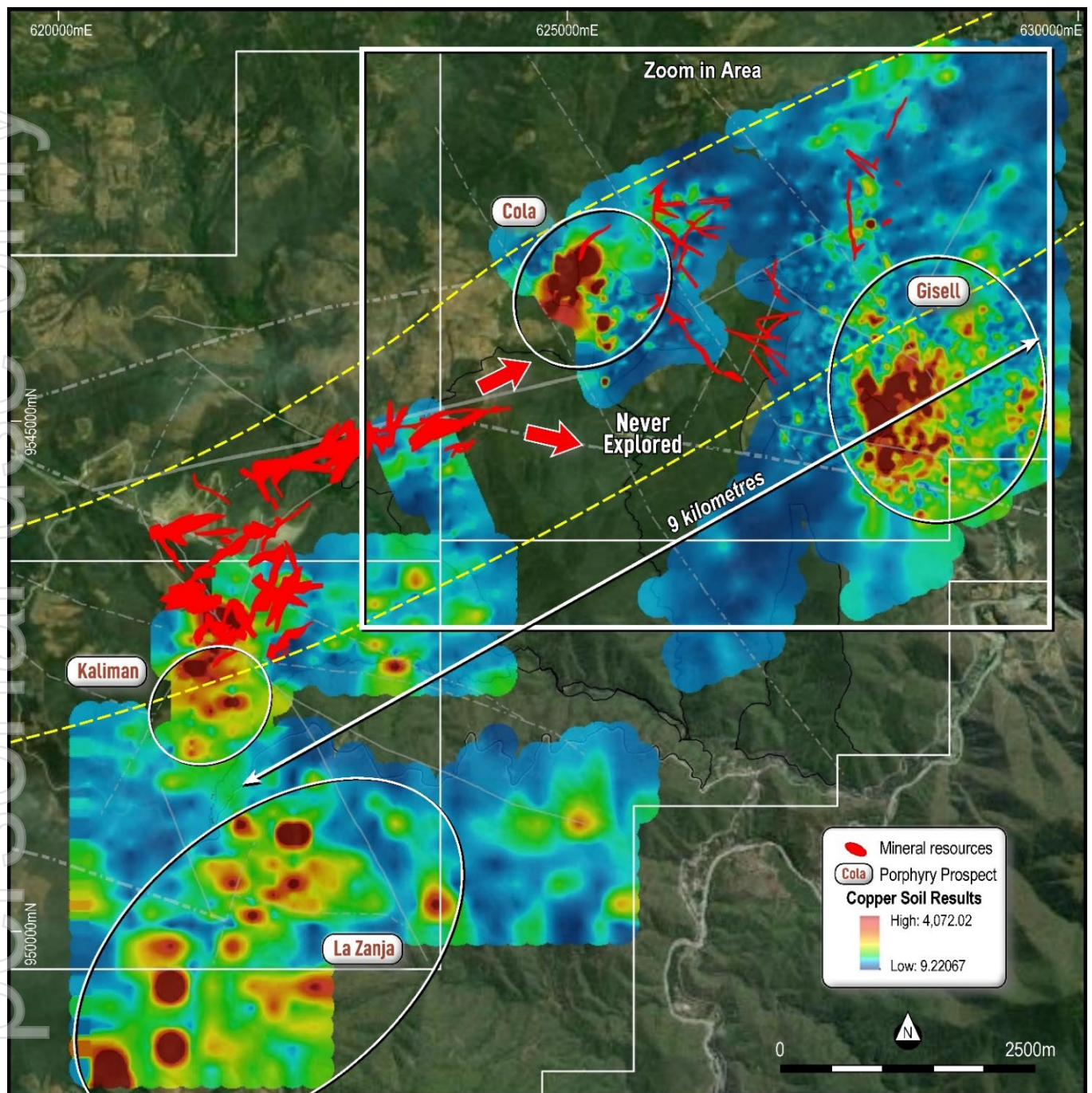


Figure 3. Dynasty Gold Project displaying surface soil geochemical geochemistry (copper ppm) in relation to current mineral resources. Note large-scale copper anomalies defined by soil sampling at the Gisell and Cola prospects, the copper anomaly at Cola remains open to the southwest in areas that have never previously been explored.

## Dynasty Exploration Potential Evaluation

Chief Technical Advisor, Mike Skead recently spent three weeks on site with the geology team to evaluate the exploration potential of Dynasty, with a focus on structural controls and geochemical analysis to identify exposure levels within the hydrothermal system of mineralised shears and veins.

