

12 July 2018

TORRECILLAS EXPLORATION UPDATE

HIGHLIGHTS

- Reconnaissance mapping and channel sampling completed across an expanded concession package at Torrecillas.
- Four of the eleven highly prospective vein corridors are prioritised for follow-up exploration activity, with recent in-fill surface sampling assessing continuity of grade across multiple targets returning better results including:
 - o 42.7g/t, 41.2g/t gold, 23g/t gold & 6.9g/t gold
- Two new target areas discovered in mapping, including multiple vein sets identified to the west of the Torrecillas Mine requiring additional follow-up exploration, with better assays at surface including:
 - 35g/t, 22.7g/t, & 13g/t gold peak rock chips on new veins identified including up to 4.7g/t & 3.8g/t gold in brecciated zones located within the newly defined zone.

Titan Minerals Limited (ASX: TTM) ("Titan" or "The Company") is pleased to announce results of a recent reconnaissance mapping and sampling campaign at the Torecillas project which includes the first comprehensive detailed surface mapping over the full extent of the vast property position surrounding the historical Torecillas mining operations. Results of the exploration campaign includes discovery of multiple gold-bearing vein sets sub-cropping on the property and provides additional information across a number of outcropping early-stage prospects with high-grade gold showings at surface within Titan's significant land holding on the >100km long Nazca–Ocoña metallogenic belt in Southern Peru.

Titan is currently nearing completion on successfully re-consolidating 100% ownership of the Torrecillas Gold Project without Titan having to earn-in as previously required. The Company anticipates increasing from its right to earn-in a 70% interest in the Torrecillas Gold Project to 100% ownership subject to meeting conditions precedent for completion of the Andina Resources acquisition.

Along with the consolidation of 100% of the Torrecillas Gold Project, Titan will also acquire the Tulin and Vista Gold Plants that have several key benefits impacting on the high-grade mineralisation potential of the Torrecillas project:

- Titan will be able to take advantage of the Vista Gold Plant to avoid building its own mill facilities, saving circa US\$4M in capital expenditure, and
-) avoiding the three to four years required to achieve the gold plant licensing approvals;
-) Ore can be transported from the Torrecillas Gold Project to the Vista Gold Plant via the Pan American Highway, which provides an efficient transport route from mine to mill.

Exploration activity on the project continues during the Andina acquisition, and results from recent work will allow the Company to better rate and rank numerous targets requiring follow-up work and re-define the exploration strategy to advance top tier targets to potential drill testing in 2018 following required permitting. Among the previously identified eleven target areas, four vein zones have been identified for follow-up work based on strike extent and continuity of high grade results, including the Rebeca, Preciosa and Ady-Oly vein corridors, with each target area containing multiple veins across substantial widths ranging from 1.8 to 2.7km in strike extent.

Suite 6, 295 Rokeby Rd, Subiaco WA 6008 ACN: 117 790 897 Ph: +61 8 6555 2950 | Fax: +61 8 6166 0261 www.titanminerals.com.au



Previous exploration and mining on the Torrecillas Concession has highlighted multiple targets with high-grade resource potential within the project area. Recent exploration activity has refined characteristics to prioritise areas delivering significant strike extent and density of veining with continuity of grade to deliver potentially economically viable resources with drill definition.

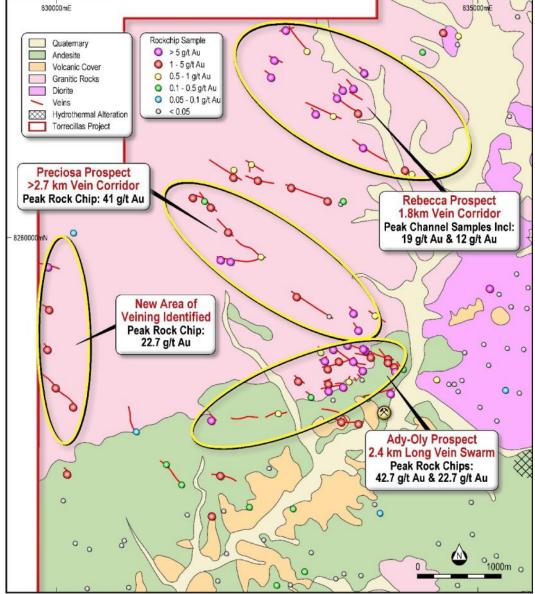


Figure 1 | Location of prioritised high-grade gold target areas at Torrecillas Project in Peru with reported surface sampling locations

The priority target areas for drill follow-up include;

- Ady-Oly Prospect, which comprises numerous sub-parallel vein and vein extensions to the historical resource at the Torrecillas mine area on a complex vein array covering over 2.4km extent proximal to the granitic and Andesitic volcanic host rock contact zone in the area. The area includes numerous >5g/t results from channel samples across veins mapped at surface. Including up to 42.7g/t gold and 22.7g/t gold value returned on new vein extensions identified in recent mapping in a step-out to the southwest.
- Preciosa Prospect is a 2.7km long corridor of veining with multiple high-grade veins mapped on topographic highs. Sampling to date demonstrate strong potential for continuity of gold grades along strike, and additional trench sampling is planned in areas of colluvial cover to assess additional continuity of strike along veins within the target area.



