ASX ANNOUNCEMENT

4 December 2017

Multiple High-Grade Gold Targets Identified at Torrecillas

Highlights

- **Titan implementing strategic review of the historical exploration data for the Torrecillas Project in Peru**
- **Multiple target areas of high-grade gold vein systems identified via historic surface mapping and channel-sampling**
- **Significant Au grades as high as 238g/t.**
- **Over 16,000 hectares of tenements**
- **Highlights of historic channel sampling include**
  - 0.90m at 9.63 g/t Au
  - 0.35m at 14.9 g/t Au
  - 0.32m at 6.81 g/t Au
  - 0.20m at 238.0 g/t Au
  - 0.25m at 17.15 g/t Au
  - 0.25 at 12.65 g/t Au
  - 0.20m at 26.3 g/t Au
- **Drilling campaign expected to commence in Q1 2018**

Titan Minerals Limited (ASX: TTM) ("Titan" or "The Company") is pleased to advise its geological team is undertaking a detailed review of the historical exploration data for the high-grade Torrecillas Gold Project in Peru. The Company has a right to earn-in up to 70% of the project, which is currently owned by the private company Andina Resources of which is a major shareholder of Titan.

Systematic detailed surface mapping and channel-sampling undertaken in 2012 discovered numerous high-grade gold vein systems within the Torrecillas tenure. Six new target areas – Rebeca, Tessie, Linda Julia, Sandra and 5 Noviembre West – were defined, (and remain unexplored), in addition to the previously-identified vein systems of Torre Chico, Ady-Oly, 5 Noviembre and Brecha Toropampa (see Figure 1).

The vein systems are structurally controlled and vary in strike between east-west to nor northwest – south southeast, in accordance with the regional trend. Dip is also variable, but is typically steep. Significantly, the identified strike lengths of these vein systems are all greater than ***300m and up to 850m,*** in comparison to the vein system at Andina's Torrecillas Gold Mine which has less than 200m of strike and had a JORC measured resource of over 100,000oz (Au). The historic channel samples represent such high grade Au hits (9.63g/t, 14.9g/t, 6.81g/t, 238g/t, 17.15g/t, 12.65g/t, 26.3g/t) validating the strategy of exploring and mobilising drilling rigs in 2018.

Titan anticipates initially undertaking geophysical survey and further channel samples in January 2018 and subsequently expects to identify priority drilling targets. Titan intends to implement a 30,000 meters diamond drilling program on the new vein systems in mid-2018 once the review of the Torrecillas tenements is completed by its geological team.

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The mineralised veins are typically narrow greyish-coloured quartz veins, hosted by intrusive granodiorites that form part of the larger Coastal Batholith. The veins have brown staining from iron oxides (haematite-goethite) present, and at surface present significant argillic alteration. Chlorite ± carbonate alteration is also often present near the vein margins and in fractures. Disseminated pyrite and chalcopyrite mineralisation is common, and copper carbonates such as malachite can be observed in outcrop.

