

## DRILLING CONTINUES TO EXTEND EPITHERMAL GOLD-SILVER MINERALISATION AT DYNASTY

### Substantial Overlapping Epithermal Gold and Silver Confirmed at Kaliman

#### Highlights

- Brecha-Comanche (Cerro Verde prospect) drilling has extended gold-silver mineralisation a further 120 metres vertically, confirming strong mineralisation and depth extension potential. Significant drill intercepts include:

Diamond Hole CVDD23-101:

- 4.97m<sup>1</sup> @ 2.12 g/t Au, 6.91 g/t Ag from 299.1m,
- 11.0m @ 2.67 g/t Au, 19.23 g/t Ag from 396m.

Diamond Hole CVDD23-102:

- 5.88m @ 4.64 g/t Au, 9.22 g/t Ag from 203m,
- 11.95m @ 3.25 g/t Au, 10.52 g/t Ag from 218.5m,
- 9.65m @ 2.29 g/t Au, 19.93 g/t Ag from 250m,
- 6.95m @ 10.84 g/t Au, 25.22 g/t Ag from 337.85m,  
*including 3.4m @ 20.53 g/t Au, 43.09 g/t Ag from 340.2m.*

Diamond Hole CVDD23-104:

- 5.75m @ 1.55 g/t Au, 2.38 g/t Ag from 50.13m,
- 11.07m @ 3.13 g/t Au, 19.00 g/t Ag from 118.24m,  
*including 2.76m @ 8.52 g/t Au, 45.99 g/t Ag from 118.24m,*
- 4.31m @ 4.46 g/t Au, 4.86 g/t Ag from 284.35m.

- Drilling at Kaliman prospect has revealed strong epithermal gold mineralisation from shallow depths making for a substantial additional overlapping epithermal-porphyry system. Significant drill intercepts include:

Diamond Hole KLDD23-003:

- 3.0m @ 3.89 g/t Au, 21.30 g/t Ag from 72m,
- 6.6m @ 2.47 g/t Au, 8.49 g/t Ag from 105.4m,
- 5.03m @ 2.26 g/t Au, 4.17 g/t Ag from 159.3m.

Diamond Hole KLDD23-004:

- 3.69m @ 3.47 g/t Au, 10.04 g/t Ag from 34.31m,
- 3.14m @ 3.55 g/t Au, 14.12 g/t Ag from 163m.

<sup>1</sup> Note that these widths are downhole, and are not always representative of true widths, please refer to Appendix A for full details on significant intercepts.

**▪ Other significant progress:**

- An additional surface geochemical sampling and coincident detailed mapping program is underway at the Papayal and Trapichillo prospects in the northeast of the gkm epithermal vein corridor (refer to Figure 1).
- Following infill and extensional drilling at Cerro Verde and the complete validation and interpretation of multiple vein swarms into a 3D geological model, the completion of a new JORC 2012 compliant Mineral Resource Estimate replacing the previous 43-101 estimate is imminent.

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

*"These exciting results prove strong depth and grade continuity of the epithermal vein system in the Brecha-Comanche zone at Cerro Verde. The intercepts have extended the known depth of the high-grade system more than 120 metres below previous drilling, and more importantly the system remains open."*

*"These results have massive implications for exploration and resource growth at the Dynasty Project, where most of the gold mineralisation defined to date at the project sits within the top 100m of surface and is sparsely tested to approximately 200m depth."*

*"Our follow up drilling in the Kaliman Porphyry zone has identified a new overlapping and structurally controlled zone of epithermal vein mineralisation with excellent shallow and high-grade gold-silver intercepts returned. These new results present a great opportunity for further expansion of the overall ore system targeting this style of mineralisation across the broader Dynasty Project."*

*"Another important milestone recently achieved has been re-securing access to the Papayal and Trapichillo prospects, where the geology team is now rapidly advancing surface geochemistry and confirmatory mapping across the outcropping epithermal vein corridor. This area is sparsely and shallowly tested by historical drilling and trenching and provides a significant opportunity to rapidly grow the resource base."*

*"Our CSR team has done a magnificent job in establishing positive and mutually beneficial engagement and support with the many communities and stakeholders in our project areas providing a terrific foundation for advancement of the Dynasty Project."*



**Plate 2: CVDD23-101- 404.6m. Massive epithermal quartz-gypsum-barite-carbonate-pyrite-arsenopyrite-sphalerite vein.**

Titan Minerals Limited (**Titan** or the **Company**) (**ASX:TTM**) is pleased to provide an update on drilling activities at its Brecha-Comanche and Kaliman targets, at the Cerro Verde prospect, at the Company's 100% held Dynasty Gold Project (**Dynasty**) in southern Ecuador.

### Brecha-Comanche, Cerro Verde Prospect

Three diamond holes have been completed for a total of 1,259 metres at the Brecha-Comanche epithermal vein system, where drilling was targeting test depth extensions, and the hypothesis that epithermal gold-silver veins potentially coalesce or widen at depth.

Pleasingly, drilling was successful in intersecting predicted down dip extensions to gold mineralisation, confirming the continuity and substantially extending the epithermal vein system a further 120 to 150 metres below previous drilling limits.

Mineralisation has now been defined from surface to a depth of 350 metres, with new significant drill intersections to be included in the updated Mineral Resource Estimate (MRE).

Significant intersections returned from Brecha-Comanche drilling include:

CVDD23-101:

- **4.97m<sup>2</sup> @ 2.12 g/t Au, 6.91 g/t Ag** from 299.18m,
- **11.0m @ 2.67 g/t Au, 19.23 g/t Ag** from 396m.

CVDD23-102:

- **5.88m @ 4.64 g/t Au, 9.22 g/t Ag** from 203m,
- **11.95m @ 3.25 g/t Au, 10.52 g/t Ag** from 218.5m,
- **9.65m @ 2.29 g/t Au, 19.93 g/t Ag** from 250m,
- **6.95m @ 10.84 g/t Au, 25.22 g/t Ag** from 337.85m,  
*including 3.4m @ 20.53 g/t Au, 43.09 g/t Ag from 340.2m..*

CVDD23-104

- **5.75m @ 1.55 g/t Au, 2.38 g/t Ag** from 50.13m,
- **11.07m @ 3.13 g/t Au, 19.00 g/t Ag** from 118.24m,  
*including 2.76m @ 8.52g/t Au, 45.99 g/t Ag from 118.24m,*
- **4.31m @ 4.46 g/t Au, 4.86 g/t Ag** from 284.35m.

