

# HIGH-GRADE GOLD DISCOVERED IN EXTENSIONAL TRENCHES AT DYNASTY GOLD PROJECT

Strong Gold Confirmed from Surface in Extensional Veins at Iguana

## **Key Highlights**

- 3.1Moz gold & 22Moz silver Mineral Resource at Dynasty set to substantially grow with continuity in surface mineralisation now confirmed over the entire 9kilometre epithermal corridor.
- Mineralisation footprint at Iguana now recognised to be much larger than the 2.5km x 300m area which contains current drill and trench defined resources of 0.7Moz gold & 4.8Moz silver. Reconnaissance work and latest surface geochemical results have confirmed Iguana mineralisation footprint to be 4km x 1.5km, with multiple new mineralised veins discovered at surface.
- Trenching at Iguana south has returned an exceptional result of 3.0m @ 21.4 g/t Au & 14.1 g/t Ag, confirming a new high-grade vein from surface. This high-grade vein is located outside Mineral Resources and has never been drill tested.
- Trenching at Iguana east has returned a high-grade result of 1.8m @ 4.5 g/t Au & 10.6 g/t Ag, confirming further mineralisation outside currently defined Mineral Resources, representing an excellent resource growth target adjacent to Inferred Resources at Iguana.
- Multiple new veins exhibiting high-grade gold confirmed in rock chips, coincident with geochemical anomalies, remain un-tested. Trenching is underway over these new targets, with results to inform exploration drill planning.
- Up to 10,000m of drilling set to commence in the coming weeks at Dynasty, targeting lateral and depth resource extensions of current Mineral Resources, along with testing multiple new exploration targets.
- Development workstreams for Dynasty to be initiated in parallel with resource growth, with a resource update planned for mid-2025.
- Further to the recently announced Linderos Copper Project JV & Earn-in deal, Hancock Prospecting subsidiary company (Hanrine) are preparing to commence the initial 10,000m drilling campaign in the coming weeks. This first phase of drilling will see Hanrine earn a 25% interest and have the exclusive right to increase their interest to 80% by spending US\$120 million on exploration and project evaluation<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Refer to ASX Release dated 18<sup>th</sup> September 2024 for full details of the Joint Venture & Earn-in Agreement.



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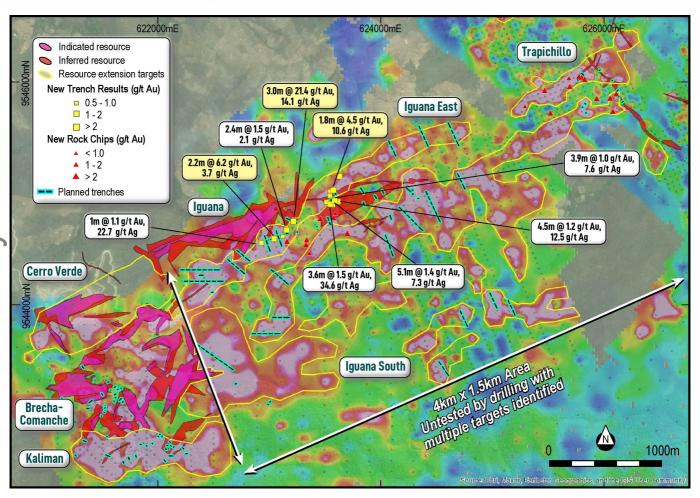


Figure 1. Dynasty Gold Project displaying soil geochemistry (arsenic), resource extensional targets, planned trenches and new significant trench results in extensional areas outside Mineral Resources.

#### **Titan's CEO Melanie Leighton commented:**

"Our efforts this year have been focussed on unveiling the opportunity within large unexplored gaps in the 9kilometre epithermal corridor at Dynasty. Our systematic exploration has dramatically increased the Dynasty mineralisation footprint, successfully identifying several new exploration and extensional targets which have the potential to provide substantial growth to the current 3.1Moz gold & 22Moz silver resource.

"It's exciting that our mapping, soil, rock chip and trench sampling efforts have proven the continuity of the gold system in previously unexplored areas, with several high priority targets identified in new areas. These latest trench results have confirmed the presence of high-grade gold from surface in the first of many new extensional targets to be tested. Trenching is underway over several exploration targets, with results to assist with defining strike extents and tenor of mineralisation in these areas ahead of drilling.