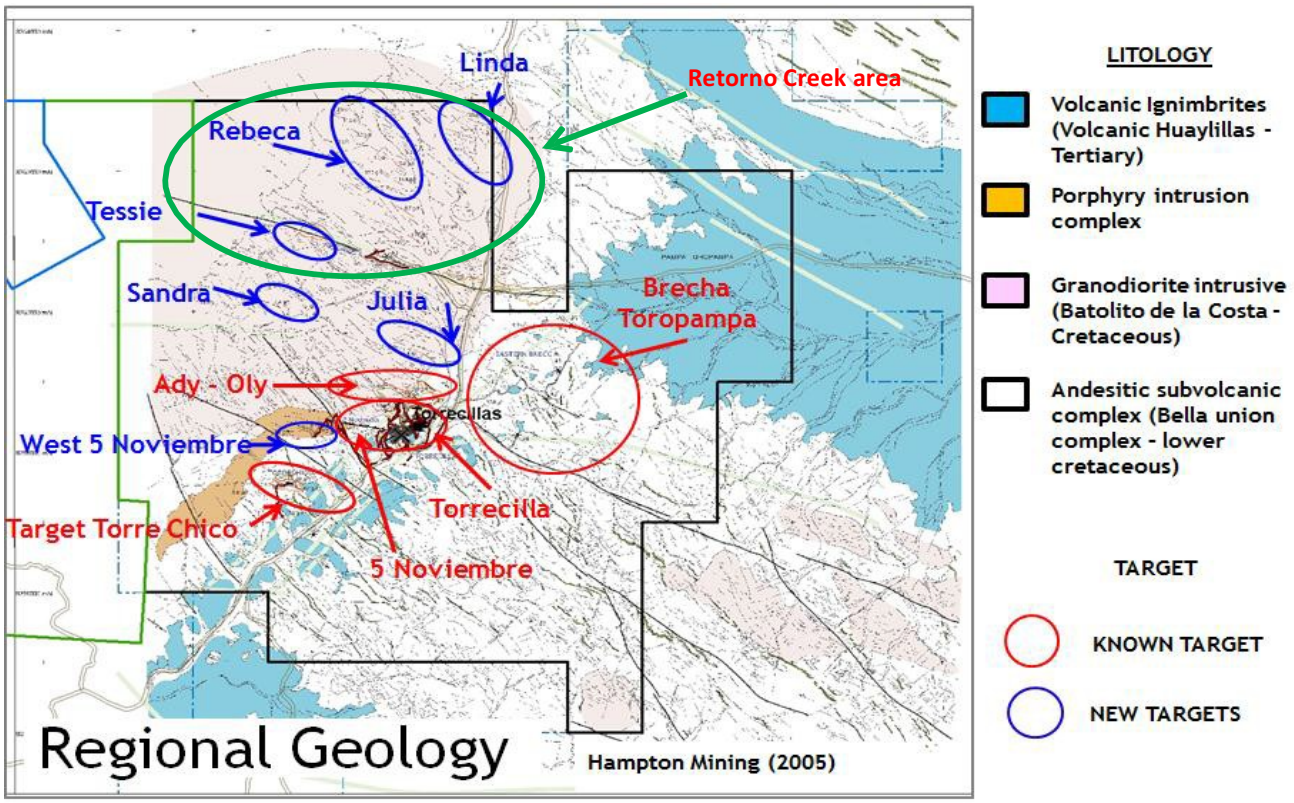

Figure 1 - Location of the high-grade gold target areas at Titan Minerals' Torrecillas Projects in Peru; circled in blue are the targets discovered during the 2012 exploration campaign

Regional Setting

The Torrecillas Project lies within the Pisco-Chala Structural Domain in a corridor between two regional-scale fault structures striking northwest-southeast known as the Nazca – Ocoña metallogenic belt, with the northern-most tenements of the Torrecillas Project crossing over the eastern structure and into the Western Cordillera Domain (Figure 3). The regional geology is dominated by Mesozoic volcanic and sedimentary rocks that were intruded by igneous plutons in the Late Cretaceous. These rocks were formed in a Mariana-type subduction environment with several cycles of compression and extension that marked the beginning of the Andean Cycle. Later Tertiary and Quaternary volcanic and sedimentary rocks, which are more dominant in the western part of the region moving away from the Cordillera and down towards the present-day coast, subsequently formed as the tectonic setting changed to the current Andean-type continental margin.

Locally, the Torrecillas Project is located within the Bella Union Complex, on the edge of a large tonalite-granodiorite pluton that forms part of the larger Coastal Batholith. The Complex formed during the Cretaceous and subsequently suffered many cycles of deformation and intrusions, resulting in widespread hydrothermal and low-grade (hornfelsic) metamorphism. The dominant orientation for nearly all rock units, structures (faults) and veins is northwest-southeast, although the major structures become more east-west and more north-south to the south and north of the project area, respectively.
Mineralisation within the project area, as for the whole of the 100+ km -long Nazca – Ocoña metallogenic belt, occurs as mesothermal vein systems. These quartz ± sulphides veins have infilled faults and other structures, and caused strong

chlorite – epidote ± pyrite alteration in the surrounding host rock, with subsequent faulting and reactivation of existing faults causing localised offsets and breccias. Gold primarily occurs as free grains associated with pyrite and/or chalcopyrite, with remobilisation existing locally. The veins are typically thin (<5m thick), but extensive in both strike and dip, and the gold grades are typically high (>10 g/t Au) and in localised zones can be extremely high (>>1oz/t).