Epithermal / mesothermal veins and porphyry systems are typically associated with hydrothermal centres within the proximity of regional faults, hence the review of exploration potential commenced with an analysis of large-scale lineaments such as:

- Geomorphological lineaments: detail topography from Lidar hillshade and topography 1:100,000 scale,
- Regional and local scale geological lineaments, and
- Geophysical lineaments, from gravity (residual total bouguer), airborne magnetics (reduced to pole from TMI and analytical signal) and radiometrics (K, Th and U).

Lineaments were overlain with project scale geochemical data ie. stream sediments (BLEG) and soil grid surveys, to define exploration targets. Information was prepared at 1:25,000 scale, covering the 9-kilometre northeast mineralised corridor from Cerro Verde to Papayal prospects. Field reconnaissance was performed to define lineaments related to interpreted faults or shear zones.

Stereographic and geochemical analyses using elemental ratios highlighted that epithermal and/or mesothermal veins at Dynasty obey shear zones with preferential northeast-southwest orientations throughout the 9-kilometre mineralised corridor.

The northeast orientation is considered to represent the main shear plane, characterized by discontinuous mineralogy with thickness changes observed in quartz+carbonate veins and in alteration haloes. Each reactivation of the primary northeast plane is considered to have good potential to host important gold concentrations ie. plunging ore shoots.

A secondary east-west orientation was confirmed based upon observations at the Foto vein, Cerro Verde prospect. Shear zones with a normal sense of movement reflect dilatational planes, combined with primary northeast shear plane, determines the main stresses and sense of movement to be strike-slip and dextral type. This has been confirmed for the Brecha-Comanche, Foto, and Iguana targets.

Two orientations evident at the Trapichillo prospect, is shear type veins with northwest-southeast and north-south orientations, indicating a potential change in the principal stress field in this part of the project. Geochemically, a change is also observed at Trapichillo, which shows a higher concentration of base metal sulphides in shear veins ie. lead, zinc, and copper, with respect to the Cerro Verde and Iguana prospects.

The exposure level of mineralisation of the Dynasty project is variable, according to the geochemistry of hydrothermal systems. Based on arsenic+antimony+thallium/copper ratios we can determine that:

- the Iguana vein system is located higher up in the hydrothermal system,
- followed in depth by the Foto and Brecha-Comanche vein systems,
- a little further down in the system are veins within the Trapichillo and Papayal prospects with a higher ratio of lead, zinc, and copper, possibly mesothermal type.
- The Kaliman porphyry lower again in the system with a higher ratio of copper+molybdenum to lead+zinc.

Interestingly, these variations in vertical zonation of the hydrothermal system do not represent a topographic relationship. For example, the Foto target is in the upper part of the hydrothermal system but located in a topographical low. This is likely due to dip-slip movements that post-date and displace mineralisation ie. post-mineralisation faults. These areas that are relatively high in the system represent good potential for vertical expansion of the resource and will be evaluated as part of the upcoming targeting and drill planning exercise.



## Dynasty 3D Geological Model Update

Modelling for the Cerro Verde prospect (Cerro Verde) considers the entire zone of mineralisation, including shear and quartz vein hosted high-grade mineralisation and illite-smectite-pyrite±arsenopyrite alteration halo of low-moderate grade mineralisation.

The inclusion of high-grade vein and shear hosted mineralisation together with the low-moderate grade alteration halo, allows better quantification of the deposit potential and provides a geological and grade estimation model better suited for engineering purposes.

The updated vein model combines relogging of historical drill holes and updated surface mapping. Analysis of all available data has led to improvements in the geological model and enabled isolated veins such as Foto and Piojo targets to be incorporated in the model, following verification of mineralisation continuity through review of drilling and mapping information.

Figure 4 shows a plan view of the new mineralisation model and figure 5 depicts A-A' cross section through Brecha-Comanche, showing the newly interpreted mineralisation geometry in comparison to the previously generated block model. The block model estimate for Brecha-Comanche was previously estimated using a probabilistic technique, but this will be superseded by a discrete mineralisation model, which should allow for improved grade and confidence in the model leading to a potential upgrade in classification.

The improved resource model will also be used to support future drill design focused on targeting ore shoots and resource extensions.

## Dynasty Gold Project Next Steps

- Trenching and detailed mapping over newly identified arsenic and copper target areas to better understand mineralisation extent and controls, and to optimise drill design- results due in the coming 6 weeks.
- Expanded exploration programs including surface soil sampling and mapping to define resource extension targets over the 1.8 kilometre gap zone between Iguana and Trapichillo- results due in the coming 4-6 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 in July 2024
- Dynasty Mineral Resource Estimate Update, targeting modest resource growth and improved JORC classification, workstreams advancing – due Q2 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.

