

## HIGH GRADE EPITHERMAL GOLD INTERSECTED AT MESETA

Titan Minerals Limited (**Titan** or the **Company**) (**ASX:TTM**) is pleased to provide results from the Company's maiden drilling at the Meseta Gold prospect (**Meseta**), at the Linderos Project in southern Ecuador.

### Key Highlights include:

- Recent drilling at Meseta proves that a shallow intermediate-sulphidation epithermal gold system exists adjacent to the recently discovered Copper Ridge Porphyry system.
- Several high-grade gold, silver and base metal epithermal veins intersected from shallow depths, with significant results including:
  1. **MGDD22-010:**
    - **7.22m grading 13.77g/t Au**, 12.90g/t Ag, 0.15% Cu, 0.38% Zn from 66.28m, including higher grade intercepts of:
      - 0.92m grading 31.50g/t Au, 24.30g/t Ag, 0.25% Cu from 68.28m: and
      - 0.58m grading 99.80g/t Au, 89.90g/t Ag, 0.98% Cu, 0.31% Zn
    - All within a broader intersection of 76.5m grading 1.41g/t Au, 5.63g/t Ag, 0.27% Zn from surface
  2. **MGDD22-012:**
    - **4.88m grading 12.87g/t Au**, 6.04g/t Ag, 0.11 % Cu, 0.41% Zn from 41.0m, including a higher grade intercept of:
      - 1.64m grading 33.35g/t Au, 11.28 g/t Ag, 0.23% Cu, 0.72% Zn from 44.24m
    - **All within a broader intersection of 45.82m grading 1.40g/t Au, 2.13g/t Ag, 0.25% Zn from 4.35m**
  3. **MGDD22-001:**
    - **4.64m grading 5.00g/t Au**, 10.33g/t Ag, 0.39% Zn, 0.19% Pb from 51.7m
  4. **MGDD22-003**
    - **5.76m grading 3.72g/t Au**, 48.69g/t Ag, 0.25% Zn, 0.28% Pb from 36.54m, including a higher grade intercept of:
      - 0.73m grading 11.35g/t Au, 73.30 g/t Ag, 0.84% Zn, 1.24% Pb from 37.35m
- Meseta is the first of several epithermal gold targets defined by Titan's reconnaissance works within the Linderos Project to be drill tested, with high priority prospects proximal to porphyry copper-gold sources driving epithermal gold mineralisation.

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

*"These are exciting results for Titan which confirm the potential for significant high-grade gold, silver and base metals at the Linderos Project. The results demonstrate that the causal intrusion responsible for the recently discovered Copper Ridge porphyry system, is also the plumbing to the Meseta intermediate sulphidation epithermal system."*

*"In many cases these high-grade epithermal vein systems have been eroded, and all that remains is the porphyry source. So, we're excited that the Meseta epithermal mineralisation remains preserved, adjacent to its source, the Copper Ridge porphyry system, where recent drilling has demonstrated the potential for significant copper-gold porphyry mineralisation from shallow depths."*

*"We feel that we're onto something big here, with our maiden drilling campaigns at both Meseta and Copper Ridge delivering promising results, and plenty of scope for extending mineralisation with strong vectors towards higher grade gold, silver and copper mineralisation."*

*"We now have a pipeline of high conviction targets to feature in forthcoming exploration work programs in 2023."*

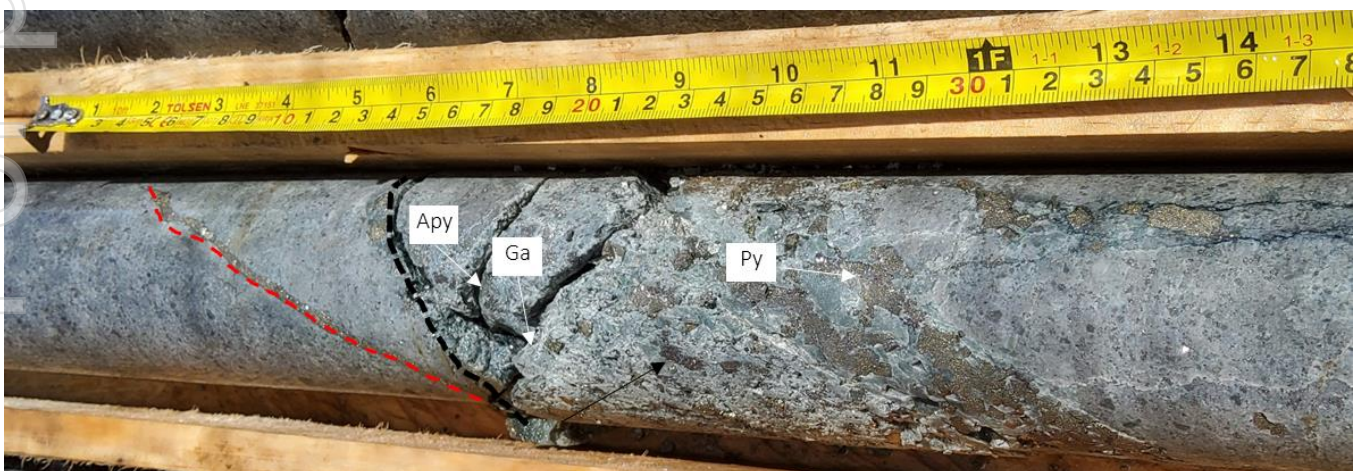
**Linderos Project Drilling Results**

The Company is pleased to provide results from its maiden drilling campaign completed in late 2022 at the Meseta Gold prospect (**Meseta**), at the company's 100% held Linderos Project in southern Ecuador.

Drilling was successful in intersecting multiple pyrite-sphalerite-arsenopyrite±galena massive sulphide veins, with several significant intersections of high grade gold and silver returned, along with significant intersections of silver-zinc-±lead±gold±copper. Significant intersections are included in table 1, and illustrated in figures 1, 2, and 3.