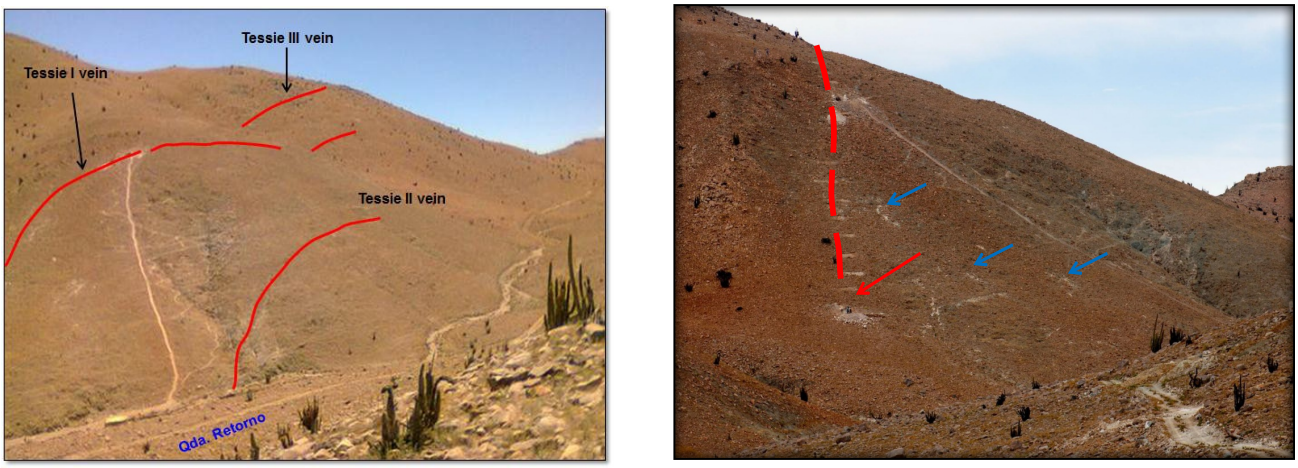

Figure 2 - Location of the high-grade gold Tessie vein system in outcrop; trench-sampling of the Tessie I vein in 2012

