Titan Minerals Jerusalem Gold Project concession in Ecuador reinstated to 100% ownership

Highlights

- 100% ownership of the Jerusalem Project in Ecuador successfully reinstated to Titan
- Existing resource totals 1.28 Moz gold averaging 14.5 g/t and 8.6 Moz silver at 98 g/t in most recent Canadian NI 43-101 compliant mineral resource completed in 2014, comprised of:
  - Measured & Indicated – 955,000 tonnes @ 13.8 g/t gold and 93 g/t silver for 423,000 oz contained gold and 2.86 Moz contained silver
  - Inferred – 1,775,000 tonnes @ 15 g/t gold and 101 g/t silver for 856,000 oz contained gold and 5.76 Moz contained silver
- Historical diamond drillhole dataset of 47 diamond holes totaling 13,383 m drilled with multiple undrilled targets identified in surface geochemistry
- The Jerusalem concession is located on-trend between the Fruta del Norte deposit 40 km to the north and the contiguous land holding of Luminex Resources’ Condor Project
- Numerous high grade targets identified but not explored and the system remains open to the north and at depth.
- Focus continues to be on expanding the resource at the Company’s flagship Dynasty Gold Project in Ecuador with the commencement of its significant drilling campaign in Q3 2020

Titan Minerals Limited (ASX: TTM) (“Titan” or the “Company”) is pleased to report the successful reinstatement of the Jerusalén Concession (“Jerusalem Gold Project”). Hosted in the same Jurassic age terrane as the Mirador, Fruta del Norte, and Condor deposits, the Jerusalem Gold Project is situated between the latter two deposits approximately 40 km south of Lundin’s Fruta del Norte Mine hosting over 13 Moz Au resources and the concession is contiguous with Luminex Resources’ Condor Project, host to over 5 Moz Au resources to the south of the project.

The Jerusalem Gold Project was originally acquired in 2003, whereafter, substantial expenditure from 2003 through 2007 enabled completion of significant exploration activity, resource estimation and preliminary economic study work. The previous management pledged an expenditure commitment for exploration investment from May 2010 but was prevented from actively exploring the project due to illegal artisanal mining activity. Issues with artisanal activity were confirmed on the concession and Force Majeure was declared in statutory reporting to the government during periods where activity on the project was temporarily delayed. In 2015 the previous management approached the government to ask the eviction of the illegal artisanal miners, but without success.

In 2017 the Ministry of Mines cancelled the concession on the basis that expenditure commitments had not been met. Cancellation of the concession was appealed and, in September 2019, resulted in the High Court ruling in favour of the owner, declaring the procedure for cancellation null and void accepting the concession was under Force Majeure due to the ongoing illegal activity in the area.

Titan has been engaged with the Ecuadorian Ministry of Mines since the acquisition of Core Gold in May 2020 and had presented its case to successfully reinstate the concession. The Jerusalem concession has been now reinstated to Titan Minerals with the concession being formally validated and registered late last week.
Commenting on the reinstatement of ownership, Titan Minerals Managing Director, Laurie Marsland said:

"Return of the Jerusalem concession is a great result for our shareholders. Clearly, the concession adds significant value to our already exceptional portfolio of exploration and development assets. We look forward to placing boots on the ground to evaluate the full potential of Jerusalem and the opportunities it provides.

A lot of work has been done since acquiring the Ecuadorian assets and I want to take this opportunity to thank all members of our team for their continued diligence and dedication to the task at hand. I think we will all look back on the acquisition of Core Gold as a remarkable opportunity."

Jerusalem Gold Project – Foreign Resource Estimate

The Jerusalem Gold Project is a single concession located within 45km of the provincial capital Zamora in the Zamora-Chinchipe province. The project area has been the focus of a number of exploration campaigns, reporting several mineral resource estimations since the late 1990’s and host to artisanal mining activity since the early 1980’s. Several mineral resource estimations completed and two such estimates reported under the Canadian National Instrument 43-101, with the most recent technical report titled "Jerusalem Gold Project, Zamora Chinchipe – Ecuador" dated 24 October, 2014 and released on the SEDAR platform on 5 November 2014 (refer to Table 1).