The Meseta Gold prospect displays metal zonation and alteration assemblages typical of intermediate sulphidation systems related to proximal porphyry systems, with outcropping porphyry mineralisation identified and drill tested at the Copper Ridge Porphyry prospect (**Copper Ridge**) less than 500 metres to the south of Meseta (refer to Figures 1, 2 and 3).

Table 1 details significant intersections for gold, silver, copper, zinc, and lead returned from the Company's maiden drilling at Meseta, where pleasingly 12 out of 14 holes intersected polymetallic massive sulphide mineralisation.



*Plate 1: MGDD22-006 (35.74m). Quartz diorite with shear zone infilled by massive pyrite, sphalerite, arsenopyrite, pyrrhotite and galena, with a halo of sericite and illite-smectite.*

Table 1. Meseta Significant Drilling Intersections

Hole ID	From (m)	To (m)	Width (m)	Au (g/t)	Ag (ppm)	Cu (%)	Zn (%)	Pb (%)	Metals
MGDD22-001	41.5	43.3	1.8	1.08	4.70	0.04	0.45	0.04	Au-Ag-Zn
	51.72	66.34	14.62	2.16	5.62	0.05	0.33	0.06	Au-Ag-Zn
	<b>including:</b>								
	<b>51.72</b>	<b>56.34</b>	<b>4.62</b>	<b>5.00</b>	<b>10.33</b>	<b>0.09</b>	<b>0.39</b>	<b>0.19</b>	Au-Ag-Zn-Pb
MGDD22-002	80.78	86.78	6	0.01	5.23	0.00	0.66	0.60	Ag-Zn-Pb
	45.55	55.48	9.93	0.60	4.08	0.01	0.41	0.00	Au-Ag-Zn
	<b>including:</b>								
MGDD22-003	<b>45.55</b>	<b>48.68</b>	<b>3.13</b>	<b>1.00</b>	<b>1.70</b>	<b>0.02</b>	<b>0.17</b>	<b>0.00</b>	Au-Ag-Zn
	36.54	42.3	5.76	3.72	48.69	0.03	0.25	0.28	Au-Ag-Zn-Pb
MGDD22-004	<b>including:</b>								
	37.35	38.08	0.73	11.35	73.30	0.01	0.84	1.24	Au-Ag-Zn-Pb
MGDD22-005	36.4	37	0.6	3.13	2.44	0.04	0.91	0.13	Au-Ag-Zn
	40.1	40.75	0.65	0.59	16.75	0.45	0.26	0.02	Au-Ag-Cu-Zn
	44.37	59	14.63	0.61	3.76	0.02	0.18	0.03	Au-Ag-Zn
	107.2	130.3	23.1	0.32	1.30	0.04	0.13	0.00	Au-Ag-Zn
MGDD22-006	20.25	28.25	8	0.06	6.67	0.01	0.13	0.85	Ag-Zn-Pb
	30.8	94.74	63.94	0.04	3.72	0.02	0.99	0.13	Ag-Zn-Pb
	<b>including:</b>								
	<b>32.19</b>	<b>39.63</b>	<b>7.44</b>	<b>0.02</b>	<b>7.61</b>	<b>0.02</b>	<b>0.82</b>	<b>0.64</b>	Ag-Zn-Pb
MGDD22-007	73.6	74	0.4	0.31	18.40	0.07	5.55	0.03	Zn-Ag-Au
	4	116.3	112.3	0.08	4.09	0.00	0.48	0.03	Ag-Zn
	<b>including:</b>								
	<b>19.49</b>	<b>22.35</b>	<b>2.86</b>	<b>1.60</b>	<b>16.89</b>	<b>0.01</b>	<b>0.63</b>	<b>0.13</b>	Au-Ag-Zn-Pb
MGDD22-008	<b>and including:</b>								
	<b>94.49</b>	<b>95.3</b>	<b>0.81</b>	<b>0.80</b>	<b>9.11</b>	<b>0.01</b>	<b>0.16</b>	<b>0.08</b>	Au-Ag-Zn--Pb
MGDD22-009	45.8	80.73	34.93	0.04	6.42	0.01	0.65	0.04	Ag-Zn
MGDD22-010	30.3	32.15	1.85	2.84	4.42	0.05	0.15	0.03	Au-Ag-Zn--Pb
MGDD22-011	0	76.5	76.5	1.41	5.63	0.02	0.27	0.04	Au-Ag-Zn--Pb
	<b>including</b>								
	<b>66.28</b>	<b>73.5</b>	<b>7.22</b>	<b>13.77</b>	<b>12.90</b>	<b>0.15</b>	<b>0.38</b>	<b>0.02</b>	Au-Ag-Cu-Zn
	<b>including</b>								
	<b>68.28</b>	<b>69.2</b>	<b>0.92</b>	<b>31.50</b>	<b>24.30</b>	<b>0.25</b>	<b>0.02</b>	<b>0.01</b>	Au-Ag-Cu
MGDD22-012	<b>and including:</b>								
	<b>72.92</b>	<b>73.5</b>	<b>0.58</b>	<b>99.80</b>	<b>89.90</b>	<b>0.98</b>	<b>0.31</b>	<b>0.14</b>	Au-Ag-Cu-Zn-
MGDD22-013	66.5	93.2	26.7	0.02	9.58	0.01	0.22	0.16	Ag-Zn-Pb
MGDD22-014	4.35	50.17	45.82	1.40	2.13	0.02	0.25	0.02	Au-Ag-Zn
	41	45.88	4.88	12.87	6.04	0.11	0.41	0.00	Au-Ag-Cu-Zn
	<b>including</b>								
MGDD22-015	<b>44.24</b>	<b>45.88</b>	<b>1.64</b>	<b>33.35</b>	<b>11.28</b>	<b>0.23</b>	<b>0.72</b>	<b>0.01</b>	Au-Ag-Cu-Zn
	8.8	10.4	1.6	0.52	8.86	0.01	0.04	0.08	Au-Ag

## Alteration & Mineralisation

Precious (gold-silver) and base metal (copper-zinc-lead) mineralisation in veins occurs as massive pyrite (**py**), arsenopyrite (**apy**), with minor pyrrhotite (**po**), chalcopyrite (**cpy**), galena (**ga**) and sphalerite (**sp**). Polymetallic veins are interpreted to infill shear zones, with thicknesses ranging from 0.5 to 1.65m, and disseminated sulphides also pervasive in the quartz diorite wall rock.