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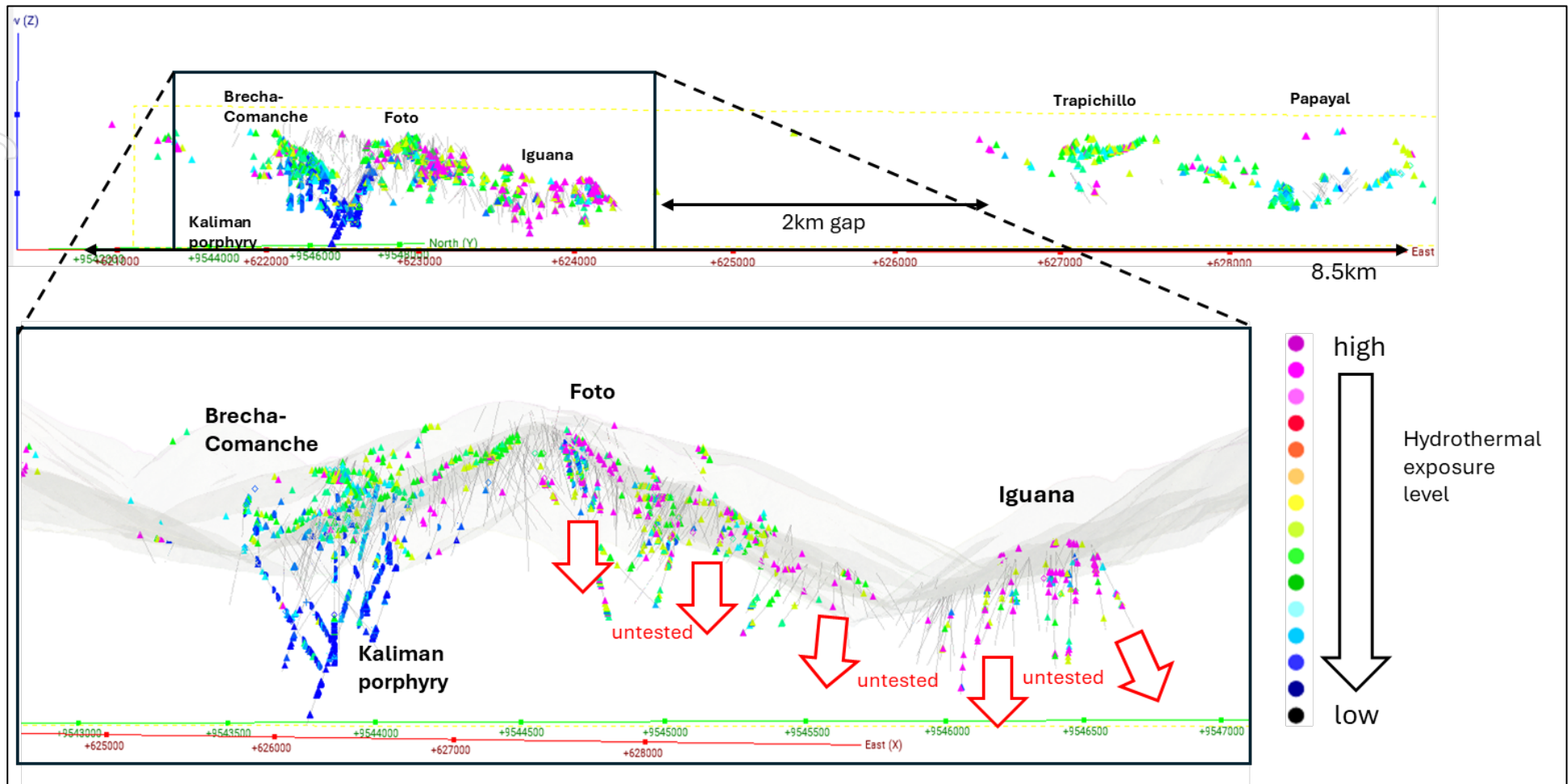


Figure 4. Northeast oriented long section from Brecha-Comanche in the SW to Papayal in the NE showing drill traces coloured by the As+Sb+Tl/Cu ratio i.e. hydrothermal system level within mineralised veins. It can be observed that the Foto and Iguana targets are located high in the system with higher values of arsenic, antimony and thallium. Foto and Iguana represent obvious targets for depth extensions when considering they are high in the system.