Mineralisation at the Brecha-Comanche (Cerro Verde prospect) is hosted within a phyllic altered diorite unit which intrudes propylitic and phyllic altered andesites. Mineralisation and vein styles associated with significant intercepts include:

- crustiform and brecciated quartz ± calcite veins, disseminated pyrite-arsenopyrite, phyllic alteration halo.
- crustiform and bladed quartz-pyrite-arsenopyrite veins, separated by phyllic alteration halo.
- massive-brecciated quartz ± calcite ± gypsum-pyrite-arsenopyrite epithermal veins.
- massive quartz-gypsum-pyrite-arsenopyrite epithermal veins.
- bladed quartz-calcite veins, cemented breccias, disseminated pyrite-arsenopyrite-sphalerite, with phyllic alteration halo.

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<sup>2</sup> Note that these widths are downhole, and are not always representative of true widths, which are recorded in Appendix A.

An additional drillhole is currently being completed targeting the overlapping epithermal and porphyry systems between the Brecha-Comanche and Kaliman systems, where previous drilling intersected **7.27m @ 9.89 g/t Au, 28.0 g/t Ag, 0.24% Cu from 118.78m** in CVD033 (refer to ASX Release dated 14 April 2023). Results from this drillhole are expected in the 4 to 6 weeks.

### Kaliman, Cerro Verde Prospect

Four diamond holes have been completed for a total of 1,557 metres at Kaliman, Cerro Verde prospect. Although significant porphyry style mineralisation was not intersected by drilling, a positive result has been the successful discovery and confirmation of shallow epithermal gold-silver veins, overlapping the porphyry system at the Kaliman prospect.

Significant drilling intersections include:

KLDD23-003:

- **3.0m<sup>3</sup> @ 3.89 g/t Au, 21.30 g/t Ag** from 72m,  
within a broader intersection of 22m @ 0.75 g/t Au, 5.38 g/t Ag from 72m,
- **6.6m @ 2.47 g/t Au, 8.49 g/t Ag** from 105.4m,
- **5.03m @ 2.26 g/t Au, 4.17 g/t Ag** from 159.3m.

KLDD23-004:

- **3.69m @ 3.47 g/t Au, 10.04 g/t Ag** from 34.31m,
- **3.14m @ 3.55 g/t Au, 14.12 g/t Ag** from 163m,
- **2.4m @ 1.51 g/t Au, 11.04 g/t Ag** from 223.77,
- **110m @ 0.19 g/t Au, 1.16 g/t Ag, 0.13% Cu** from 274m.

An additional four diamond drillholes for 429.5 metres targeting shallow epithermal gold at the Kaliman prospect have been completed, with the results of these holes pending.

The Company looks forward to providing further drilling updates as results are received.

The technical team is evaluating results and updating the 3D geological model ahead of the next phase of drilling, with several lateral and depth extension targets remaining open.

### Dynasty JORC Resource Update

The Company has been working in earnest on the Dynasty Mineral Resource Estimate (MRE). Elizabeth Haren (Haren Consulting), an Independent resource geologist has been engaged to generate a JORC (2012) Compliant MRE.

The MRE will incorporate all drilling and trenching, including recently completed drilling where assays have been returned for the Cerro Verde prospect (Brecha-Comanche and Kaliman).

The Company is pleased to advise that the MRE is progressing as expected and very close to completion.

Results of the impending JORC 2012 MRE and preliminary pit optimisations will help inform drill targeting decisions as the Company continues to grow the gold and silver resources at Dynasty.

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<sup>3</sup> Note that these widths are downhole, and are not always representative of true widths, which are recorded in Appendix A.



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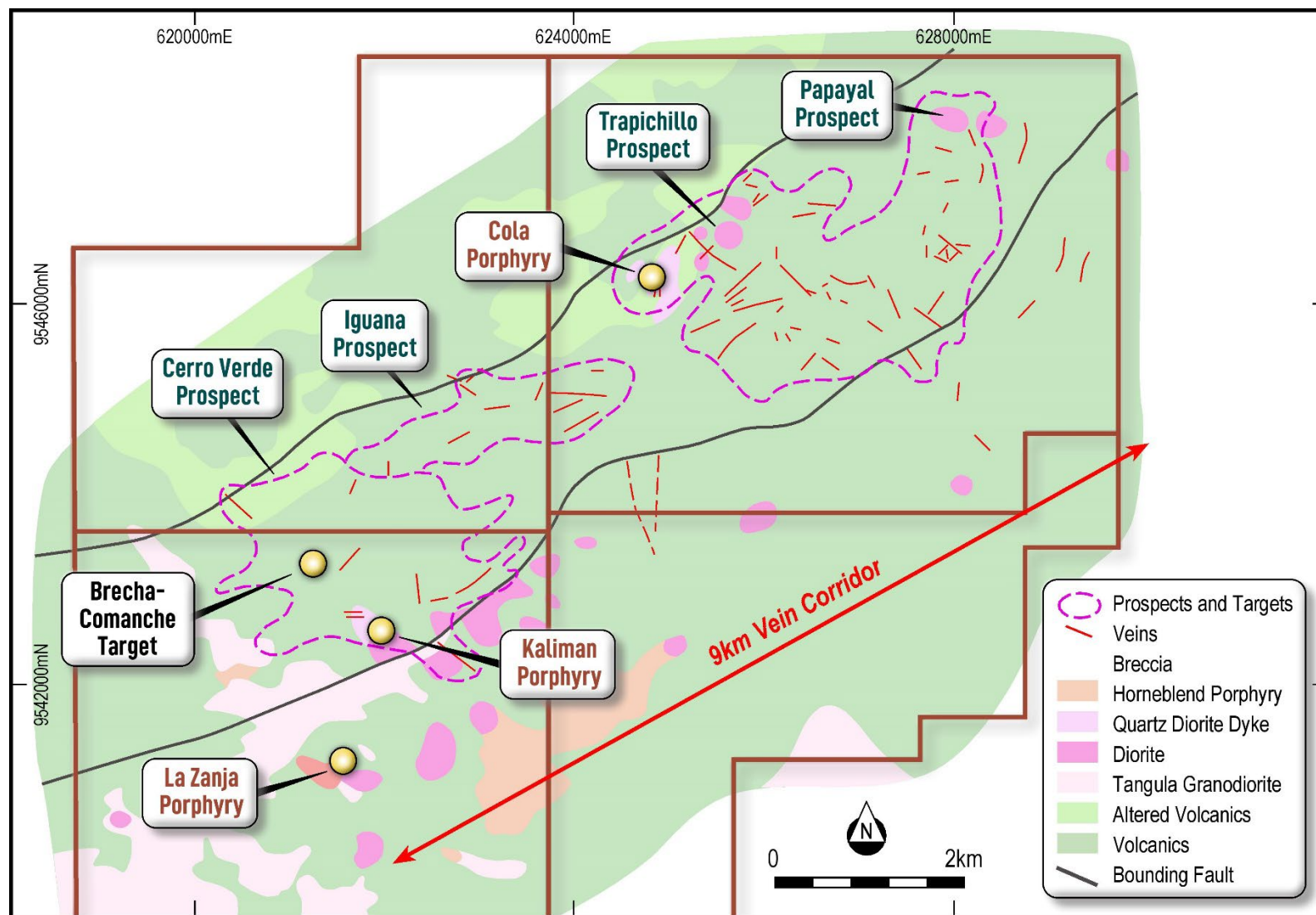