Rebecca Prospect is an area of relative high vein density and on average returning consistently high grades from representative channel sampling across multiple veins within the 1.8km long vein swarm. Again, vein extent and density are currently focused in areas of best exposure with significant potential to add strike extent and volume through further trenching and follow-up drilling along strike.

Planned Work

The company will continue with exploration activity including ongoing channel sampling and trenching activity to define continuity of grade at surface on targets and will move forward with required environmental permitting for drilling over top tier targets within the mining concessions.

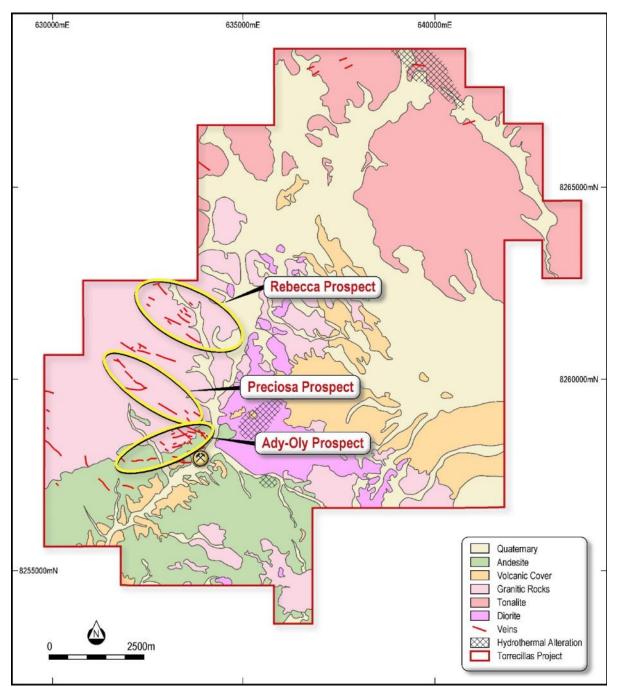


Figure 2 | Results of recent geological mapping by Titan Geologists across expanded concession package at the Torecillas Project area.



Regional Setting

The Torrecillas Project lies within the Pisco-Chala Structural Domain in a corridor between two regional-scale northwest striking fault structures 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.

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 metamorphism. Mineralisation within the project area, as for the whole of the 100+ km -long Nazca – Ocoña metallogenic belt, occurs as mesothermal quartz vein systems where gold primarily occurs as free grains associated with pyrite and/or chalcopyrite. The veins are typically thin (>10 g/t Au) and in localised zones can be extremely high (>10z/t).

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 5,800Ha 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 12,900Ha concession package that also contain two large tonnage, low-grade disseminated targets containing known gold and copper with silver and molybdenum mineralization.

For further information on all aspects of the company and its project please visit: <u>www.titanminerals.com.au</u> or contact: Matt Carr – Executive Chairman +61 8 6555 2950

Competent Persons 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 COO & Chief Geologist for the Company. Mr Schwertfeger 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.



APPENDIX A 2012 JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used 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. 	 Representative chip channel sampling has been taken on available exposures from outcrop and excavations, with sample lengths dictated by mapping and observations of the geologist onsite. Channel Sampling was done as continuous and equal sampling of an outcrop or excavated exposure of in-situ material to provide a representative sample of material sampled that best approximates the true width of the exposure. Rock chip samples are composite grab samples collected from in situ outcrops selected by the geologist.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).) No drilling techqnique was implemented in the reported results
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Samples are not collected for use in mineral resource estimation or mining studies and sample recovery and sample preparation technique is considered appropriate. Sample tools and sampling site are cleaned between samples and sample material is coned and quartered to ensure representative nature of the samples. However, Coarse material (large rock fragments) are removed from samples or disaggregated on-site during collection to not overly bias sampling to large fragments in the relatively small sample size
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Samples are not collected for use in mineral resource estimation or mining studies Rock, saprolite and soil characteristics, colour and nature of the sample setting are logged qualitatively, and the slope, slope direction of the sample location is quantified. Sample sites are not regularly photographed. Selected channel and rock chip samples taken from surface are photographed and photos stored digitally. All sample sites in surface sampling and mapping programmes are logged
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	 Not applicable to the reported exploration results Rock chip samples collected are composite grab samples collected from in situ outcrops selected by the geologist and are considered appropriate for the vein orientation studies that the samples are collected in, for defining future drill orientation. Channel samples collected are continuous and equal sampling of an outcrop or excavated exposure of in-situ material to provide a representative sample of material sampled.