"We anticipate a steady flow of results from trenching currently underway and drilling which is planned to commence in the coming weeks. With gold and silver prices at all time highs, we are optimistic of a muchenhanced scenario for Dynasty with an updated resource estimate due in mid-2025."

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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 underexplored areas outside the currently defined 3.1 Moz gold and 22Moz silver Mineral Resource.

Soil sampling along the epithermal system at Dynasty has successfully expanded the gold mineralisation footprint along the entire 9-kilometre corridor, with several compelling new exploration and resource extensional targets highlighted in areas that have never previously been explored or drilled.

Recent trench sampling has returned excellent results in resource extensional areas to the south and east of the Iguana prospect (Iguana). Trench results at Iguana south have highlighted a new extensive mineralised gold-silver vein from surface, with significant trench results including 3.0m @ 21.4 g/t Au & 14.1 g/t Ag and 2.2m @ 6.2 g/t Au & 3.7 g/t Ag. These latest results have confirmed a northeast trending ~ 400-metre-long new vein discovery, that remains open along strike to the northeast and southwest. This new vein has never been drilled and is located ~150m to the south of drilled defined Iguana Mineral Resources.

Latest mapping and trench sampling from Iguana east have also highlighted multiple new veins with significant trench results including 1.8m @ 4.5 g/t Au & 10.6 g/t Ag from surface. This new trench result was returned from a new vein located approximately 150 metres to the north of currently defined resources, representing a resource growth target.

New trench results have also been returned from peripheral areas of Inferred Mineral Resources at Iguana east, with latest results confirming the continuity and tenor of mineralisation in an area which has been sparsely explored with trenches and never drilled. A significant result of 1.8m @ 4.5 g/t Au & 10.6 g/t Ag was returned from trenching in an area of low geological confidence, providing good support to improve the geological interpretation and resource classification in this area. Further trenching and drilling are planned at Iguana east to target resource additions and improvements to classification.

The Company believes that these new exploration and resource extensional targets have the potential to substantially grow the Dynasty Mineral Resource, with a campaign of up to 10,000m of drilling set to commence in the coming weeks.

#### Much Larger Mineralisaiton Footprint Unveiled at Iguana Prospect

Iguana is located within a northeast-southwest fault network, where mapping, trenching and drilling has confirmed strike extensive, high-grade gold-silver epithermal veins, ranging from several hundred metres to kilometres in length. The Iguana prospect (Iguana) currently hosts Indicated Resources of 0.2 Moz gold and 1.2 Moz silver and Inferred Resources of 0.5 Moz gold and 3.6 Moz silver and has good potential for lateral and depth extensional resource growth.

Prior to Titan's 2024 reconnaissance exploration programs, mineralisation at Iguana was defined by limited drilling and trenching over an area of ~2.5 kilometres by 300 metres. Drilling and trenching over a 1.5km x 300m area at Iguana has defined Indicated & Inferred Resources. While surface trenching over a 1km by 200m area at Iguana East has defined Inferred Resources.

Where drilling has been completed at Iguana, mineralisation is defined to an average depth of ~200 metres below surface, with mineralisation remaining open and untested below this depth, providing strong potential for additional resource growth down dip (refer to Figure 4).

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Reconnaissance mapping and surface geochemical sampling programs implemented by Titan in 2024 have unveiled the ultimate scale of mineralisation at Iguana. The mineralisation footprint now recognised at Iguana (Iguana Main, Iguana East & Iguana South) is much larger, ~4 kilometres by 1.5 kilometres. This is an exciting development, particularly when considering that drilling to date has only tested a small portion (~1.5 km x 300m) of the much larger mineral system at Iguana.

Soil sampling has highlighted multiple strike extensive northeast trending soil geochemical anomalies, which have now been validated by rock chips and trench sampling, confirming excellent potential for additional gold-silver mineralisation in newly identified veins from surface.

Significant results of 7.5 g/t Au & 4.3g/t Ag and 8.2 g/t Au & 112 g/t Ag were returned from rock chip sampling at Iguana east. While rock chip sampling at the Iguana south target also returned significant results of 3.1 g/t Au & 29.3 g/t Ag and 4.3 g/t Au & 3.0 g/t Ag. These results further validate extensional targets identified by Titan's soil sampling and mapping.