Wall rock mineralisation includes disseminated sulphides, with visual estimates ranging from 1 to 20% pyrite, 0.5 to 80% arsenopyrite, 1 to 5% sphalerite, including several zones of 0.5 to 10% disseminated pyrrhotite, and isolated intervals of 0.5 to 2% chalcopyrite, and 0.5 to 1% galena.

The best gold intersections were returned from holes MGDD22-010 and MGDD22-012 in an area that has not previously been drilled. Observations from these significant gold intersections are described in further detail below.

### MGDD22-010:

- Host rock is a light grey, equigranular quartz diorite, overprinted by strong phyllic alteration (sericite-pyrite) with abundant manganese carbonate minerals (illite-smectite) also present.
- Best mineralisation was intersected in two principal structures with strong gold, silver and copper mineralisation returned from:
  1. **68.9m**: 0.55m wide, moderately dipping massive sulphide vein, composed of pyrite (40%), arsenopyrite (40%) pyrrhotite (3%) and traces of chalcopyrite (Plate 1).
  2. **72.92m**: 0.58m wide, steeply dipping massive sulphide vein, composed of arsenopyrite (30%), pyrite (10%), pyrrhotite (5%), and chalcopyrite (3%). (Plate ),
- Wallrock alteration haloes around the margins of mineralised veins exhibit disseminated arsenopyrite, pyrite and pyrrhotite and in some areas sphalerite is also observed.

### MGDD22-012:

- Host rock is a light grey, porphyritic quartz diorite, overprinted by strong phyllic alteration (sericite-pyrite), with some areas exhibiting the presence of carbonate minerals (illite), silica and chlorite.
- Best mineralisation was intersected in two principal structures with strong gold, silver, zinc and copper mineralisation returned from:
  1. **41m**: 0.4m wide massive sulphide vein composed of pyrite (20%), arsenopyrite (40%) and smectite cement. The host rock shows mainly chlorite alteration (Plate 3. Left: MGDD22-012- First structure (41m) showing the mineralised intercept (13g/t gold, 9.98g/t silver and 0.12% copper), it corresponds to massive sulphide vein. Right: MGDD22-012- Second structure (44.24m) showing the mineralised intercept (33.35g/t gold and 11.28g/t silver and 0.23% copper).2).
  2. **44.24m**: 1.64m wide massive sulphide vein interpreted to be a wider ore shoot formed by the intersection of two structures composed of pyrite (20%), arsenopyrite (40%), sphalerite (1%) and chalcopyrite (1%). is (Plate 2).
- Wallrock alteration haloes around the margins of mineralized veins show disseminated pyrite (5% to 25%), sphalerite (1%) and occasionally pyrrhotite (1%), with disseminated pyrrhotite increasing when proximal to the vein.



*Plate 2. Left: MGDD22-010- First structure (68.9 m) showing the mineralised intercept (31.5g/t gold, 24.3g/t silver and 0.25% copper), it corresponds to massive sulphide vein. Right: MGDD22-010- Second structure (73.15m) showing the mineralised intercept (99.8g/t gold and 89.9g/t silver and 0.98% copper).*



*Plate 3. Left: MGDD22-012- First structure (41m) showing the mineralised intercept (13g/t gold, 9.98g/t silver and 0.12% copper), it corresponds to massive sulphide vein. Right: MGDD22-012- Second structure (44.24m) showing the mineralised intercept (33.35g/t gold and 11.28g/t silver and 0.23% copper).*

Meseta exhibits pervasive phyllic (quartz-paragonite±pyrite) alteration, grading to intermediate argillic (paragonite-illite). To the east, within the andesites, the intermediate argillic alteration also includes chlorite.

Results returned from Titan's initial drilling at Meseta further enhance results returned from recent drilling at the Copper Ridge porphyry prospect (**Copper Ridge**) with the better results being:

- **308m grading 0.4% Cu Eq<sup>1</sup> from 54m** in CRDD22-003, including a higher grade intercept of **76m grading 0.5% Cu Eq** from 132m downhole; and
- **558m grading 0.2% Cu Eq from surface to end of hole** in CRDD22-006, including a higher grade intercept of **22m grading 0.5% Cu Eq** from 524m downhole.

For further information on the Copper Ridge Porphyry drilling results refer to ASX releases dated 20th December 2022 and 6<sup>th</sup> February 2023.

The Company looks forward to providing further updates as results from exploration work programs at the Linderos Project are received.