Figure 1: Dynasty Gold Project displaying simplified geology and prospect locations

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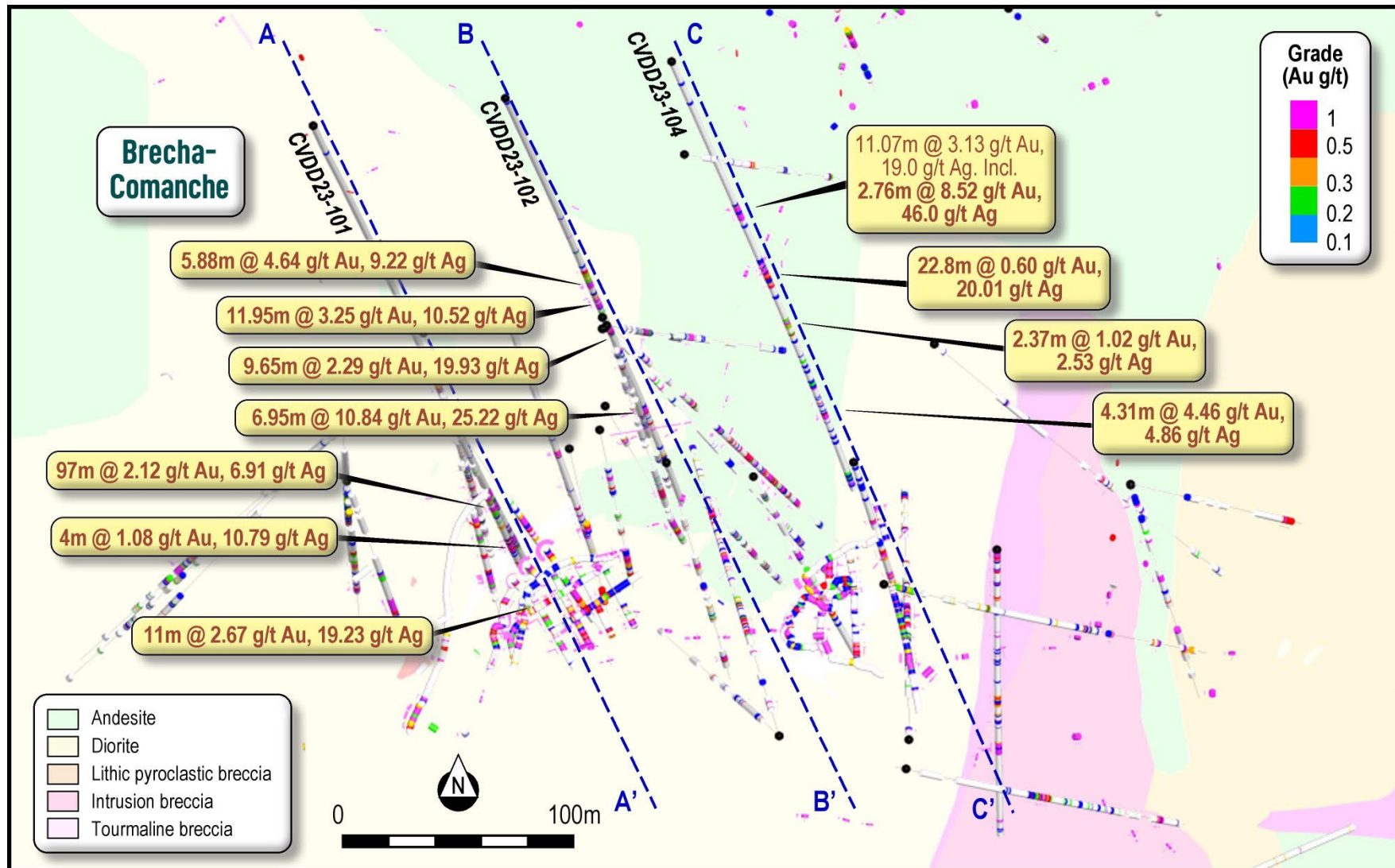


Figure 2. Brecha-Comanche Target (Cerro Verde) plan view displaying simplified geology, drilling (Au g/t) and locations of cross sections in figures 3, 4 and 5.