Titan's geology team are currently undertaking further mapping and trenching to better understand potential widths and tenor of vein hosted gold-silver mineralisation in the Iguana extensional targets with results to feed into drill design, targeting resource growth in entirely new areas.

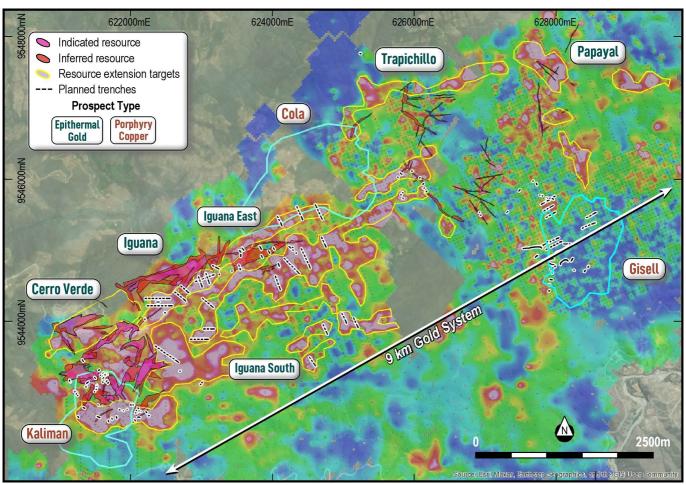


Figure 2. Dynasty Gold Project entire 9km corridor proven to be fertile with epithermal gold and copper porphyry mineralisation. Image shows arsenic in soil geochemistry, geochemical anomalies (gold- yellow and copper- cyan) and current Mineral Resources.

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### Multiple Depth Extensional Targets Provide Resource Growth Options

Examples of resource growth depth extensions can be observed in the following figures, where several veins within the Cerro Verde and Iguana prospects have been drilled to an average depth of  $\sim 200$  metres, with multiple mineralised veins remaining open and untested at depth.

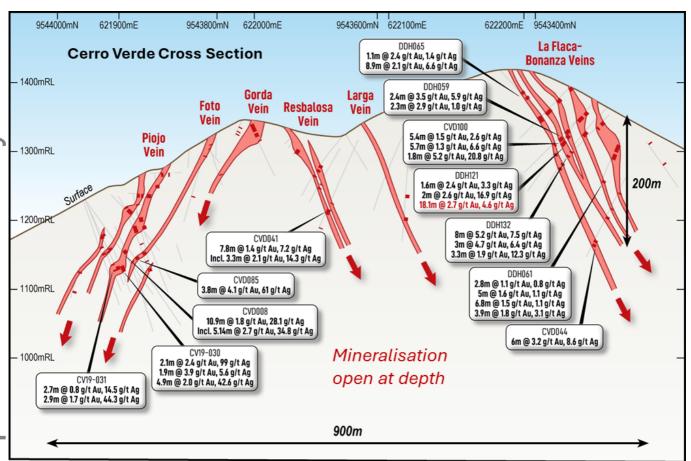


Figure 3. Cross Section through Cerro Verde prospect highlighting multiple veins and previously reported significant intercepts, with drilling completed to an average depth of  $\sim$  200m, and mineralisation open and untested below that depth. These areas below drilling provide good potential for resource depth extensions.

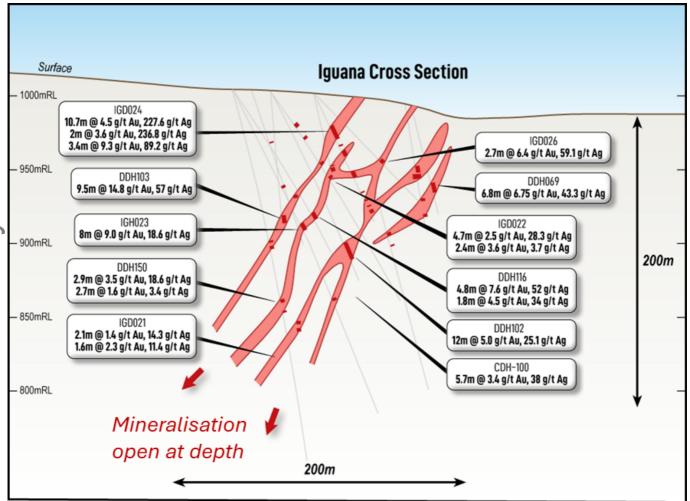


Figure 4. Cross Section through Iquana prospect highlighting multiple veins and previously reported significant intercepts, with drilling completed to an average depth of ~ 200m and mineralisation remaining open and untested below that depth. These areas below drilling provide good potential for resource depth extensions.

