
Drilling Commences at Dynasty Gold Project Cerro Verde Prospect

Key Highlights

- Drilling has commenced on the Cerro Verde Prospect with 12,000m planned over the next 3 months
- Channel sampling at Cerro Verde well advanced and will continue concurrently with drilling activities. Over 125 channel samples are pending analysis and will be released to the market when complete
- Relogging of over 33,000m of historical drill core was recently completed. Geologic modeling is well advanced, with auriferous quartz vein geometries to be validated in planned drilling
- Key features in the regional structural setting highlighted in high resolution airborne geophysics completed in the past 6 months to be evaluated as part of the planned drilling programme
- Titan fully funded through to completion of the current 12,000 metre drill programme at Cerro Verde that will enable a resource update of the current foreign resource estimate in accordance with the JORC code
- Mineralisation is open at depth, as over 90% of mineralised intercepts in the existing foreign resource estimate of 2.1Moz gold are within 100m of surface
- Based upon previous mill to mining model reconciliation analysis, previous shallow, small scale mining at a cutoff grade of 2.0g/t, averaged a head grade of approximately 3.4g/t gold from an open pit and consistently returned, on average, 40% more gold than the previous resource estimated
- Dynasty is situated in a highly prospective regional setting, with Titan's 100% owned Copper Duke Project gold-copper porphyry systems located only 18km to the east, where geochemistry surveys are currently in progress

Titan Minerals Limited (ASX: TTM) (Titan or the Company) is pleased to announce diamond drilling has commenced on the Cerro Verde Prospect area, located within the Company's flagship Dynasty Gold Project.

Commenting on the drilling program, Titan Minerals Managing Director, Laurie Marsland said:

"The Cerro Verde area provides significant opportunity for resource growth and currently hosts over 55% of the ounces estimated in the previously completed foreign resource estimate. Further, understanding the Cerro Verde area is key to defining controls on mineralisation for the district and being more predictive in defining targets for resource growth.

This final phase of drilling will deliver datasets, including the first additional sampling data from the project since completion of the initial drilling in 2008, that will enable Titan to deliver the first mineral resource estimation reported under the JORC Code.

Once the current confirmation drilling is completed, we plan to continue drilling and test the multiple extension targets already identified. Our objective is to aggressively grow the resource throughout the coming year."

The Cerro Verde Prospect hosts over 1.1Moz of gold within the existing 2.1Moz gold foreign resource estimation (Canadian NI 43-101 compliant) for the Dynasty Gold Project (refer to ASX Release dated 30 April 2020 and Notes to Resource following the end of this announcement). The information in this announcement relating to Mineral Resource Estimates for the Dynasty Gold Project refers to a foreign estimate and is not reported in accordance with the JORC Code.

The planned exploration activity at Dynasty is predominantly in-fill drilling in an area hosting the existing resource estimate. Currently, 78 diamond holes totalling 11,800m are planned. Drilling is focused on acquiring additional structural data to refine modelling of a structurally complex telescoping epithermal to mesothermal style gold vein system. This work will underpin an updated resource estimation reported under the JORC Code that is underway and will be finalised following completion of drilling at Cerro Verde.

Commencement of drilling at Cerro Verde follows construction of 2.3km of new roads within the project area to establish access to key targets and link the Iguana and Cerro Verde Prospect areas. The additional route into the Cerro Verde Prospect will provide access across the central Cerro Verde area. It also establishes access to several previously un-drilled veins and extension targets to the east of Cerro Verde which can be taken advantage of during ongoing drilling activity.