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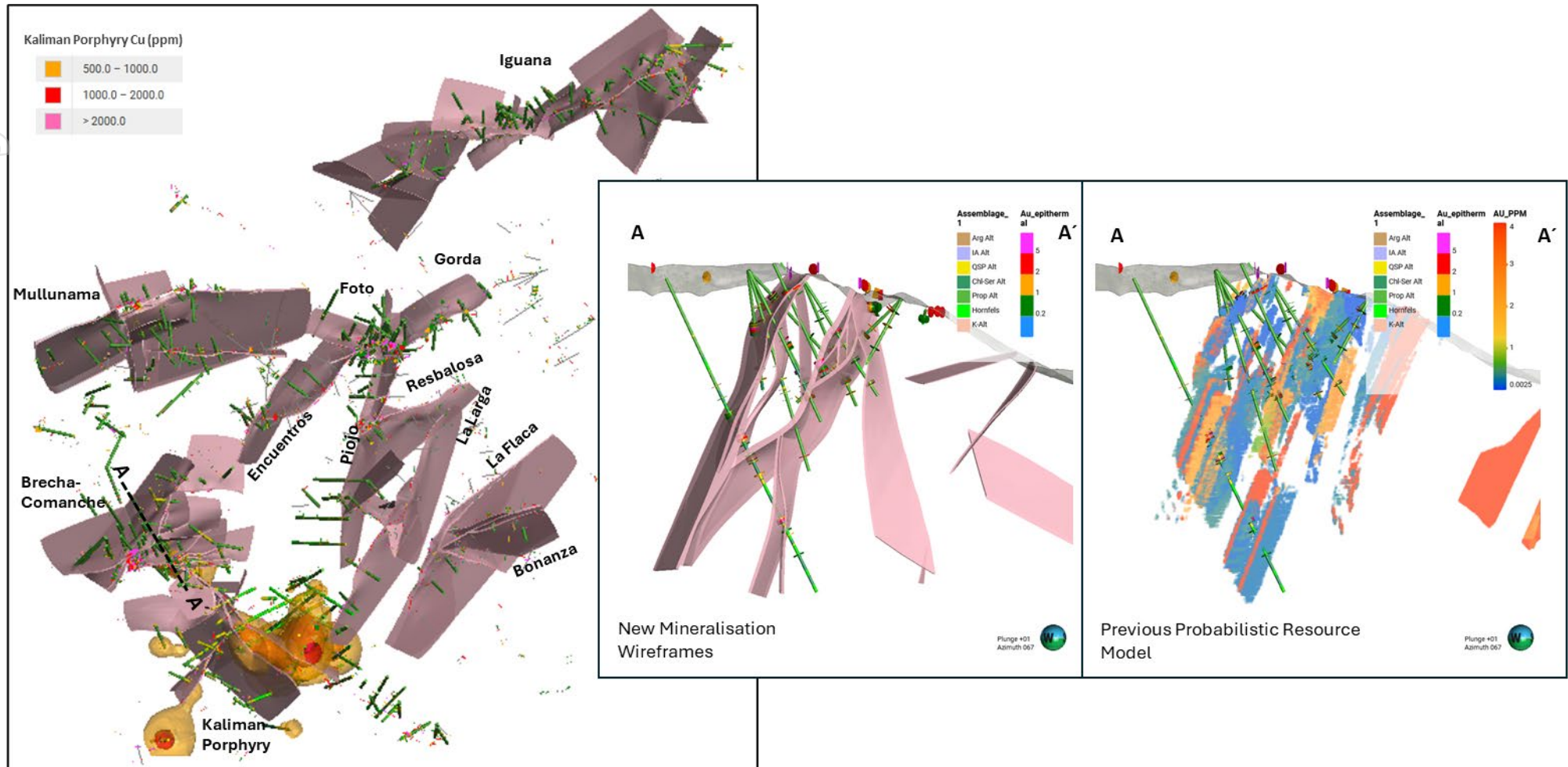


Figure 5. Cerro Verde 3D mineralisation model- plan view and cross section A-A' through Brecha-Comanche target.

## About the Dynasty Gold Project

The Dynasty Gold Project is an advanced stage exploration project comprising five contiguous concessions and is 139km<sup>2</sup> 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 gold and copper mineralisation as identified by surface mapping, trenching and drilling at the Kaliman prospect.