### Dynasty Mineral Resource & Pre-scoping Mine Assessment Update

An internal resource update has been completed for Dynasty, incorporating results from 30 holes for 3,221m of diamond drilling completed at the Cerro Verde and Papayal prospects since the maiden Mineral Resource Estimate (MRE) published in July 2023. Significant improvements have been made to the geological model, incorporating extensive geological observations and structural measurements taken from surface mapping and drill core logging.

While the geological model has been improved with this new information, changes to the resource estimate in terms of tonnes, grade and ounces are not considered a material addition. Hence, the Company has elected to delay its revised MRE until data from the upcoming resource drilling campaign can be added.

The Dynasty Pre-Scoping Mine Assessment (PSMA) has been completed by expert external consultants, ABGM Engineering. The PSMA has provided a framework and confidence for the company to proceed with its strategy of resource growth and conversion, with a Scoping Study to commence in mid-2025.



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Using high level assumptions, the PSMA generated indicative open pit shells and depths, conceptual and underground mine extraction plans and indicative potential productivity outputs to be used a future guide for economic evaluation.

It's important to note that a Pre-Scoping Mine Assessment allows conceptual evaluation using highly indicative, albeit plausible parameters and differentials of these parameters enabling the understanding of the potential exploitation strategies, economic potential of these methods and ultimately to frame the scope of work for a Scoping level study.

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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#### **CAPITAL STRUCTURE** 470K 187M \$1.6M \$3.8M **SHARES ON ISSUE** RECEIVABLES **DAILY LIQUIDITY CASH** As at 30/06/24 Average 30-day volume traded ASX:TTM As at 31/3/24 14M ~60% **UNLISTED OPTIONS TOP 20 OWNERSHIP** MARKET CAP At \$0.46/sh As at 31/3/2024 27M LISTED OPTIONS

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## **About the Dynasty Gold Project**

The Dynasty Gold Project is an advanced exploration- early resource stage 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 and small scale mining activities.

Exploration work at the Dynasty Gold Project has outlined an extensive zone of epithermal veining over a nine kilometres strike and two kilometres 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 Meta (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 ≥ 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.

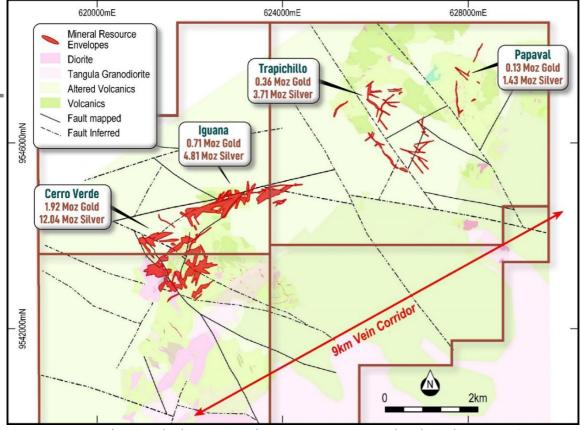


Figure 5. Dynasty plan view displaying Mineral Resources, prospects and geological interpretation.

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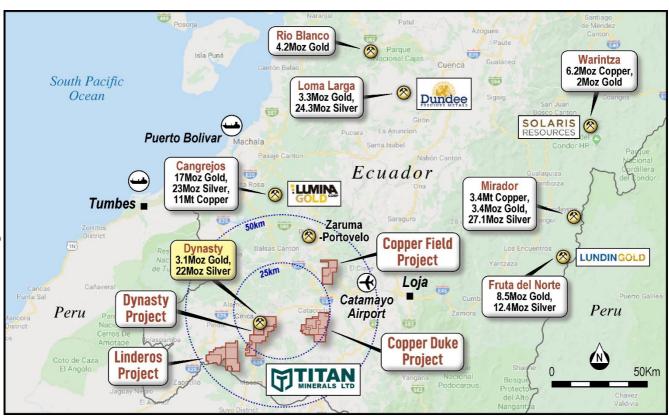


Figure 6. Titan Minerals southern Ecuador Projects, peer deposit



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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 A.