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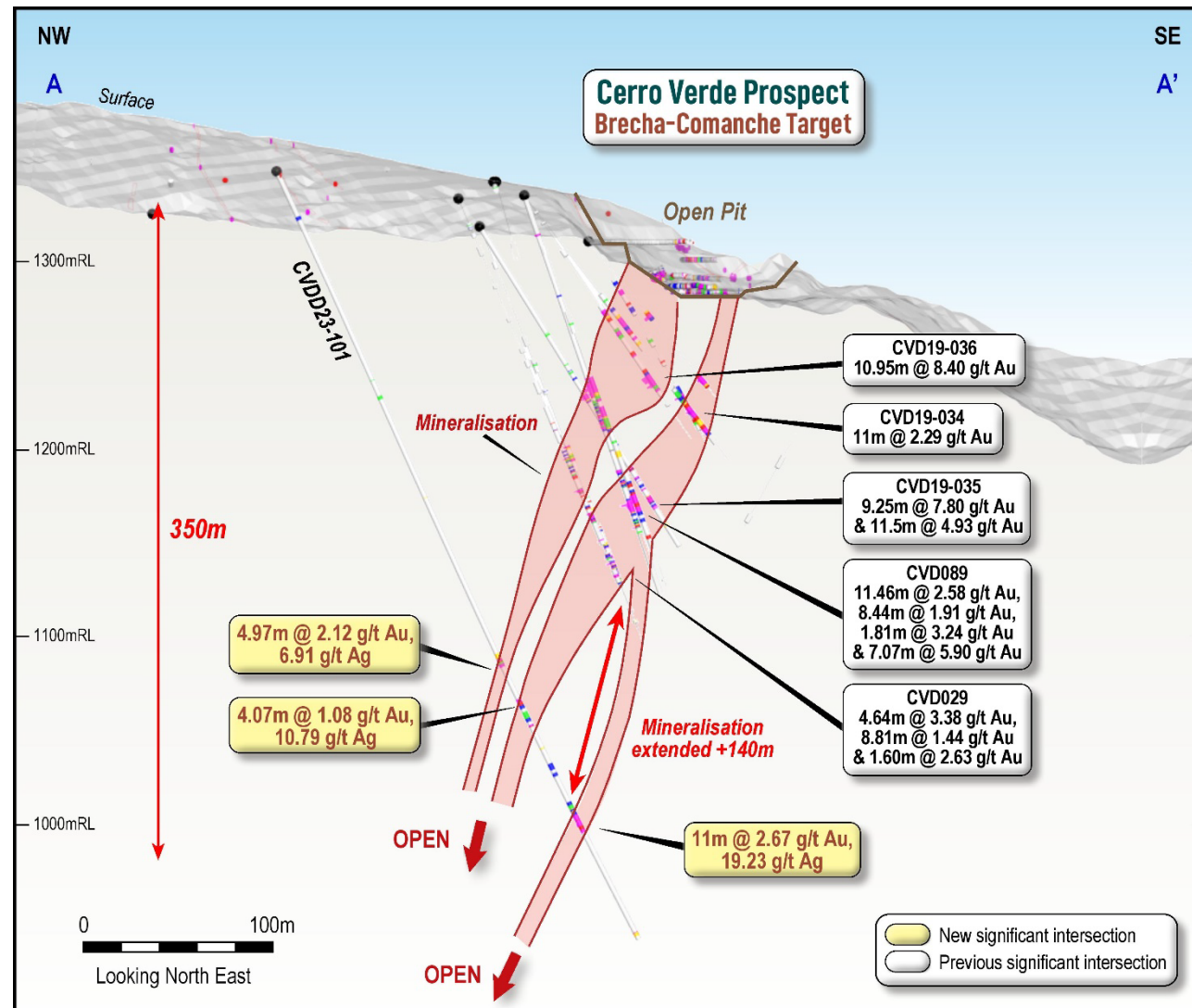


Figure 3. Brecha-Comanche cross section A-A' displaying drilling, interpreted mineralisation and significant intersections



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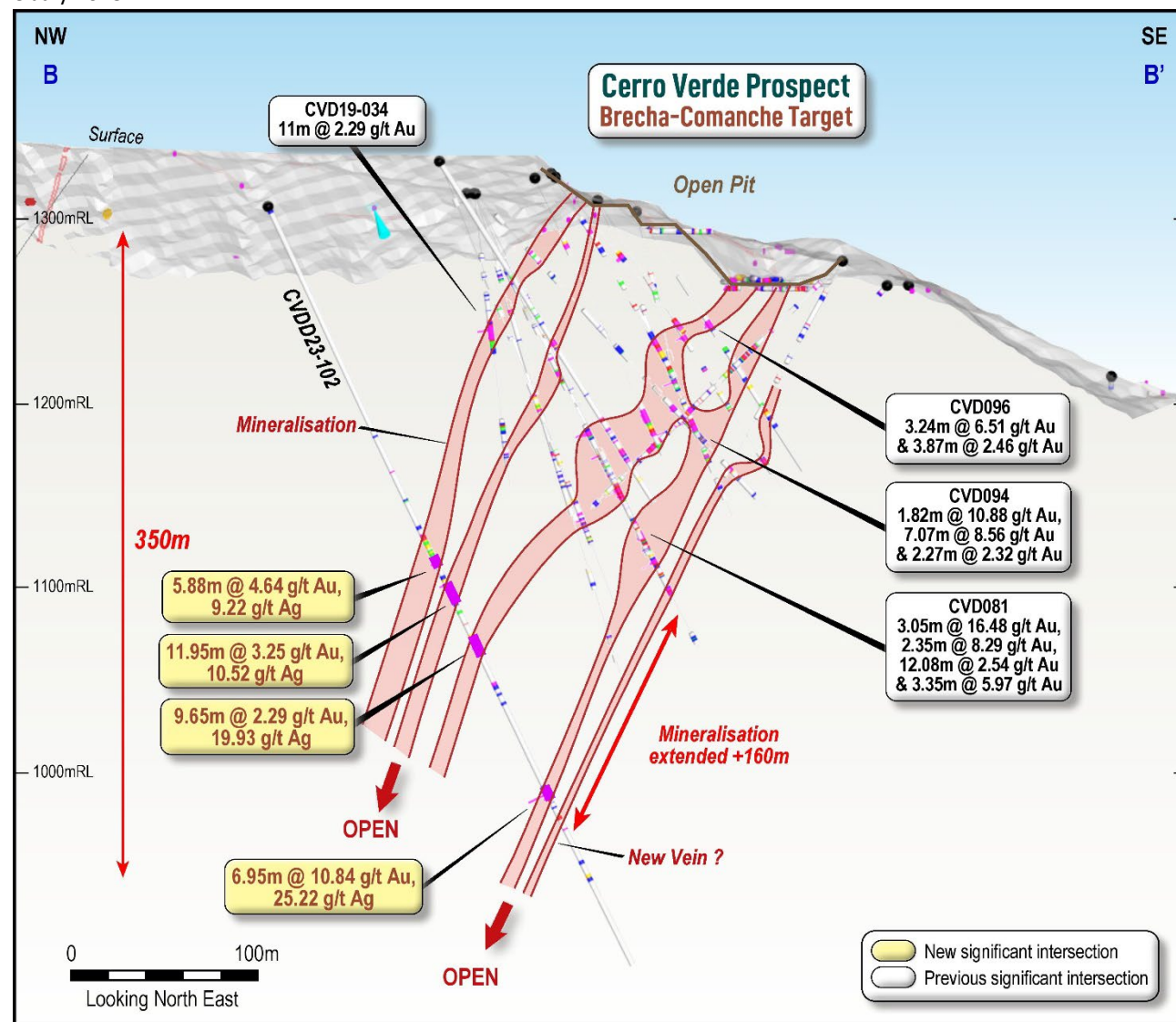


Figure 4. Brecha-Comanche cross section B-B' displaying drilling, interpreted mineralisation and significant intersections