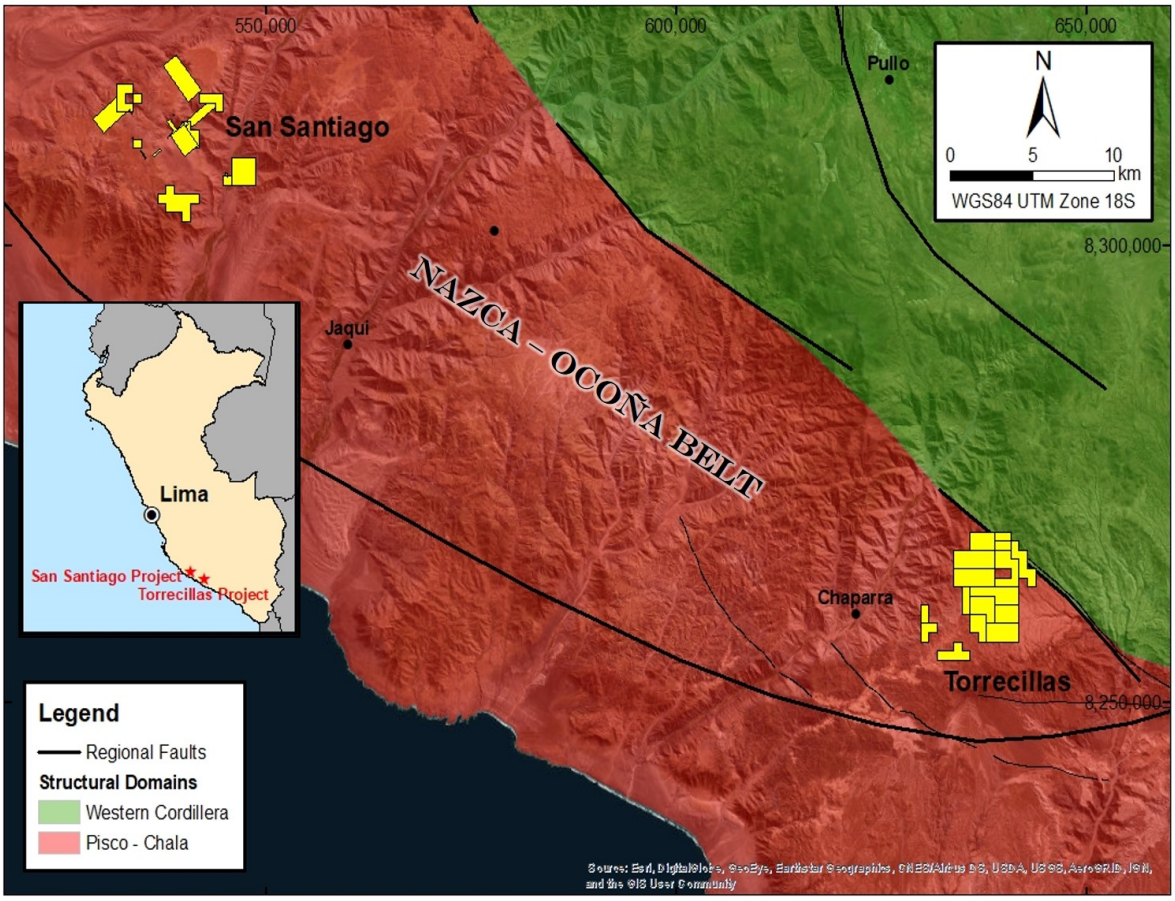

Figure 3 - Location and tenure of Titan Minerals' San Santiago and Torrecillas Projects in Peru

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About Titan Minerals Ltd

Titan Minerals is the owner and operator of a copper and gold business in a well-established mining region of Southern Peru. A centralised processing plant with three separate circuits produces copper concentrate and copper cement in addition to loaded carbon from the CIP gold circuit, with feed sourced from third party operators as well as from Titan's 100% owned mines.

The copper assets of Titan are contained within 7,800Ha of under explored concessions that surround the San Santiago processing plant and are currently being mined for copper, with an attractive gold and silver credit.

Titan's gold assets include its small-scale mines at the Torrecillas project. At Torrecillas, a number of high-grade narrow gold veins have been developed and mined by Titan Minerals. This gold project, located just 180km from the processing plant, are part of 16,000Ha concession package that also contain two large tonnage, low-grade disseminated targets containing known gold and copper with silver and molybdenum mineralization.

Competent Person's Statement

The information in this document that relates to the Torrecillas gold project and the San Santiago concessions is based on information compiled and conclusions derived by Mr Aidan Platel. Mr Platel has over 17 years' experience in the minerals industry, in both mining and exploration roles across a wide range of commodities. Mr Platel has the relevant qualifications, experience and independence to be considered a "Competent Person" as defined by the JORC Code (2012). Mr Platel consents to the inclusion in this presentation of the matters based on his information and has reviewed all statements pertaining to this information in the form and context in which it appears.

Information in this announcement relates to the following previous ASX announcements:

- 27 November 2012, New Gold Discovery at Torrecillas Project, Peru
- 1 February 2013, Tessie Vein System Discovered at Torrecillas Gold Project, Peru
- 22nd of April 2013, Exploration and trial mining update from Tessie project – Torrecillas Project

Exploration results were prepared and first disclosed under the JORC code 2004. It has not been updated since to comply with the JORC code 2012 on the basis that the information has not materially changed since it was last reported (see Minera Annual reports 2012-2014 and various corresponding ASX releases.)

The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. The company confirms that the form and context in which the competent persons findings have not been materially modified from the original announcement.