Table 1. Dynasty Significant Trench Results returned from the Iguana Prospect

Trench	Nauth	Faat	DI.	l au réh	Din	A =:		From	То	Length	Au	Ag
Number	North	East	RL	Length	Dip	Azimuth		(m)	(m)	(m)	(g/t)	(g/t)
IGC24-023	623163	9544672	1114	6	-30	295		2	4.4	2.4	1.5	2.1
IGC24-025	623620	9544920	1260	11	-2	3		2.9	7.35	4.45	1.2	12.5
IGC24-026	623596	9544935	1239	7	-31	337		0	5.1	5.1	1.4	7.3
IGC24-027	623592	9544927	1239	8	-25	340		0	1.7	1.7	1.2	3.8
IGC24-028	623576	9544895	1234	4	-75	308		0	3.6	3.6	1.5	2.9
IGC24-029	622971	9544681	1021	13	-10	244		0	11	11	0.1	4.9
IGC24-031	623580	9545032	1217	4	40	180		1	2.8	1.8	4.5	10.6
IGC24-032	623547	9545014	1206	4	25	25		1	2.7	1.7	1.2	10.0
IGC24-033	623631	9545155	1270	8	-18	105		1	2.85	1.85	1.1	13.4
IGC24-034	623516	9544919	1225	6	-39	176		2.5	4	1.5	1.0	10.6
IGT24-001	622929	9544553	1054	3	4	68		1.3	2.3	1	1.1	22.7
10704 000	C220 4F	0544500	1007	1	10	78		0	4.3	4.3	3.2	2.8
IGT24-003	623045	9544593	1087	4	10	/8	including	1.25	3.4	2.15	6.2	3. <i>7</i>
IGT24-004	623120	9544616	1121	9	11	71		2	6.5	4.5	0.6	1.2
IGT24-006	623218	9544752	1152	7	25	110		2	5	3	21.4	14.1
IGT24-007	623546	9544983	1205	7	1	135		0	3.9	3.9	1.0	7.6
10704 000	000555	0544000	1010	12	٥٢	293		1.3	11.7	10.4	0.5	5.2
IGT24-008	623555	9544903	1218	12	-25	293	including	2.28	4.1	1.82	1.4	12.7

Table 2. Dynasty Significant Rock Chip Results from the Iguana prospect

Sample ID	East	North	RL	Au (g/t)	Ag (g/t)
TM053010	623580	9544782	1235	14.30	6.8
TM052926	623062	9544869	1100	12.20	68.5
TM053006	623462	9544775	1238	8.18	112.0
TM053003	623334	9544542	1095	7.51	4.3
TM053014	623009	9544670	1045	6.37	45.7
TM053015	622999	9544640	1045	5.73	75.1
TM053007	623461	9544775	1238	5.14	23.0
TM053009	623704	9544646	1219	4.62	7.3
TM053005	623339	9544584	1123	4.32	3.0
TM053017	623161	9544572	1140	3.05	29.3
TM053008	623595	9544821	1250	1.46	2.1
TM053002	623363	9544465	1050	1.42	1.8
TM052930	623242	9544860	1102	1.05	5.7

NB. All locations are given in WGS84 Datum.



## **APPENDIX B**

## Dynasty Project - 2012 JORC Table 1

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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.         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.     </li> </ul>	<ul> <li>Trench and Channel sampling is completed as representative cut samples across measured intervals cut with hammer or hammer and chisel techniques.</li> <li>Rock chip samples were selected by geologists as being of geological or mineralisation interest. Rock chips an are not considered to be representative on their own, and are to be used in conjunction with other geological datasets.</li> <li>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. Sample returning &gt;10ppm Au from the AA finish technique are re-analysed by 50g fire assay for Au with a gravimetri 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 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 of 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>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> </ul>
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 new drilling included in this announcement.
Drill sample recovery	<ul> <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>	No new drilling included in this announcement.