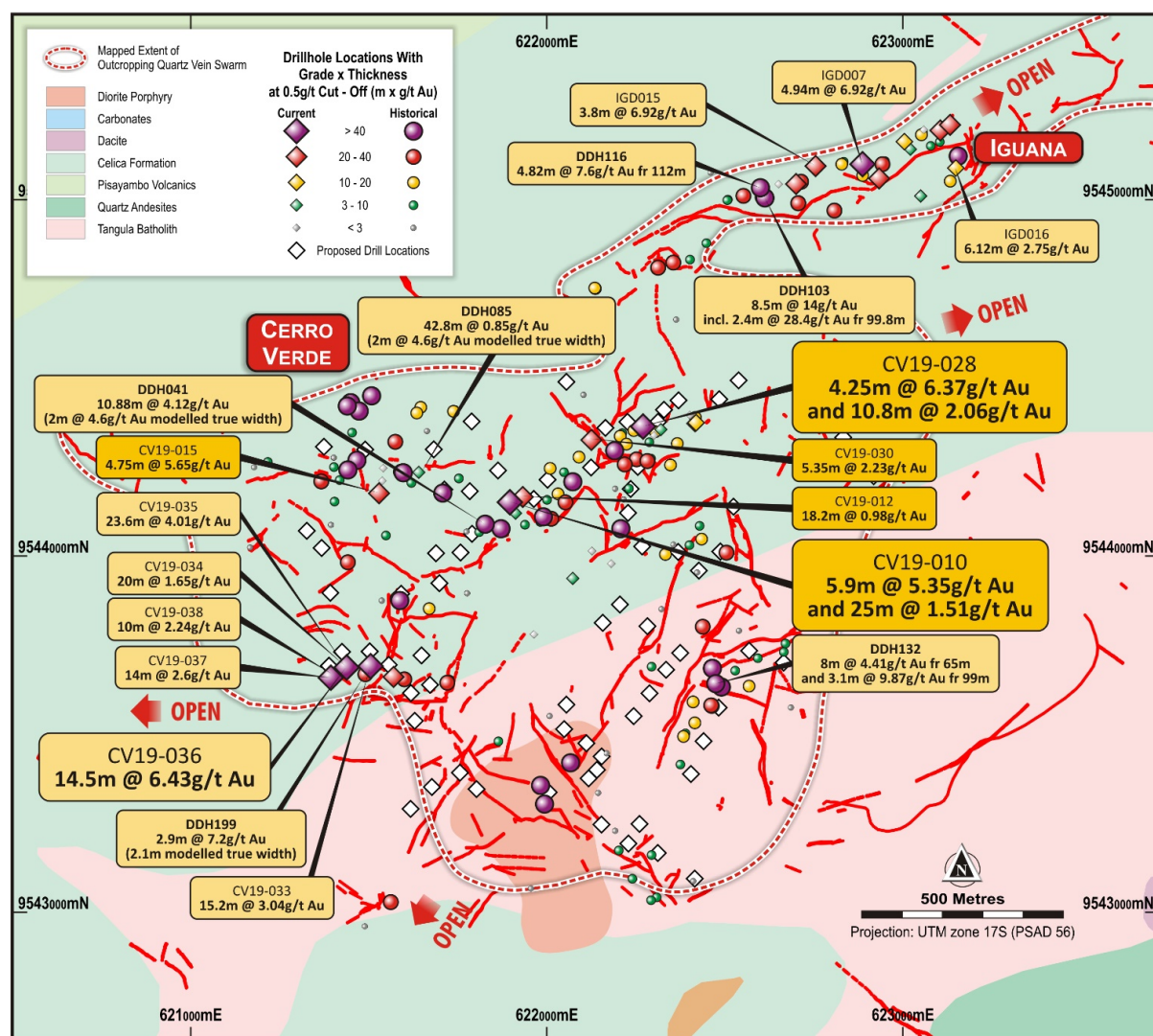


Figure 1: Cerro Verde and Iguana Prospect Areas with reported drill collar locations and Cerro Verde proposed drill sites

During preparation for drilling over the past few months, geologic mapping, and surface sampling has been initiated in the Cerro Verde Prospect area. Field activities include channel sampling of vein exposure in open pits, and sampling on outcropping vein zones, with assay results pending from 125 samples collected

in channel sampling activities. Other activities during the drilling campaign include channel sampling, trenching, surface mapping and geologic review of updated geology interpretations based on recently acquired airborne magnetic and radiometric datasets over the Dynasty Project (refer to ASX release dated 13 January 2021).

Dynasty Gold Project and Cerro Verde Prospect Overview

Dynasty is an advanced stage exploration project located in the Loja Province of southern Ecuador comprised of five concessions totalling 139km², including three concessions that received an Environmental Authorisation in early 2016 which are fully permitted for exploration and small-scale mining.

From 2017 to the end of 2019, Dynasty Project operated as a small scale mine producing on average 17,000 tonnes per month at an average grade of 3.46g/t gold from open pits (refer to ASX release dated 19 May 2020).

Titan conducted a reconciliation of the historic mining completed through to 31 Dec 2018, where an open pit was design over and developed on three veins included in the foreign resource estimation. In addition to the veins modelled, small-scale, open pit mining produced gold from several additional veins not intersected in previous drilling at the Cerro Verde Prospect area, and not included in the current foreign resource estimation. Titan found 40% more gold was extracted from the same volumes in the foreign resource estimate, where 69% more tonnes were mined versus the resource estimate, at 15% lower grade. The additional density of high-grade veining in combination with indications of low-grade aureoles around veins and vein intersections indicate bulk tonnage potential of the resource in the Cerro Verde prospect area.

Diamond drilling completed at Cerro Verde in 2019-20 has provided further indications for potential increases in resource volume that have not yet been included in resource estimation and require further drilling to define mineralised geometries. Significant intercepts at a 0.5g/t gold cut-off measured three to five times wider than previous results on the same mineralised veins. Previous sampling focused only on dominant quartz vein zones and material surrounding the quartz vein was not sampled. Previously reported intercepts used in the foreign resource estimate are often beginning and ending in mineralisation.

The mineralisation forming a halo around the main vein zone in each of the reported holes in the Brecha-Comanche corridor includes strong alteration with white clays, silicification, and narrow quartz veinlets. Drill results announced 14 July 2020 on the mineralised structure identified as the Brecha Vein zone, returned 14.5m @ 6.43g/t gold from 119 metres, including 6.65m @ 12.5g/t gold downdip from the original modelled intercept of 2.75m @ 2.70g/t gold on the principal quartz vein within the zone.

Similarly, the Comanche structure is returning substantially better intercepts of 16.6m @ 3.49g/t gold from 171.4 metres, including 5.05m @ 9.10g/t gold downdip of 2.9m @ 7.2g/t gold in hole DDH-199 used in the existing foreign mineral resource estimate (refer to Figure 1), where the reported vein intercept of 5.05m @ 9.10g/t gold within hole CV19-035 is interpreted to correlate with the original 2.9m @ 7.2g/t gold included in the current model (but excluding sampling outside of reported intervals in original sampling).

As outlined in the Company's quarterly report it is fully funded through to completion of the current 12,000 metre drill programme at Cerro Verde that will enable a resource update of the current foreign resource estimate in accordance with the JORC code.

-ENDS-

Released with the authority of the Board.

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

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Notes to Mineral Resource

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.

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Travis Schwertfeger, who is a Member of The Australian Institute of Geoscientists. Mr Schwertfeger is the Chief Geologist for the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he 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'. Mr Schwertfeger consents to their inclusion in the report of the matters based on his information in the form and context in which it appears.