**<sup>1</sup> Copper Equivalent (Cu Eq) values – Requirements under the JORC Code**

- Assumed commodity prices for the calculation of Copper Equivalent (Cu Eq) is Cu US\$3.00/lb, Au US\$1,700/oz, Mo US\$14/lb and Ag US\$20/oz
- Recoveries are assumed from similar deposits: Cu = 85%, Au = 65%, Ag = 65%, Mo = 80%
- Cu Eq (%) was calculated using the following formula:  $((Cu\% \times Cu \text{ price } 1\% \text{ per tonne} \times Cu \text{ recovery}) + (Au(g/t) \times Au \text{ price per g/t} \times Au \text{ recovery}) + (Mo \text{ ppm} \times Mo \text{ price per g/t} \times Mo \text{ recovery}) + Ag \text{ ppm} \times Ag \text{ price per g/t} \times Ag \text{ recovery}) / (Cu \text{ price } 1\% \text{ per tonne} \times Cu \text{ recovery})$ . **Cu Eq (%) = Cu (%) + (0.54 x Au (g/t)) + (0.00037 x Mo (ppm)) + (0.0063 x Ag (ppm))**
- TTM confirms that it is the Company's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

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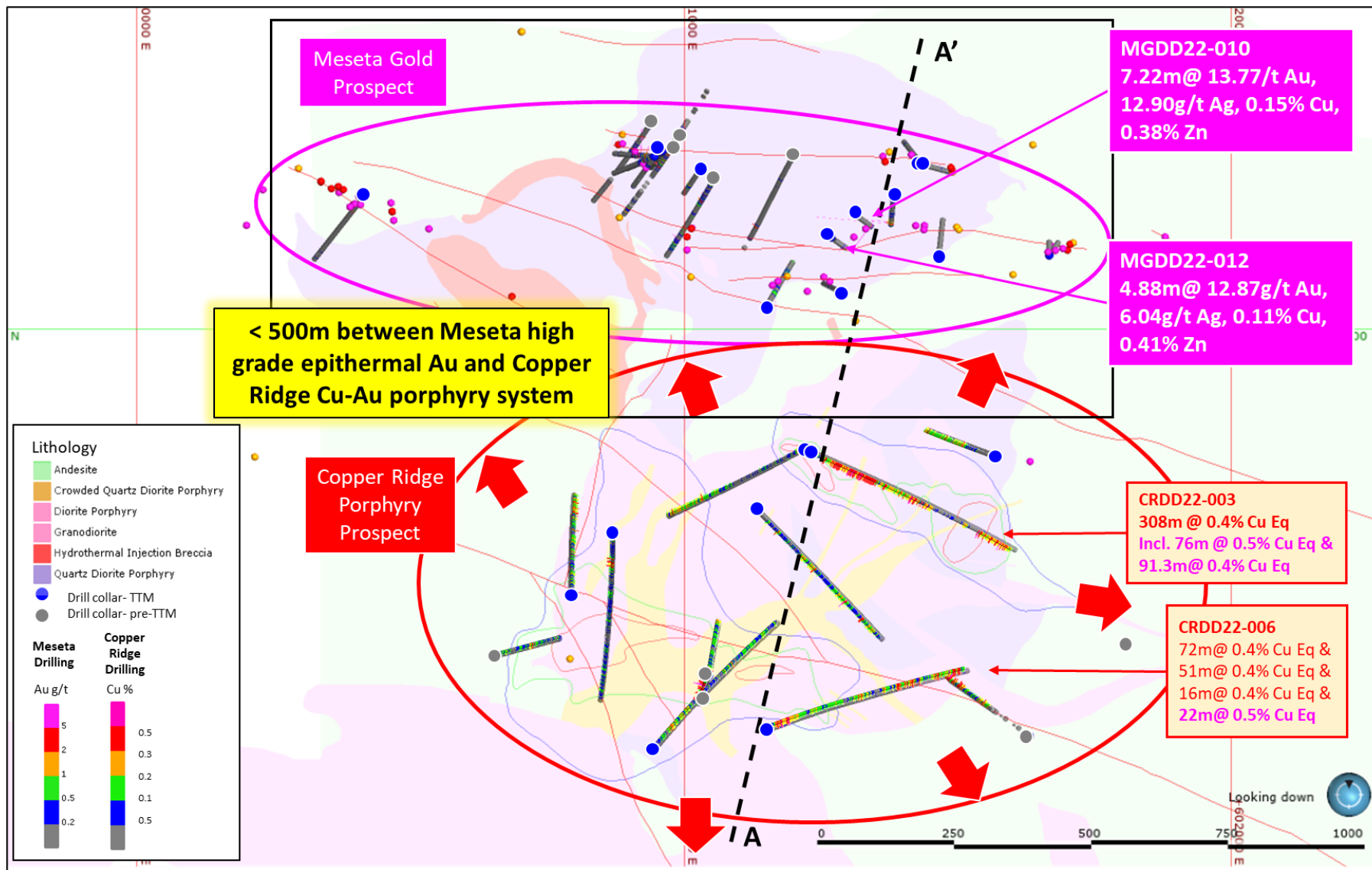


Figure 1: Plan view of the Meseta and Copper Ridge prospects, Linderos Project, displaying project geology drill traces (Cu histogram for Copper Ridge, Au histogram for Meseta), select significant intercepts, and surface rock chips coloured by Au (g/t).