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Criteria	JORC Code explanation	Commentary
Logging	<ul> <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> </ul>	<ul> <li>No new drilling included in this announcement.</li> <li>Rock chip and trench samples are geologically logged using qualitative descriptions for lithology, alteration. Mineralogy, veining and presence and type of sulphides.</li> </ul>
	<ul> <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>	
Sub-sampling techniques and sample preparation	<ul> <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> </ul>	<ul> <li>Trench and 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>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 50g portion is then dried in an oven at 60°C for 8 hours to remove moisture. Subsequently, the dried sample</li> </ul>
	<ul> <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> <li>undergoes crushing under pressure with a glass roller. The pulverized sample is then pelletized and is prepared for analysis using the handheld p-XRF.</li> <li>Laboratory Assay Analysis: 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> <li>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.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> <li>No geophysical tools 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>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> <li>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).</li> <li>Forty elements are analysed with the pXRF, with their respective detection limits outlined below:</li> </ul>



Criteria	Criteria JORC Code explanation				Commentary									
			Elemen	t Detection limit	Element	Detection limit	Element	Detection limit	Element	Detection limit				
			Ag (ppn	n) < 5 ppm	Cs (ppm)	< 10 ppm	Nd (ppm)	< 50 ppm	Si (ppm)	< 300 ppm				
			Al (ppn		Cu (ppm)	< 5 ppm	Ni (ppm)	< 5 ppm	Sn (ppm)	< 5 ppm				
			As (ppn Ba (ppn		Fe (ppm)	< 25 ppm < 5 ppm	P (ppm) Pb (ppm)	< 300 ppm < 5 ppm	Sr (ppm)	< 5 ppm < 5 ppm				
			Ca (ppn		Hg (ppm) K (ppm)	< 25 ppm	Pr (ppm)	< 25 ppm	Te (ppm) Th (ppm)	< 5 ppm				
			Cd (ppn		La (ppm)	< 25 ppm	Rb (ppm)	< 5 ppm	Ti (ppm)	< 5 ppm				
			Ce (ppn		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 (ppn		Mo (ppm)	< 5 ppm	Sc (ppm)	< 10 ppm	Zn (ppm)	< 5 ppm				
			Cr (ppn	1) < 5 ppm	Nb (ppm)	< 5 ppm	Se (ppm)	< 5 ppm	Zr (ppm)	< 5 ppm				
Verification of sampling and	•	The verification of significant intersections by either independent or alternative company personnel.		ported inters Ecuador.	ections a	are calculat	ed by pı	ofessional	geologi	sts in Austra	alia and validated by a senior geologists			
assaying	•	The use of twinned holes.	• Ori	ginal laborat	ory data	files in CS\	/ and lo	cked PDF f	ormats	are stored t	ogether with the merged data.			
		Documentation of primary data, data entry procedures,	<ul> <li>All</li> </ul>	drilling and	surface o	data are sto	red in a	self-valida	tina MX	Deposit de	ological database.			
	-	data verification, data storage (physical and electronic)		•						opoon go	2.23.24. 44.45455.			
		protocols.	• No	adjustment t	o data is	s made in th	ie repor	tea results						
	_	'	<ul><li>All</li></ul>	surveyed da	ta is coll	ected and s	tored in	WGS84 da	atum.					
	•	Discuss any adjustment to assay data.												
Location of data	•	Accuracy and quality of surveys used to locate drill holes	<ul><li>Re</li></ul>	ported trench	and cha	annel samp	les are	ocated with	n an RT	K GPS surv	ey unit with sub-centimetre reporting for			
points		(collar and down-hole surveys), trenches, mine workings	the purpose of improved confidence in resource estimation work.											
		and other locations used in Mineral Resource estimation.	• All	surveyed da	ta is coll	ected and s	tored in	WGS84 da	atum.					
			<ul> <li>Tor</li> </ul>	ographic co	ntrol is o	around surv	ev gual	itv and rec	onciled	against Dro	one platform survey data with 1m pixel			
	•	Specification of the grid system used		olution. Asse	-			•		-				
		Quality and adequacy of topographic control.		il samples we										
	·	Quality and adequacy of topographic control.		•		U								
			• Gri	d system use	ed for all	undertakin	gs at th	e Dynasty F	Project i	s WGS84 Z	one 17 South			
Data spacing	•	Data spacing for reporting of Exploration Results.	• Re	ported chanr	nel and t	rench sam	oling is	collected or	n 1m to	2m spacing	g depending on resolution of geological			
and distribution	•	Whether the data spacing, and distribution is sufficient to	and structural information deemed necessary by the geology team.											
		establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	dat		nd distril	bution for h	nigher c	onfidence			e indicated and inferred categories, with n categories to be defined with further			
	•	Whether sample compositing has been applied.		ta spacing foologists' disci							hoc basis, with samples taken at the			
				ta spacing fo vn to an infill					results	was on a 2	00m x 50m spacing and in some areas			
			• No	Sample com	positing	has been a	applied i	n reported	explora	tion results.				
Orientation of data in relation		Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which		e orientation phyry target					perper	ndicular to r	napped orientation of primary vein and			
to geological structure	•	this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to		e true thickne	ess of in	tercepts wil	l be acc	ounted for		•	analysis and 3D modelling of veins. Al interpreted as true thickness.			