Table 1. Dynasty Mineral Resource Estimate, July 2023

Dynasty Project	Indicated					Inferred					Total				
	Tonnes (M)	Grade (g/t)		Contained Metal (Moz)		Tonnes (M)	Grade (g/t)		Contained 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
<b>Total</b>	<b>18.09</b>	<b>2.09</b>	<b>14.73</b>	<b>1.21</b>	<b>8.57</b>	<b>25.44</b>	<b>2.33</b>	<b>16.40</b>	<b>1.90</b>	<b>13.41</b>	<b>43.54</b>	<b>2.23</b>	<b>15.70</b>	<b>3.12</b>	<b>21.98</b>

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.

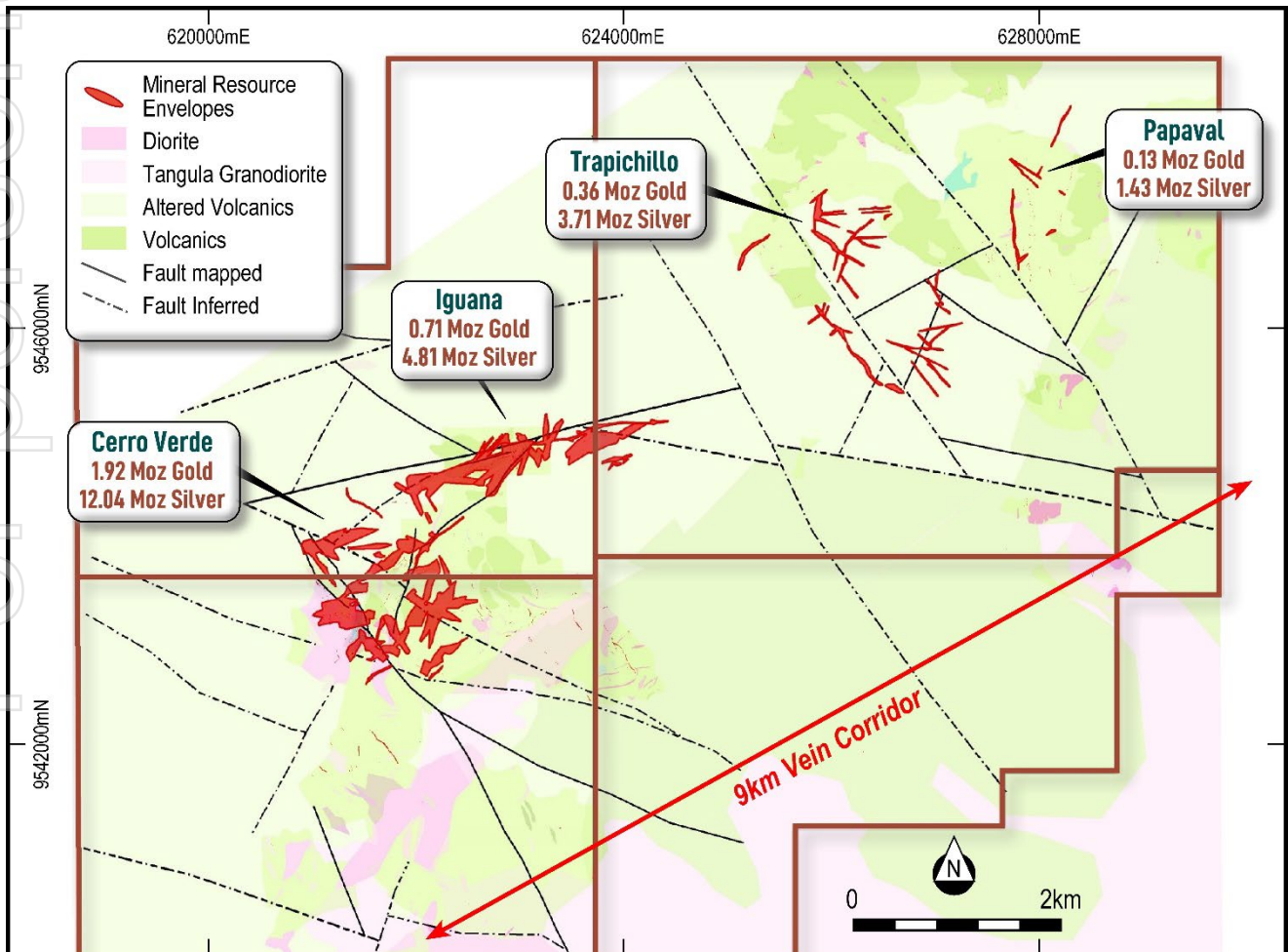


Figure 6. Dynasty plan view displaying Mineral Resources, prospects and geological interpretation.