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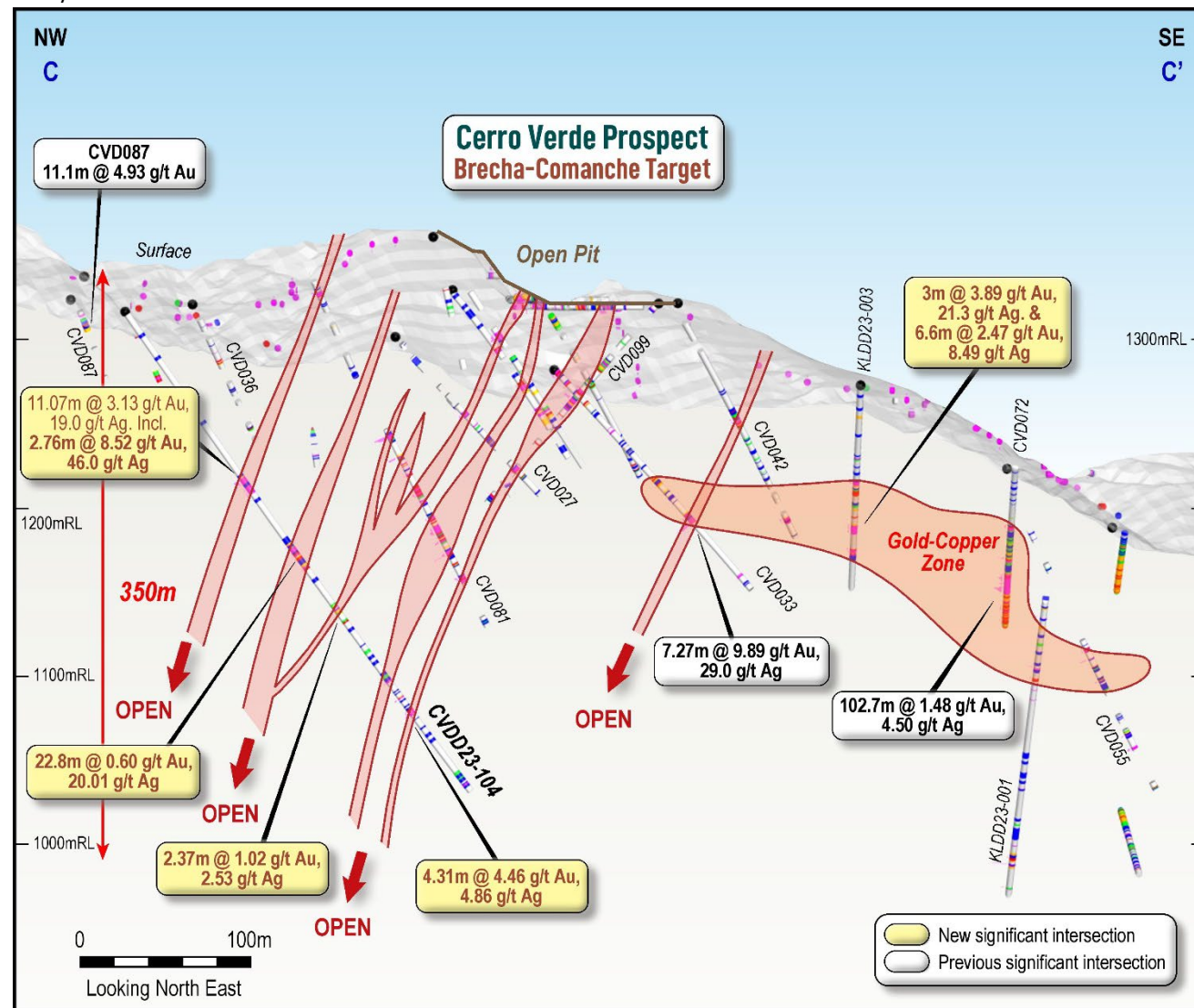


Figure 5. Brecha-Comanche cross section C-C' displaying drilling, interpreted mineralisation and significant intersections

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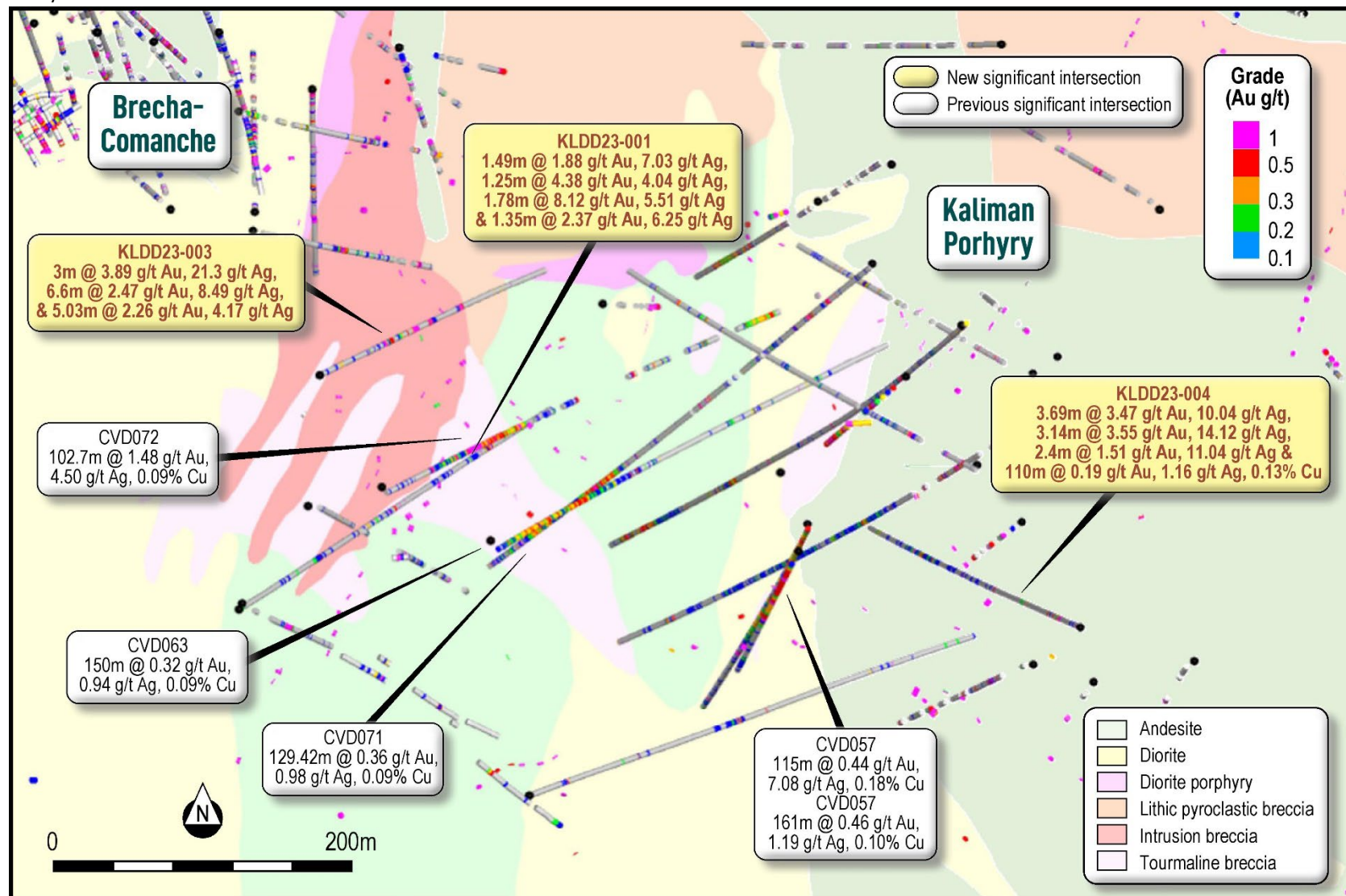


Figure 6: Kaliman Target (Cerro Verde) plan view displaying geology, drilling and significant intersections.