Criteria	JORC Code explanation	Commentary
	have introduced a sampling bias, this should be assessed and reported if material.	<ul> <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> </ul>
		<ul> <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>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were collected by Titan Minerals geologists and field technicians 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 with closed stowage area for transport.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of reported data completed outside of standard checks on inserted QAQC sampling.



## Section 2 - Reporting of Exploration Results

ı	Cuitouio	IODC Code avalenation	Communitation
	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 approximate of the toward held at the time.	<ul> <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> </ul>
		The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to	<ul> <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> </ul>
		operate in the area.	<ul> <li>Concessions, Zar 3A and Cecilia 1 have not yet completed the environmental permitting process and require the grant of an Environmental Authorisation.</li> </ul>
			• 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.
		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:
	Exploration done by other parties	exploration by other parties.	<ul> <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> </ul>
			<ul> <li>During the 1970s the United Nations explored the "Curiplaya" area, 2 km east of the Dynasty Project.</li> <li>Copper and gold were detected in small quantities, data not included in reporting.</li> </ul>
			• 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.
			<ul> <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> </ul>
			<ul> <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>



	Criteria	JC	ORC Code explanation	Commentary					
					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.				
			A summary of all information material to	•	No new drilling included in the body of this report.				
	Information	the understanding of the exploration results including a tabulation of the following information for all Material drill holes:		•	Trench information is included for all reported significant trench results.				
			<ul> <li>easting and northing of the drill hole collar</li> </ul>						
			<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>						
-			o dip and azimuth of the hole						
			<ul> <li>down hole length and interception depth</li> </ul>						
			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	•	No high-grade assay cut was applied to reported gold results. In the case of silver, the initial upper detection				
	methods		averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of		limit of the four-acid digest used is 100ppm, and an overlimit analysis method with an upper detection limit of 1,500ppm is used.				
			high grades) and cut-off grades are usually Material and should be stated		Lower cut-off for reported significant intercepts is 0.2g/t Au with up to 4m of internal dilution (results with <0.1g/t Au or un-sampled intervals where null values are taken as a zero-gold grade in calculating				



Criteria	JORC Code explanation	Commentary
	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.	significant intercepts) are allowed within a reported intercept.  No metal equivalent reporting is applicable to this announcement
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	<ul> <li>Reported intersections are measured sample lengths. Reported trench and channel intersections are of unknown true width, further drilling and modelling of results is required to confirm the projected dip(s) of mineralised zones.</li> </ul>
intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul> <li>Reported intercepts are drilled thickness and should not be interpreted as true thickness unless otherwise indicated.</li> </ul>
	<ul> <li>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').</li> </ul>	
Diagrams	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.	Included in body of report as deemed appropriate by the competent person
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable,	<ul> <li>All material exploration results for surface geochemistry are included in the appendices of this report, and location of all results are included in figures provided in their entirety.</li> </ul>
	representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	<ul> <li>All results above 0.2g/t Au are included when reporting high grade vein hosted gold mineralisation. No upper cut-off has been applied.</li> </ul>
Other substantive exploration data	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	<ul> <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> <li>Bulk density tests have been completed on areas related to the reported exploration results.</li> </ul>
	results; bulk density, groundwater, geotechnical and rock characteristics;	



Criteria	JORC Code explanation	Commentary
	potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul> <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> </ul>
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Included in body of report as deemed appropriate by the competent person.