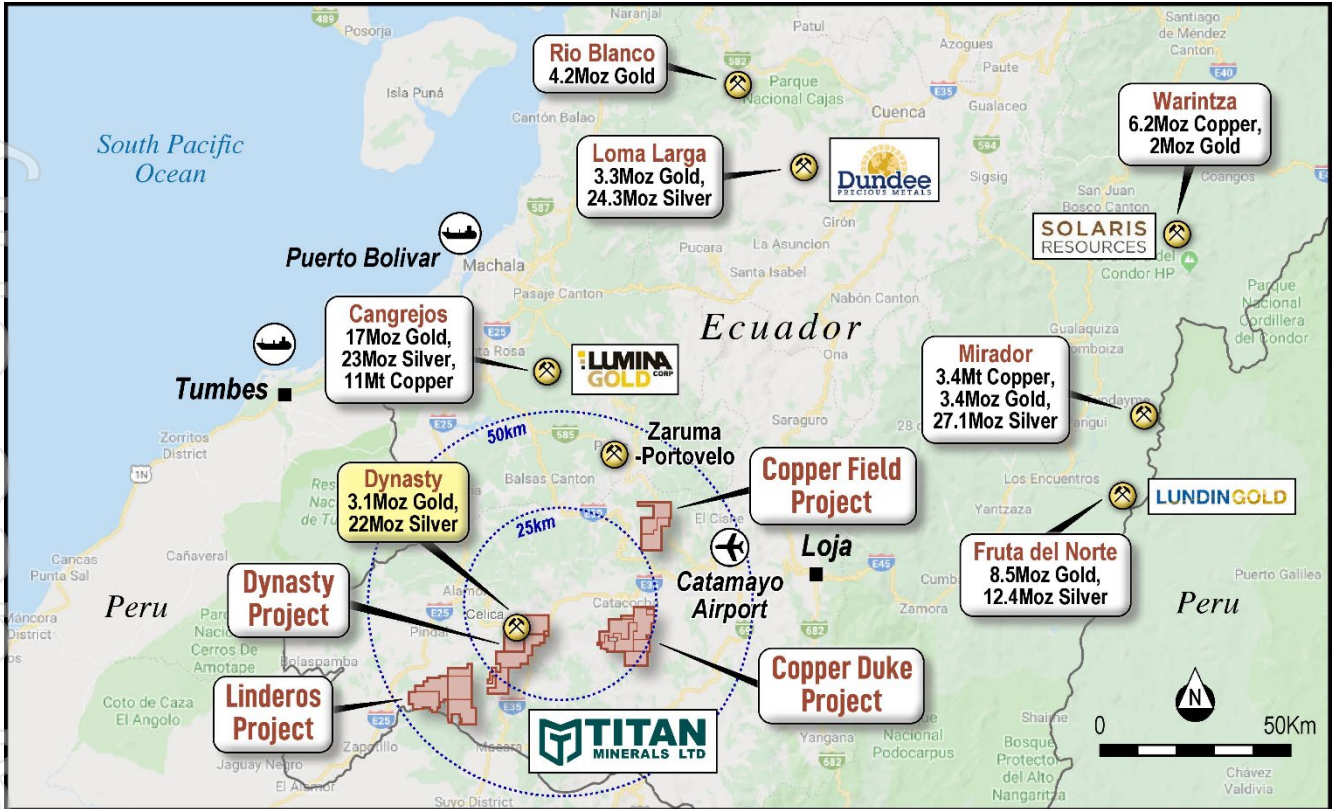


Figure 7. Titan Minerals southern Ecuador Projects, peer deposits and surrounding infrastructure

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Released with the authority of the Board.

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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.



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## Appendix A.