## 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.

Located in a major flexure of the Andean Terrane, the Dynasty Gold Project is situated within a corridor of mineralisation extending from Peru through northern Ecuador that is associated with early to late Miocene aged intrusions. The majority of porphyry copper and epithermal gold deposits in southern Ecuador are associated with magmatism in this age range, with a number of these younger intrusions located along the margin of the extensive Cretaceous aged Tangua Batholith forming a favourable structural and metallogenic corridor for intrusion activity where Titan minerals holds a significant land position in southern Ecuador.

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, silver and copper mineralisation as identified by surface mapping, trenching and drilling at the Kaliman Porphyry prospect.

Previous explorers had estimated a Canadian NI 43-101 resource estimate (referred to as a Foreign Resource) of 14.4 million tonnes at 4.5 g/t gold and 36 g/t silver for a contained 2.1M ounces of gold and 16.8M ounces of silver. This resource estimate was compiled using a dataset of 1,160 trenches and 26,733 metres of diamond core. It was estimated by polygonal methods which are not yet considered JORC 2012 compliant.

The Dynasty Foreign Resource has been validated by trial mining conducted in 2019, where approximately 600,000 tonnes of ore was mined at a grade of 3.46g/t gold. Reconciliation of mined material versus the historical resource resulted in 169% tonnes at 85% of the estimated grade, for 40% more gold.

The resource is estimated over three main prospects: Cerro Verde, Iguana and Papayal. The information in this announcement relating to Mineral Resource Estimates for the Dynasty Gold Project is a foreign estimate and is not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify this foreign estimate as a mineral resource in accordance with the JORC Code and it is uncertain that following further exploration work this foreign estimate will be able to be reported as a mineral resource in accordance with the JORC Code (refer to ASX announcement dated 30 April 2020 and Notes to Foreign Mineral Resource Estimate below).



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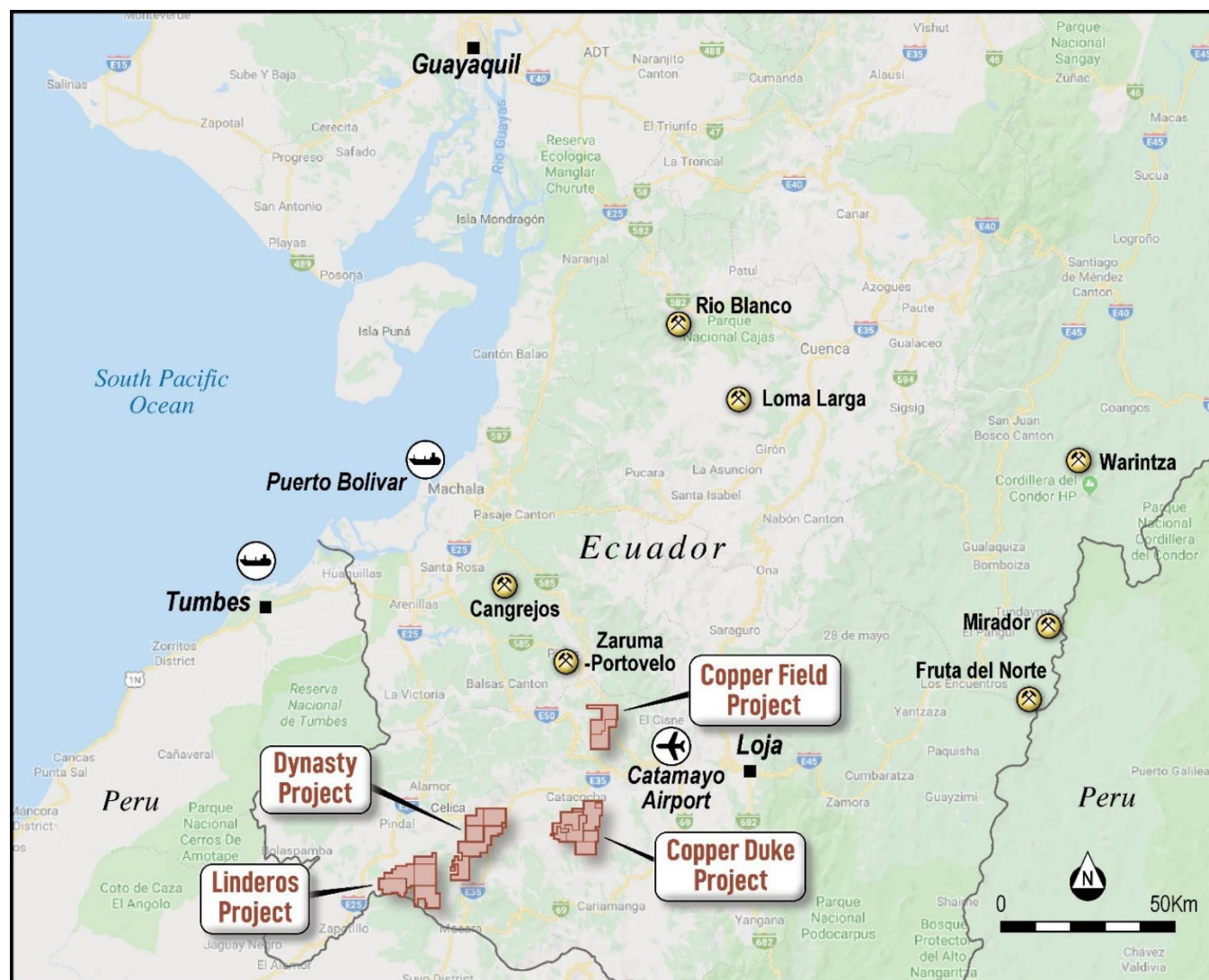


Figure 7: Titan Minerals southern Ecuador Projects, peer deposits and surrounding infrastructure



## ENDS-

Released with the authority of the Board.