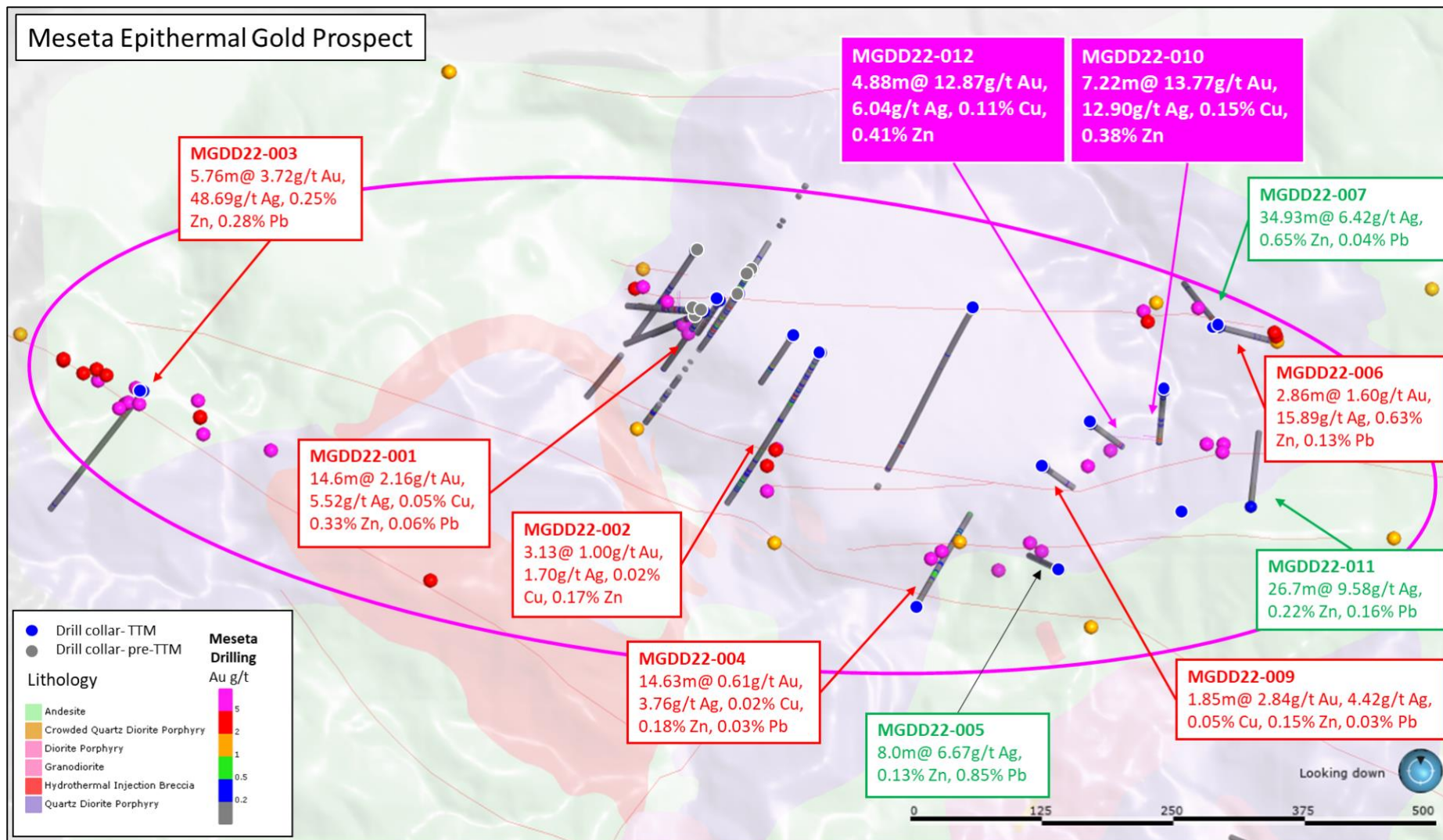


Figure 2: Zoom in Plan view of the Meseta Gold prospect displaying project geology, drill traces (Au histogram), significant intercepts, and surface rock chips coloured by Au (g/t).