Table 1. Dynasty Gold Project Significant Rock Chips

Rock Chip	East (m)	North (m)	Level (m)	Au (g/t)	Ag (g/t)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
06951	7,960	544,876	29	7.71	0.97	0,600 (0.06%)	6.46	100,000 (20%)	12550 (12.5%)
052910	7,248	546,299	92	0.73	0.46	210	1.74	833	711
052905	7,052	546,573	77	5.6	0.2	108	1.64	701	267
050925	1,905	543,410	25	0.12	0.7	79	1.1	661	141
053430	6,816	544,559	11	5.9	0.55	64	1.55	820	296
052908	7,143	546,517	59	5.4	0.9	98	2	243	485
052888	7,288	545,553	67	0.65	0.7	698	3.48	1,440	2640
050927	1,971	543,346	25	0.59	0.05	33	0.65	312	107
052907	7,016	546,506	23	0.57	0.26	175	1.44	1,280	498
052884	7,688	545,226	42	0.39	0.2	231	3.66	2,450	1090
053431	6,801	544,546	03	0.38	0.78	121	1.26	558	230
052912	7,304	546,298	50	0.14	0.76	37	2.14	87	68
050929	1,972	543,347	26	0.83	0.3	23	0.86	180	31
052885	7,702	545,198	89	0.47	0.2	104	2.8	3,780	831
052887	7,412	545,526	093	0.375	0.1	44	1.4	493	231
052737	7,482	543,902	50	1.2	0.2	249	1.36	903	13
07084	6,696	543,527	97	0.11	0.49	29	7.36	54	70

NB. All coordinates are given in WGS84 Zone 17S

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APPENDIX B

Dynasty Project - 2012 JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.  <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No drilling included in this announcement.</li> <li>Rock chip samples were dried at a temperature &lt; 60°C, crushed to better than 70% passing a 2mm mesh and split to produce a 250g charge pulverised to 200 mesh to form a pulp sample.</li> <li>50g charges were split from each pulp for fire assay for Au with an atomic absorption (AA) finish. Samples returning &gt;10ppm Au from the AA finish technique are re-analysed by 50g fire assay for Au with a gravimetric finish.</li> <li>An additional charge is split from sample for four acid digests with ICP-MS reporting a 48-element suite. Within the 48 elements suite, overlimit analyses of a 5-element suite are performed with an ore grade technique (ICP-AES) if any one element for Ag, Pb, Zn, Cu, Mo exceeds detection limits in the ICP-MS method.</li> <li>Soil samples were dried at a temperature &lt; 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.</li> <li>50g charges were split from each pulp for super trace gold and multielement in soils analysis.</li> <li>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.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling included in this announcement.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling included in this announcement.</li> </ul>



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Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling included in this announcement.</li> <li>Geological observations have been routinely recorded for rock chip samples as part of detailed surface geological mapping.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all cores taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples were submitted in their entirety for analysis, no subsampling was completed.</li> <li>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.</li> <li>The samples are directed to the internal laboratory situated at the company's offices. Upon entry into the digital sample inventory, they undergo splitting, and only a 50g portion is selected for further processing. This 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 ultimately prepared for analysis using the handheld p-XRF.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>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 appropriate method to evaluate total gold and silver content of the samples.</li> <li>No geophysical tools or other instruments were used in relation to the reported exploration results.</li> <li>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).</li> <li>Soil samples were analysed by the company pXRF following preparation as outlined above. Forty elements are analysed, with their respective detection limits outlined below:</li> </ul>

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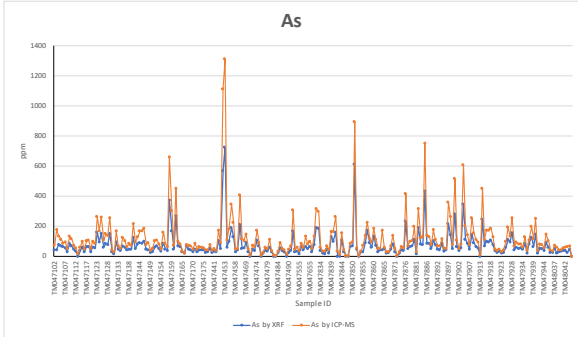
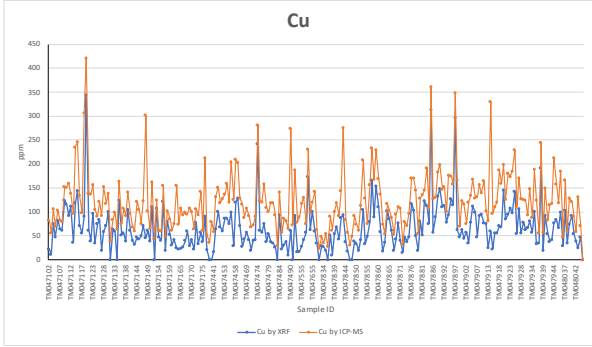
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<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported, only surface soil and rock chip sample results</li> <li>No adjustment to data is made in the reported results</li> </ul>																																																																																								
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>No drillholes reported</li> <li>Rock chip samples were located using a GPS</li> <li>Grid system used for all undertakings at the Dynasty Project is WGS84 Zone 17 South</li> </ul>																																																																																								
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Data spacing for reported soil sampling geochemical results was on a 200m x 50m spacing and in some areas down to an infill grid of 50m x 50m spacing.</li> <li>Data spacing for reported rock chip samples was on an irregular/ ad hoc basis, with samples taken at the geologists' discretion as part of their surface mapping activities.</li> <li>No Sample compositing has been applied in reported exploration results.</li> </ul>																																																																																								
<b>Orientation of data in relation to geological structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples may have been taken along the length of mineralised vein structures, so bias may be introduced. However, rock chip sample results are used for exploration targeting purposes, and will not be considered for resource estimation purposes.</li> <li>No bias is considered to have been introduced by the soil sampling orientation, as the soil samples were taken on a systematic grid spacing, considered to be perpendicular to, and appropriate for, the style of mineralisation.</li> </ul>																																																																																								
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were collected by Titan Minerals geologists and held in a secure yard prior to shipment for laboratory analysis. Samples are enclosed in polyweave sacks for delivery to the lab and weighed individually prior to shipment and upon arrival at the lab. Sample shipment is completed through a commercial transport company</li> </ul>																																																																																								