For further information on the company and our projects, please visit: [www.titanminerals.com.au](http://www.titanminerals.com.au)

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## Competent Person's Statements

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

## Notes to Foreign Mineral Resource Estimate

The information in this document relating to Mineral Resource Estimates for the Dynasty Gold Project have been extracted from the ASX announcement dated 30 April 2020 (Initial Announcement).

Titan confirms that it is not in possession of any new information or data that materially impacts on the reliability of the Mineral Resource Estimates for the Dynasty Gold Project and included in the Initial Announcement. Titan confirms that the supporting information provided in the Initial Announcement continues to apply and has not materially changed.

The information in this announcement relating to Mineral Resource Estimates for the Dynasty Gold Project is a foreign estimate and is not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify this foreign estimate as a mineral resource in accordance with the JORC Code and it is uncertain that following further exploration work that this foreign estimate will be able to be reported as a mineral resource in accordance with the JORC Code.

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## APPENDIX A

Table 1. Brecha-Comanche Significant Drill Intersections

Hole ID	Easting (UTM)	Northing (UTM)	Elevation (m)	EOH (m)	Azimuth (°)	Dip (°)		From (m)	To (m)	Width (m)	Est. TW (m)	Au (g/t)	Ag (g/t)
CVDD23-101	621116	9543445	1354.33	474.02	153	-65		299.18	304.15	4.97	3.1	2.12	6.91
								324	328	4	3	1.08	10.79
								340.0	341.2	1.2	1	1.09	6.12
								396	407	11	5.6	2.67	19.23
								469.68	472	2.32	1.8	0.45	2.18
CVDD23-102	621199	9543457	1300.05	441.21	154	-65		203	208.88	5.88	3.1	4.64	9.22
							<i>including</i>	<b>205.95</b>	<b>207.85</b>	<b>1.90</b>	<b>1</b>	<b>8.83</b>	<b>16.58</b>
								218.5	230.45	11.95	6.5	3.25	10.52
								250	259.65	9.65	4.8	2.29	19.93
								275.95	278	2.05	1.2	1.32	4.86
								337.85	344.8	6.95	3.5	10.84	25.22
							<i>including</i>	<b>340.2</b>	<b>343.6</b>	<b>3.4</b>	<b>1.8</b>	<b>20.53</b>	<b>43.09</b>
CVDD23-104	621271	9543473	1253.92	344.18	344	-55		15.62	17	1.38	1.1	0.94	0.57
								32.0	33.4	1.4	1.1	1.07	1.39
								50.13	55.88	5.75	4.4	1.55	2.38
								78.77	80.8	2.03	1.3	2.63	17.53
								95	95.64	0.64	0.4	2.26	8.79
								118.24	129.31	11.07	8.5	3.13	19.00
							<i>including</i>	<b>118.24</b>	<b>121</b>	<b>2.76</b>	<b>2.1</b>	<b>8.52</b>	<b>45.99</b>
								161	183.8	22.8		0.60	20.01
								208.7	216.3	7.6	5.0	0.54	3.44
							<i>including</i>	<b>210.85</b>	<b>213.22</b>	<b>2.37</b>	<b>1.9</b>	<b>1.02</b>	<b>2.53</b>
								284.35	288.66	4.31	3.2	4.46	4.86

NB. Collar locations are given in WGS84 Datum.

EOH - End of hole depth.

Est. TW - Estimated True Width.

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Table 2. Kaliman Significant Drill Intersections

Hole ID	Easting (UTM)	Northing (UTM)	Elevation (m)	EOH (m)	Azimuth (°)	Dip (°)		From (m)	To (m)	Width (m)	Est. TW (m)	Au (g/t)	Ag (g/t)	Cu (%)
KLDD23-001	621363	9542913	1215	425.23	58	-54.6		54.33	66.57	12.24	9.2	0.08	0.32	0.03
								100	112	12	9.1	0.18	1.19	0.03
								169.34	170.83	1.49	1.1	1.88	7.03	0.02
								204.75	206	1.25	1.0	4.38	4.04	0.02
								212.15	220.4	8.25		0.52	1.54	0.02
								279	287	8		0.12	0.23	0.04
								312.1	348	35.9		0.59	1	0.03
							<b>including</b>	<b>344.82</b>	<b>346.6</b>	<b>1.78</b>	<b>1.25</b>	<b>8.12</b>	<b>5.51</b>	<b>0.02</b>
								361.9	363.25	1.35		2.37	6.25	0.02
KLDD23-002	621557	9542788	1112	461.57	70	-45.8		390	425.23	35.23		0.14	0.49	0.03
								94.81	127	32.19		0.07	0.74	0.06
								193	222	29		0.21	0.72	0.04
								401	423	22		0.04	0.41	0.04
KLDD23-003	621417	9543070	1211	259.28	64	-50		460.05	461.57	1.52		0.12	0.44	0.03
								54	56	2		0.95	3.63	0.01
								72	94	22		0.75	5.38	0.06
							<b>including</b>	<b>72</b>	<b>75</b>	<b>3</b>	<b>2.7</b>	<b>3.89</b>	<b>21.3</b>	<b>0.05</b>
								105.4	112	6.6	4.5	2.47	8.49	0.01
								123.23	132	8.77	6.2	0.92	2.92	0.02
KLDD23-004	621926	9542901	1193	410.77	293	-68		159.3	164.33	5.03	4.1	2.26	4.17	0.02
								4.77	5.3	0.53		8.85	7.25	0.03
								34.31	38	3.69	3.0	3.47	10.04	0.01
								163	166.14	3.14	2.0	3.55	14.12	0.01
								223.77	226.17	2.4	1.6	1.51	11.04	0.03
								274	384	110		0.19	1.16	0.13
							<b>including</b>	<b>303.4</b>	<b>311</b>	<b>7.6</b>		<b>0.46</b>	<b>3.38</b>	<b>0.27</b>

NB. Collar locations are given in WGS84 Datum.

EOH - End of hole depth.

Est. TW - Estimated True Width.