<table>
<thead>
<tr>
<th>Category</th>
<th>Tonnes (000's)</th>
<th>Au (g/t)</th>
<th>Ag (g/t)</th>
<th>Contained Au (ozs) (000's)</th>
<th>Contained Ag (ozs) (000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>379</td>
<td>14.2</td>
<td>90</td>
<td>173</td>
<td>1097</td>
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<tr>
<td>Indicated</td>
<td>576</td>
<td>13.5</td>
<td>95</td>
<td>249</td>
<td>1760</td>
</tr>
<tr>
<td>Total Measure &amp; Indicated</td>
<td>956</td>
<td>13.8</td>
<td>93</td>
<td>423</td>
<td>2,856</td>
</tr>
<tr>
<td>Inferring</td>
<td>1775</td>
<td>15.0</td>
<td>101</td>
<td>856</td>
<td>5764</td>
</tr>
<tr>
<td>Total</td>
<td>2,730</td>
<td>14.5</td>
<td>98</td>
<td>1,279</td>
<td>8,620</td>
</tr>
</tbody>
</table>

Note: Foreign estimate completed at a 2.0g/t gold lower cut-off. Table subject to rounding errors.

The information in this announcement relating to Mineral Resource Estimates for the Jerusalem 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.

The existing drill datasets for the project are reported to include 52 holes of drilling inside or intersecting the Jerusalem Gold project. Titan has identified available files and assay logs for 47 diamond holes totalling 13,383m drilled, of which 30 holes are collared inside the Jerusalem Gold Project area. The average length of the holes is 267m and the depth of the deepest hole collared in Jerusalén Concession is 614.76m.
Titan confirms the categories of the mineralisation reported under NI 43-101 are similar to the JORC Code (2012) classifications and Titan considers the Foreign Estimate to be material to Titan and provides a basis to contribute funding for continued exploration activity and advancement of Jerusalem through additional desktop studies for the purpose of data validation and ranking of targets within the project area. Titan believes the Foreign Estimate is relevant to Titan Shareholders as it provides an indication of the mineralisation potential within the Jerusalem Gold Project at the time of reporting.

Based on the information received by Titan to date in relation to the Jerusalem Gold Project in context of physical inspection of the project sites and discussions with technical and administrative personnel involved with previous work on the project, key criteria as defined in Table 1 of the JORC Code 2012 has been reviewed and addressed by Titan.

Titan believes that the Foreign Estimate is sufficiently reliable with estimation methodologies and data compilation work acceptable for methodologies used at the time of their estimation to provide the basis for a decision to deem the property to have merit for further exploration expenditure, but is not of a quality to underpin any economic reviews.

The Technical Report includes key assumptions for commodity prices, gold mining and processing costs, and there have been no material changes in assumptions. The Technical Report in its current form is considered to be a comprehensive compilation of all available exploration data applicable to the estimation of mineral...
resources at the time of its reporting, however further work is required to assess the impact of ongoing illegal mining on the resource estimation. A summary of key assumptions and methods used to prepare the Foreign Estimate include:

- Resource Estimation calculated using the polygonal method based on 86 drill intercepts and underground channel sampling. Artisanal mining at the time could not be fully surveyed and the first 30m below surface of sampled veins were assumed to be mined out and excluded from the resources estimation.
- Economic assumptions include (i) a gold price of US$1,260/oz, (ii) an operating cost of US$73/tonne, (iii) 94% metallurgical recoveries, and (iv) a 5% government royalty to calculate a 2.06g/t gold cut-off grade for the mineral resource estimation. No top cuts for gold or silver grades were applied.
- The Foreign Estimate and current Technical Report is based on 86 drill intercepts from 13,383m of drilled diamond core holes within, or intersecting the Jerusalén concession and a further 34 representative channel samples collected from underground development.

As at the date of this announcement, the Foreign Estimate reported by Core Gold and referenced by Titan herein has not been superseded by any later estimates.

The Foreign Estimate is not reported in accordance with the JORC Code and a competent person has not done sufficient work to classify the foreign estimate as mineral resources in accordance with the JORC Code. It is Titan’s intention to undertake an evaluation of the available data, and a summary of intercepts and geologic context for the Jerusalem Gold Project mineralisation which will be announced following completion of desktop reviews. Subject to establishing unrestricted access to the project area Titan will initiate further exploration work for the Jerusalem Gold Project to underpin a mineral resource estimation report in accordance with the principles of the JORC Code that will include, but is not limited to: (i) audit, verification and re-logging program of historical diamond core stored at the Jerusalem Gold Project site, (ii) where available, compilation of underground mine surveys to assess impact of previous mining on the foreign resource estimate completed in 2014 (iii) in-fill drilling to define geometry of mineralisation and underpin development of a 3D geological model (to establish controls for geostatistical modelling techniques in resource estimation), confirm confidence in projected mineralisation, and selective twinning of previous drilling for verification purposes, and (iv) additional metallurgical studies to underpin assumption or predictions in preliminary economic assessments.