Criteria	JORC Code explanation	Commentary
	 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Field duplicate and certified reference materials were inserted, with the standards every 50 th and the duplicates every 25 th sample. The results will be compared to assess the accuracy of the sampling methods being utilised.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 Gold assays obtained by using a 30g charge for fire assay with an AAS finish with a 5ppb Au lower detection limit and a 10,000ppb Au upper detection limit is considered to be total gold estimate. Samples exceeding the upper limit are repeated obtaining a 30g charge for FA with a gravimetric finish. This technique is considered an appropriate method to evaluate total gold content of the samples. No geophysical tools used in relation to the reported exploration results. In addition to the laboratory's own QC procedure data-certified reference materials, duplicates and certified reference material are regularly inserted into the sample preparation and analysis process with approximately 5.8% of all samples being related to quality control for the reported sampling program. Data is reviewed before being accepted into the database. Any batches failing QAQC analysis resubmitted for check assays. Dataset QAQC contains acceptable levels of precision and/or accuracy.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Senior Geological staff routinely inspect all sampling. Twin holes are not utilised in the reported exploration results All Titan Minerals sample and recovery data is recorded to paper forms at the time of drilling/sampling. Data is then keypunched into controlled excel templates with self-validation functions. The templates are then provided to an internal database manager for loading into a central Company database. No adjustment is made to the data.
Location of data points	 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. Specification of the grid system used Quality and adequacy of topographic control. 	 Reported samples are all located by a single point at the sample'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. Sample locations are collected in WGS 84 datum Zone 18S projection and converted to a local grid for database storage and reporting purposes. Topographic control is based on handheld GPS and plotting to surface contour datasets. This
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and 	 method of topographic control is deemed adequate at the current exploration stage of the project. No systematic grid is applied to spacing of trenches and excavations, with preliminary sampling activity focused on zones of favourable alteration and mineralisation observed in the surface environment. The exploration activity reported is not of sufficient data spacing and distribution to be appropriate for mineral resource estimation.
	grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.) Whether sample compositing has been applied.) No compositing has been applied for reported results.



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 Orientation of channel sampling is perpendicular as possible to dominant orientation of interpreted structural and potential lithologic and interpreted vein controls on mineralisation. The orientation of trench sampling is perpendicular, or near perpendicular to the predominant trend of mineralisation No drilling with sampling intended for inclusion in a mineral resource estimation is included in reported exploration results.
Sample security) The measures taken to ensure sample security.	J Titan Minerals samples are removed from the field immediately upon collection and stored in a secure compound for sub sampling and preparation for lab dispatch. Samples are shipped from site to the laboratory under constant supervision by Titan Minerals technical personnel. Sample submission forms are sent in paper form with the samples as well as electronically to the laboratory. Reconciliation of samples occurs prior to commencement of sample preparation of dispatches.
Audits or reviews) The results of any audits or reviews of sampling techniques and data.	 All Titan Minerals Ltd QA/QC data is reviewed in an ongoing basis and reported in quarterly summaries. No lab audits or third-party assay reviews have been completed on datasets at this time.

Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 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. 	 Titan holds mineral concessions, through an indirectly held, wholly owned Peruvian subsidiary, retains direct ownership or exclusive option to acquire mineral title in Peru covering various mining licences issued under the Peruvian Mining Act as listed in the Company's most recent quarterly report. The Company is not aware of any impediments to obtaining a licence to operate in the area at the time of this report.
Exploration done by other parties) Acknowledgment and appraisal of exploration by other parties.	Exploration and production on the property completed by previous operators include Mundo Minerales, Surex have included soil sampling, rock sampling, mapping, drilling and underground works, previous work being utilised in a compiled dataset is considered to be completed in accordance with best practices at the time of data acquisition.
Geology) Deposit type, geological setting and style of mineralisation.	 The Torecillas Gold 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. The regional geology is dominated by Mesozoic volcanic and sedimentary rocks that were intruded by igneous plutons in the Late Cretaceous. 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



Criteria	JORC Code explanation	Commentary
		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 locally 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.
Drill hole Information	 A summary of all information material to the understanding of the exploration results include a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole coll dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Materic and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	ar
Data aggregation methods) In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated	 No weight averaging techniques are applied to reported exploration results. All assay results from 30g Fire assay with AA finish are initially reported at an upper cut-off of 10g/t Au. All over limit samples were repeated with 30g fire assays with a gravimetric finish providing a higher upper detection limit.
) No material variation to sample lengths in the reported exploration results.
	 Where aggregate intercepts incorporate short lengths of high grade results and longer length 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 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	hs) No metal equivalent reporting is applicable to this announcement
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Titan sample lines were oriented as close to perpendicular to interpreted geological directions as possible. Due to the early stage of exploration at the Torrecillas project, determination of true widths and definition of mineralized directions encountered in the exploration results is not always possible. Reported intersections are apparent widths of mineralisation due to the current level of sample spacing and distribution, the geometry of mineralisation is not modelled in enough detail at this stage of exploration to determine true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be includea 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.	,
Balanced reporting) 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.	 Assay results for the reported exploration activity range from below detection assay results of <5ppb Au and range up to peak values contained in the body of the report. All exploration results are included and are utilised in the interpretation of results for activity being reported on in this report. Reported sampling includes a total of 409 assays exclusive of QaQc results with 32% of samples reporting below detection and 16% of samples reporting at 1g/t gold or higher.



Criteria	JORC Code explanation	Commentary
Other substantive exploration data) 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.	 Meaningful observations included in the body of the report No other available datasets are considered relevant to reported exploration results
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Included in body of report Included in body of report as deemed appropriate by the competent person