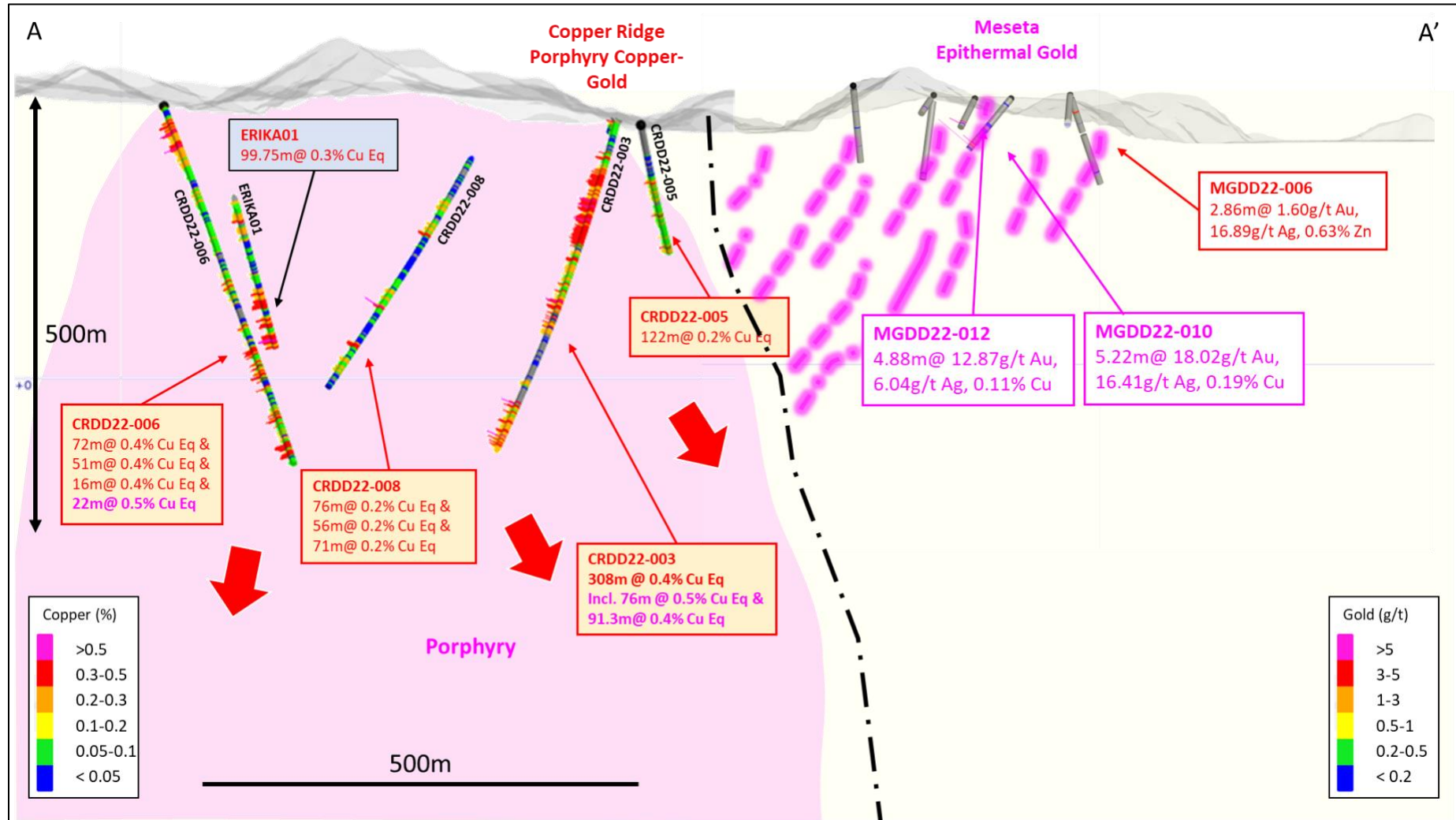


Figure 3: Schematic Long Section of Copper Ridge and Meseta mineral systems, drilling at Copper Ridge (histogram coloured by Cu %) and Meseta (histogram coloured by Au g/t), significant intercepts and geological interpretation.



## About the Meseta Gold Prospect

To the immediate northeast of Copper Ridge Porphyry prospect, gold mineralisation across the Meseta Gold prospect is hosted in steep to sub-vertical structures at the margins of the porphyry stock and is associated with strong silicification and oxidation of sulphides. Alteration and sulphide mineralisation features indicate that this is an intermediate sulphidation gold system.

High-grade epithermal gold mineralisation was initially identified at the Meseta Gold prospect in 2017, when artisanal workings on a break-away slope were sampled. The slope exposes a stockwork of oxidised veinlets capped by transported boulders forming a plateau of perched alluvial sediments. The alluvial cap covers mineralisation and alteration in the area forming a geochemically blind target beneath only a few metres of transported material.

In 2018, diamond drilling confirmed higher grade gold mineralisation in fresh rock. All drill holes intersected extensive hydrothermal related alteration and localised gold mineralisation.

An initial 14-hole program for 1,270 of diamond drilling was completed by Titan Minerals in late 2022 and was designed to test the presence of plunging high-grade ore shoots at interpreted structural intersections.

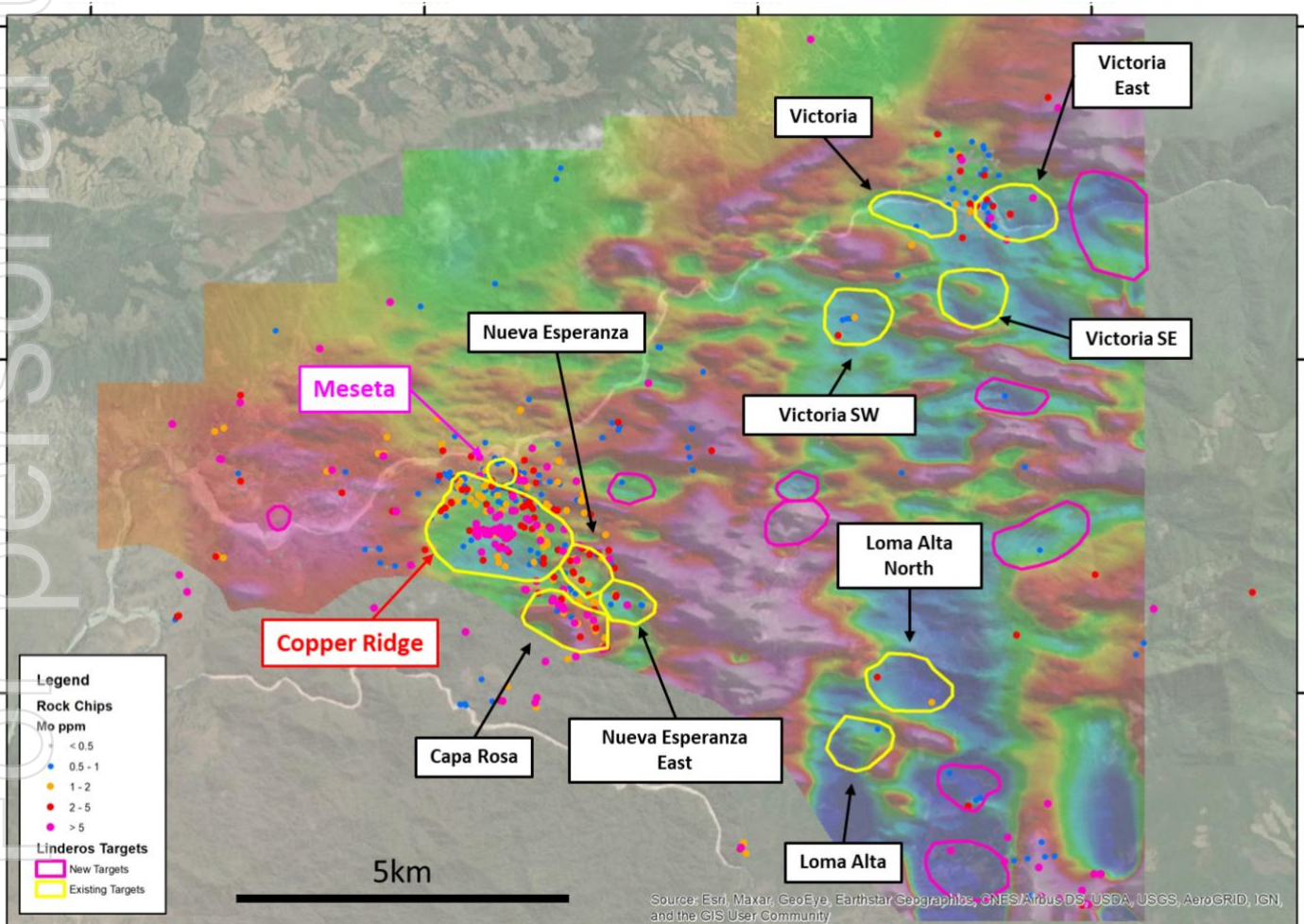


Figure 4: Linderos Project displaying prospects and targets identified by geophysics (TMI RTP image shown) and surface rock chips (Molybdenum)

## About The Linderos Project

The Linderos Project is located 20km southwest of the Company's flagship Dynasty Gold Project and is comprised of four contiguous concessions totalling over 143km<sup>2</sup> located near the Peruvian border in southern Ecuador's Loja Province.