The proposed exploration activity and evaluation work is planned to be completed during CY2021, subject to requisite community engagement, permitting requirements, and establishing unrestricted access into the project area, with the aim to have an updated Mineral Resource estimation reported in accordance with the principles of the JORC Code in 2022. Proposed work would be funded by way of Joint Venture or Farm-in Agreement, out of current cash balance of the Company, potential equity financings and/or potential divestment of other assets in the Company portfolio. The company intends to provide regular updates on timing of a mineral resource update and will regularly report results of exploration activity in compliance with continuous disclosure obligations under ASX listing rule 3.1.

**Jerusalem Gold Project Description**

The Jerusalem Gold Project is a single concession named the Jerusalén concession (code 353) located in south eastern Ecuador, 400km south east of the capital city of Quito close to the border with Peru in the province on Zamora-Chinchipe. The concession covers 225 hectares in a readily accessible region of southern Ecuador within 70km of the nearest regional airport located near the city of Loja (refer to Figure 5).

The Jerusalem Gold Project is located on the margins of the Zamora batholith, a middle to late Jurassic age intrusion up to 100km wide and exposed for 200km extent in the prolific Zamora copper-gold metallogenic belt, which hosts several epithermal gold deposits including Luminex Resources’ Gold’s Condor project and Lundin Gold’s 13.9Moz Fruta del Norte mine, and multiple copper porphyry to gold enriched copper porphyry systems including Mirador and Santa Barbara projects.
The gold mineralization found on the concession is associated with an extensive high grade polymetallic epithermal vein system featuring over twenty narrow high-grade gold veins. Multiple vein extensions and additional mineralisation identified in 2003 to 2007 exploration campaigns that have not received follow-up drill testing for continued growth and increased confidence in the previously drilled resource. The project...
hosts over 20 shoots of high grade gold veining identified by historical mining and previous drilling completed by TVX Gold (refer to project history below).

**Jerusalem Project – History**

The Jerusalén concession was initially granted in 1994 following discovery of high-grade gold veining by informal miners in the early 1980’s. Canadian listed TVX Gold acquired the concession in 1995 as part of a larger contiguous land holding, then in 1995 through to 1997 completed 29,827m of drilling from 110 diamond drill holes in and around the Jerusalem Gold Project, and constructed a 725m access tunnel, from the adjacent concession, which extended 340m underground into the Jerusalén concession area.

TVX Gold withdrew from exploration of the project in 1998 to focus on larger porphyry style copper systems in the district. The project changed hands to private investors in 2001, and was subsequently acquired by Dynasty Mining and Metals (later renamed Core Gold Inc.) in 2003, who formed agreements with third party small scale miners that were given permission to extract and beneficiate precious metals on the property in exchange for 25% of the final product. The presence of active, authorised miners on the site was intended to inhibit incursions by illegal miners in the area.

Exploration activity from 2003 through 2007 included mapping, surface trenching and underground sampling activities, with access provided by authorised artisanal miners on the project concession that culminated in a Canadian NI 43-101 technical report with resource update in 2006, followed by a preliminary economic assessment in 2007. In 2012 Core Gold reported to market an invasion of artisanal miners onto the property, which prevented the Company from advancing exploration activities.

**Canaccord Genuity (Australia) Ltd Appointed as Corporate Advisor**

Titan is also pleased to announce it has appointed Canaccord Genuity (Australia) Ltd (“Canaccord”) as its corporate advisor. Canaccord will (amongst other matters) assist with the Company’s ongoing capital markets strategy, provide introductions to a broader investor community both domestically and internationally and other advisory services. In consideration for acting as the Company’s corporate advisor, the Company will issue to Canaccord 44 million options at various exercise prices expiring 31 2023.

The above options will be issued under the Company's existing Listing Rule 7.1 capacity. An appendix 3B accompanies this announcement.

-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)
About Titan Minerals Ltd

Titan Minerals is an exploration and development company focused on exploring and developing potential Tier One projects in Ecuador’s southern Andean copper-gold belt. The Company’s flagship asset is the Dynasty Gold Project that consists of a Canadian NI 43-101 mineral resource estimate of 2.1 million ounces at 4.5g/t gold. Titan’s strategy is to conduct a drilling campaign across Dynasty and deliver a resource update in compliance with the JORC Code. Titan also owns Copper Duke, which is a multi-phase, outcropping, gold rich porphyry copper project which exhibits several encouraging characteristics.

The Company is continuously evaluating additional projects in gold, copper, and other commodities within Ecuador and elsewhere for acquisition or joint venture to grow shareholder value.

Notes to Mineral Resource

The information in this announcement relating to Mineral Resource Estimates for the Jerusalem 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 ASX Listing Rules 5.12.2 through 5.12.7 regarding requirements for foreign mineral estimates reporting is an accurate representation of the available data and 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.