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<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>with closed stowage area for transport.</p> <ul style="list-style-type: none"> <li>An audit of pXRF results in comparison with laboratory assay results was conducted, with results showing an excellent correlation.</li> <li>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 optimal for exploration purposes.</li> </ul> <div style="display: flex; flex-direction: column; align-items: center;">   </div>

personal use only

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Criteria	JORC Code explanation	Commentary
		<div style="text-align: center;"> <h3>Pb</h3> </div> <div style="text-align: center;"> <h3>Zn</h3> </div>

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## Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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 (&gt;1,000tpd underground or &gt;3,000tpd open pit) is subject to negotiation of a mineral/mining agreement.</li> <li>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.</li> <li>Concessions, Zar 3A and Cecilia 1 have not yet completed the environmental permitting process and require the grant of an Environmental Authorisation.</li> <li>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.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>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:</p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>1991–92, BHP Exploration Ltd. covered the general area with concessions, but the tenements eventually lapsed after minimal work.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>2017 to 2020 Core Gold Inc. (formerly Dynasty Mining and Metals) commenced small scale mining on a</li> </ul>



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		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.
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Porphyry intrusion style mineralisation hosting gold, silver and copper mineralisation has also been mapped and intersected by drilling by at the Kaliman porphyry within the Dynasty Project area.</li> <li>• Gold occurs in its native form along with sulphides, including pyrite, sphalerite, galena, arsenopyrite, marcasite, chalcocopyrite and bornite.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tabulation of requisite information for all reported rock chip results with significant values validated by Titan geologists and referenced in this report are included in Appendix A.</li> <li>• Only significant rock chip samples considered as significant ie. results &gt; 1.0 g/t Au have been reported.</li> <li>• Rock chip samples have been tabulated containing significant values with gold grades exceeding 1.0g/t Au and are included in Appendix A of this report. Rock chips with values &lt; 1.0 g/t Au are excluded from maps or graphics in the report.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated</i> <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No high-grade assay cut was applied to reported gold results. In the case of silver, the initial upper detection limit of the four-acid digest used is 100ppm, and an overlimit analysis method with an upper detection limit of 1,500ppm is used.</li> <li>• Lower cut-off for reported significant values is 1.0 g/t Au</li> <li>• No data aggregation has been used for reporting of significant rock chip values.</li> <li>• No metal equivalent reporting is applicable to this announcement</li> </ul>

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<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reported rock chip values are point data, and do not represent true widths of mineralisation.</li> <li>• Additional trenching, drilling and modelling of results is required to confirm the true width and orientation of mineralised zones.</li> <li>•</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Included in body of report as deemed appropriate by the competent person</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All material exploration results for surface geochemistry are included in this report, and location of all results are included in Figures provided in their entirety.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No other available datasets are considered relevant to reported exploration results. Historical exploration results include orientation studies for ground magnetics, IP Geophysics, and soil sampling grids, however each of these surveys are limited in scale relative to the project and are not considered material to assess potential of the larger project area.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Additional mapping, trenching and drilling is planned to better define structural controls on mineralisation and assess open ended mineralisation on multiple mineralised corridors within the project area. Further mapping and sampling are to be conducted along strike of reported work to refine and prioritise targets for drill testing.</li> <li>• Included in body of report as deemed appropriate by the competent person</li> </ul>