Located in a major flexure of the Andean Terrane, the Linderos 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 Tangula Batholith forming a favourable structural and metallogenic corridor for intrusion activity where Titan minerals holds a significant land position in southern Ecuador.



Figure 5: Titan Minerals southern Ecuador Projects, the metallogenic belts of Ecuador and peer deposits

## 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.

### 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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## Appendix 1. Meseta Gold prospect diamond drill hole details

Hole ID	Easting	Northing	Elevation (m)	Azimuth (°)	Dip (°)	Depth (m)
MGDD22-001	0960	28326	307	213	-65	88.78
MGDD22-002	1029	28292	310	213	-45	77.05
MGDD22-003	0412	28240	303	217	-45	202.34
MGDD22-004	1147	28036	280	30	-50	159.20
MGDD22-005	1283	28070	326	295	-70	94.74
MGDD22-006	1435	28301	315	320	-62	116.30
MGDD22-007	1435	28301	315	105	-45	80.73
MGDD22-008	1268	28168	315	125	-72	102.68
MGDD22-009	1268	28168	315	125	-30	40.83
MGDD22-010	1382	28240	311	185	-50	77.59
MGDD22-011	1465	28130	350	6	-45	101.74
MGDD22-012	1313	28209	311	125	-42	50.17
MGDD22-013	1668	28120	355	10	-45	36.01
MGDD22-014	1668	28120	355	35	-45	42.55

*NB. All drill hole coordinates are in truncated WGS84 Zone 17 south and all drill holes are diamond core from surface*

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## Linderos 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. In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core samples were selected following geological logging. Samples were selected to represent mineralised veins, with niche samples taken to represent geological units. All diamond core was cut in half and then the entirety of each diamond hole sampled, this ensures no gaps in sampling, and no sampling bias.</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>50g 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 50g 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 50g fire assay for Au with a gravimetric finish.</li> <li>An additional charge is split from sample for four acid digests with ICP-MS reporting a 48-element suite.</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-MS61 method.</li> <li>Reported rock chip samples are composite grab samples collected from in situ outcrops selected by the geologist.</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 technique currently being undertaken by Titan Minerals is diamond core, and core is oriented with the Devicore device putting the orientation mark in the bottom of hole. Reliable oriented core is defined once at least two runs in a row have less than 10mm in rotation offset at HTW diameter and less than 8mm in NTW.</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>The quality of the drill core in general is good with an average of 99% of recovery, resembled by competent rock, especially below the oxide zone.</li> <li>Mineralisation in general has been intercepted as compact rock without any loss/gain of material, except for some core loss at the beginning few metres of select diamond holes where the ground was oxidized/incompetent.</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> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc..) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Logging is recorded for all sampled and mapped intervals with qualitative logging completed for lithological composition, texture, colour, structures, veining, alteration, and quantitative logging for observed mineralogy, and estimated mineral content of quartz sulphide minerals. All channels sampled are photographed at the time of sampling. All diamond core is routinely photographed.</li> <li>All sampled intercepts in this report are logged for geology, mineralisation, structure and alteration.</li> </ul>

# ASX ANNOUNCEMENT

16 February 2023



Criteria	JORC Code explanation	Commentary
<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 core 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 recoveries are recorded in accordance with best practice at 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 and length used are 1m in the host rocks and selective sampling in vein mineralisation considering 0.3 metres as the minimum sampling length.</li> <li>Field duplicates are taken regularly to assess the quality of field sampling procedures (and/or heterogeneity of the sample material).</li> <li>No studies have yet been completed to assess heterogeneity of the sample medium, however samples collected are of sufficient size to meet industry best practices for the style of mineralisation being assessed.</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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All reported results are submitted to an accredited independent laboratory and are analysed by methods considered 'near total' assay techniques as outlined in previous sections of this table.</li> <li>No geophysical tools used in reported channel sampling.</li> <li>Quality control and quality assurance procedures ("QAQC") are defined in Titan sampling procedure documents and for the reported results QAQC for reported channel sampling work is comprised of 4.8% blanks, 4% field duplicates, and 3.4% certified reference material (standards) for an aggregate 12% of QAQC independent of the laboratories in-house QAQC.</li> <li>All results are checked before upload to the digital database to confirm they are performing as expected.</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>First pass inspection is the QAQC validation of assay data prior to import into central database.</li> <li>Reported significant intersections are calculated by professional geologists in Ecuador and the subsequently peer reviewed and validated by a geologist/ competent person in Australia.</li> <li>No twinning has been undertaken.</li> <li>Field data is captured in both hard copy and digital formats and transmitted to the database management team for upload to a managed Access and MX deposits database controlled by the database manager.</li> <li>No adjustment to data is made in the reported results.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Soil, trench and channel samples are all located by a single point at the Channel's "Start point" surveyed by handheld GPS. Surveys are accurate to +/- 5m in horizontal precision. The sample locations are then measured by tape and azimuth from the Start Point or extrapolated from the start point based on dip and azimuth of the trench.</li> <li>All surveyed data is collected and stored in WGS84 datum Zone 17 south.</li> <li>Topographic control is based on LiDAR survey completed in August, 2022. The acquired data was from Copper Ridge and Meseta Gold prospects, covering an area of 12.8km<sup>2</sup>. The minimum information density was 5 points per square metre, the flight altitude path was at 300m, with an average velocity of 70 knots. The overlap per flight pass was 42%, considering 16 flight lines.</li> </ul>