## 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.</li> </ul> <p><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></p>	<ul style="list-style-type: none"> <li>Diamond drilling method was used to obtain HTW and NTW core (71.4/56.23 mm diameter respectively) for density and chemical analyses. ½ or ¼ core was submitted for analysis.</li> <li>Downhole survey and core orientation tools are used, Diamond core is halved with a diamond saw to ensure a representative sample.</li> <li>Channel sampling is completed as representative cut samples across measured intervals cut with hammer or hammer and chisel techniques.</li> <li>Samples were 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>30g charges were split from each pulp for fire assay for Au with an atomic absorption (AA) finish and samples exceeding 10g/t Au (upper limit) have a separate 30g charge split and analysed by fire assay with a gravimetric finish. Samples returning &gt;10ppm Au from the AA finish technique are re-analysed by 30g 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.</li> <li>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> </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>Drilling HTW diameter core with standard tube core barrels retrieved by wire line, reducing to NTW diameter core as required at depth</li> <li>Drill core is oriented by Reflex ACT III and True Core tools,</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>Diamond sample recovery is recorded on a run-by-run basis during drilling with measurements of recovered material ratioed against drill advance.</li> <li>Diamond core is split in weathered material, and in competent unweathered/fresh rock is cut by a diamond saw to maintain a representative sample for the length of the sample interval.</li> <li>No correlation between sample recovery and grade is observed.</li> </ul>
<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> </ul>	<ul style="list-style-type: none"> <li>Diamond core samples are logged in detail, with descriptions and coded lithology for modelling purposes, with additional logging comprised of alteration, geotechnical, recovery, and structural logs including measurements based on core orientation marks</li> </ul>



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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<p>generated from a Reflex ACTIII downhole survey tool.</p> <ul style="list-style-type: none"> <li>Logging is predominantly qualitative in nature but including visual quantitative assessment of sulphide and quartz content included in text comments.</li> <li>Core photographs are systematically acquired for whole core with sample intervals, orientation line prior and after the sampling in both wet and dry form.</li> <li>The total lengths of all reported drill holes have been logged geologically and data is uploaded to a self-validating database. ½ cut and ¼ cut core material is retained from diamond drilling for re-logging and audit purposes.</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>Diamond core is split or cut in weathered profile depending on hardness and competency of the core and cut with a diamond saw in fresh rock. Weathered, faulted, and fractured diamond core, prior to cutting, are docked, and covered with packing tape to ensure a representative half sample is taken.</li> <li>A cutline on core is systematically applied for cutting and portion of core collected for analysis is systematic within each hole. Diamond core sample recovery are reported as being completed in accordance with best practices for the time of acquisition and considered to be appropriate and of good quality.</li> <li>Sample size studies have not been conducted but sample size used are typical of methods used for other Andean deposits of similar mineralisation styles.</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 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> </ul>
<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>Reported intersections are logged by professional geologists in Australia and data validated by a senior geologist in Ecuador.</li> <li>Twin holes have not been used in the reported exploration results. The use of twinned holes is anticipated in follow-up drilling.</li> <li>Original laboratory data files in CSV and locked PDF formats are stored together with the merged data.</li> <li>All drilling, and surface data are stored in a self-validating MX Deposit geological database.</li> </ul>

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		<ul style="list-style-type: none"> <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>Reported drill collars and channel samples are located with an RTK GPS survey unit with sub-centimetre reporting for the purpose of improved confidence in resource estimation work. A gyroscopic survey tool is used for downhole surveys.</li> <li>All surveyed data is collected and stored in WGS84 datum.</li> <li>Topographic control is ground survey quality and reconciled against Drone platform survey data with 1m pixel resolution. Assessed to be adequate for the purpose of resource estimation</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 diamond drilling varies by prospect, targeting a nominal 80m lateral spacing and 80m vertical spacing for data acquisition.</li> <li>Reported Channel sampling is collected on 10m to 20m spacing depending on resolution of structural information deemed necessary by the geology team.</li> <li>Data spacing is anticipated to support mineral resource estimation for the indicated and inferred categories, with data spacing and distribution for higher confidence resource estimation categories to be defined with further modelling and geostatistical analysis work.</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>The orientation of diamond drilling and trenching is perpendicular to mapped orientation of primary vein and porphyry target observed in outcrop where possible. Drilling is often completed on multiple azimuths as fan drilling with multiple holes collared from a single drill site to minimise surface disturbance, which will result in some oblique intercepts to vein orientations. The true thickness of intercepts will be accounted for following structural analysis of oriented core and 3D modelling of veins. All results in relation to this report are drilled thickness and should not be interpreted as true thickness at this time.</li> <li>No bias is considered to have been introduced by the existing sampling orientation.</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 with closed stowage area for transport.</li> </ul>
<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>	<ul style="list-style-type: none"> <li>No audits or reviews of reported data completed outside of standard checks on inserted QAQC sampling.</li> </ul>

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## Section 2 - Reporting of Exploration Results

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<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</li> </ul>

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		<p>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.</p> <ul style="list-style-type: none"> <li>2017 to 2020 Core Gold Inc. (formerly Dynasty Mining and Metals) commenced small scale mining on a 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.</li> </ul>
<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 Tangua 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, chalcopyrite 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 drilling results with significant intercepts validated by Titan geologists and referenced in this report are included in Appendix A of this report.</li> <li>Total number of drill holes and trench sites included in this report and located in graphics included in the report.</li> <li>Material drill holes tabulated contain significant intercepts with gold grades exceeding 0.1g/t gold and are included in Appendix A of this report. No drill holes are excluded from maps or graphics in the report and all drill locations with or without material significant intercepts are included in maps and diagrams. Tabulation of requisite information for all reported drilling results with significant intercepts announced in this report are included in Appendix A.</li> </ul>
<b>Data aggregation</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</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</li> </ul>



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<b>methods</b>	<p>grades are usually Material and should be stated</p> <p>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.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>analysis method with an upper detection limit of 1,500ppm is used.</p> <ul style="list-style-type: none"> <li>Lower cut-off for reported significant intercepts is 0.1g/t Au with up to 5m of internal dilution (results with &lt;0.1g/t Au or un-sampled intervals where null values are taken as a zero-gold grade in calculating significant intercepts) are allowed within a reported intercept.</li> <li>Significant Intercepts in Appendix A are reported for aggregate intercepts of sample intervals that are weight averaged by length of sample for results above a 0.1g/t gold cut-off.</li> <li>No metal equivalent reporting is applicable to this announcement</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <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>	<ul style="list-style-type: none"> <li>Reported intersections are measured sample lengths. Reported drill intersections are of unknown true width, further drilling and modelling of results is required to confirm the projected dip(s) of mineralised zones.</li> <li>Reported intercepts are drilled thickness and should not be interpreted as true thickness unless otherwise indicated</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</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>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.</li> </ul>	<ul style="list-style-type: none"> <li>All material exploration results for drilling are included in this report, and location of all results are included in Figures provided in their entirety.</li> <li>All results above a 0.1g/t Au lower cut-off are included in this report when reporting bulk low grade intersections, and results above 0.5g/t Au are included when reporting high grade vein hosted gold mineralisation. No upper cut-off has been applied.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</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> <li>Bulk density tests have been completed on areas related to the reported exploration results.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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> <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>	<ul style="list-style-type: none"> <li>Additional 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>