# ASX ANNOUNCEMENT

16 February 2023



Criteria	JORC Code explanation	Commentary
<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>Early-stage exploration drilling has been conducted with drilling designed to test targets defined by surface mapping, channel sampling and historical drilling.</li> <li>Much of the drilling was planned to intercept ore shoots or to test mineralisation continuity at depth defined by high grade channel sampling assays.</li> <li>Reported data to date for the project does not have adequate spacing or distribution sufficient to establish continuity of mineralisation or underpin a mineral resource estimation, and further systematic exploration including drilling is required.</li> <li>No sample compositing has been applied in reported results.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <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>Geometry of the mineralisation identified in drilling has not been outlined with adequate sample density to comment on potential for bias in sampling.</li> <li>Relationship between drill orientation and orientation of key mineralised structures is not yet defined and requires further drilling to assess.</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 secured yard at Macara prior to being transported by a company vehicle to the Celica exploration office where laboratory and dispatched paperwork is processed. Samples are enclosed in polyweave sacks for delivery to the laboratory and weighed individually prior to shipment and upon arrival at the laboratory. 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 independent audit of project data or umpire laboratory checks have been undertaken by Titan for the reported results.</li> </ul>

# ASX ANNOUNCEMENT

16 February 2023



## Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license 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 and Zamora-Chinchipe Provinces of Ecuador. The Linderos project is comprised of four concessions in the Loja Province with Titan holding 100% interest in the Linderos E, Naranjo, Dynasty 1, and Chorrera, concessions totalling an area of 143km<sup>2</sup>.</li> <li>Mineral concessions in Ecuador are subject to government royalty, the amount of which varies from 3% to 5% 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>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 adhered to for the following year submitted to the Environmental Department of the Ministry of Energy and Mines. 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 Ministry of Energy and Mines in accordance with the Mining Law on such terms and conditions as defined in the Mining Law.</li> <li>The Company is not aware of any social, cultural, or environmental impediments to obtaining a license to operate in the area at the time of this report beyond the scope of regular permitting requirements as required under Ecuadorian 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>Linderos Project</p> <ul style="list-style-type: none"> <li>1974, The United Nations completes a 9-hole drilling program following a regional scale geochemical survey.</li> <li>1978, the DGGM and Mission Espanola complete a 2-hole program totalling just over 400m drilled.</li> <li>2004 until 2005 Dynasty Mining and Metals (later Core Gold Inc.) completed mapping, limited ground geophysical surveys and exploration sampling activity including 5 diamond holes totalling 1,146m drilled and 2,033 rock channel samples were taken from 1,161m of surface trenches</li> <li>2007 to 2008, a Joint Venture arrangement with Mariana Resource Ltd ("Mariana") completed soil surveys and 8 diamond drill holes, of which six holes totalling 858m drilled are located within the Linderos Project's Chorrera concession.</li> <li>2017-19, Core Gold Inc. (formerly Dynasty Metals and Mining Inc.) completed a series of 5m spaced trenches over a 100, x 150m area of artisanal mining operations to define a small zone of high-grade gold mineralisation and followed-up in 2018 with 11 diamond holes from 5 platforms testing the mineralisation at surface and ~1km east of outcropping surface mineralisation.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Regionally, the Linderos project lies within the compressional Inter-Andean Graben that is bounded by regional scale faults. The graben is composed of multiple Miocene aged intrusions within thick Oligocene to Miocene aged volcano- sedimentary sequences overlying the Cretaceous aged Tangua Batholith that extends for over 80km from northern Peru into southern Ecuador. Local volcanic rocks cover the Chaucha, Amotape and Guamoto 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> </ul>



# ASX ANNOUNCEMENT

16 February 2023



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<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>▪ 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:                             <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>▪ If the exclusion of this information is justified on the basis that the information is not Material</li> <li>▪ and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• A summary of drillhole information has been included in the body of this release.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• 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.</li> <li>▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• No high-grade assay cut was applied to reported exploration results. A lower cut-off of 0.2g/t gold was applied to generate significant intercepts.</li> <li>• Where higher grade gold is located within reported mineralised intervals at a 0.2g/t gold cut-off, locally an additional intercept is provided as “including” within the reported intercepts at a 0.8g/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>• All reported intersections are measured sample lengths and are not to be interpreted as true thickness. Exploration to date is not sufficient to define geometry or continuity of mineralisation reported.</li> <li>• True widths to be estimated with completion of more advance exploration and commencement of both oriented core drilling and commencement of 3D visualisation and modelling work with project advancing to a scoping stage.</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 to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• All material exploration results are included in this report, and location of all results are included in their entirety in the figures provided.</li> <li>• Surface sampling in systematic channels is represented in figures and graphics as rock chip samples for all historical sampling completed.</li> </ul>

# ASX ANNOUNCEMENT

16 February 2023



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<b>Other substantive exploration data</b>	<ul style="list-style-type: none"><li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li></ul>	<ul style="list-style-type: none"><li>Geological interpretation and summary of previously reported geochemical survey results included in figures.</li><li>No other available datasets are considered relevant to reported exploration results.</li><li>No metallurgical test results, bulk density, or groundwater tests have been completed on areas related to the exploration results.</li></ul>
<b>Further work</b>	<ul style="list-style-type: none"><li><i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li><li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li></ul>	<ul style="list-style-type: none"><li>Included in body of report.</li><li>Included in body of report as deemed appropriate by the competent person.</li></ul>