24 August 2016

EXPLORATION ACTIVITIES FOR GOLD RAMP UP AT OYUT ULAAN

HIGHLIGHTS

- **Assessment of initial high grade gold results completed and accelerated ground exploration program launched at Oyut Ulaan;**
- **Drilling to test the depth and strike extent of shallow high-grade gold mineralisation;**
- **Soil survey identifies widespread gold anomalism and defines new targets to be tested;**
- **Initial metallurgical testing of oxide gold ores planned to determine processing flowsheet options;**
- **Presence of epithermal gold and copper supports our model linking to a porphyry system at depth.**

Xanadu Mines Ltd (**ASX: XAM – "Xanadu" or "Company"**) is pleased to announce it has commenced a ramped-up second phase of exploration activities on the recently discovered shallow high-grade epithermal gold veins at its 90% owned Oyut Ulaan project located in the South Gobi region of Mongolia (Figure 1). The accelerated ground exploration program including approximately 3,000m (approximately 65 shallow holes) of drilling will test both strike and vertical extensions of the high-grade epithermal gold mineralisation intersected in broad spaced reconnaissance drilling and surface trenching (see Xanadu's ASX announcement – 30 June 2016).

Xanadu's Executive Director & Chief Executive Officer, Dr. Andrew Stewart, said *"With multiple near surface gold targets, Xanadu has decided to fast-track exploration at the Oyut Ulaan gold discovery with an accelerated exploration program, which includes an extensive drill program, continued regional trenching, extensive soil and regional sampling, metallurgical test work and preliminary economic evaluations. This comprehensive program will go a long way to characterising the discovery and allow assessment of the potential for a simple, low-cost mining operation at Oyut Ulaan which could generate meaningful cash flow."*

Following site visits and detailed technical review of the outstanding initial exploration results with expert narrow vein mining consultants, the Oyut Ulaan project is now at the stage that it has clear scope to become a very meaningful gold project. Based on this work, the Company has decided to commit approximately A$650,000 towards advancing the shallow high-grade gold discovery over the next four months. While the Company's Kharmagtai Copper-Gold Project with its scale and growing JORC copper-gold resource remains the priority project, the high-grade nature of the near surface Oyut Ulaan gold mineralisation, along with the current gold price and ability to add significant value with modest exploration expenditure, makes it a particularly attractive second project. A very favourable development and pro-mining environment in Mongolia would allow rapid advancement of the project with continued positive results.

After its recent successful capital raising, the Company is in a strong financial position to rapidly advance its exciting Kharmagtai copper-gold and Oyut Ulaan copper-gold projects simultaneously.

OYUT ULAAN EPITHERMAL GOLD PROJECT

High-grade epithermal gold mineralisation at Oyut Ulaan has been identified in at least four areas that occur within a prospective area of mineralisation that is 4.5km long and 300m wide (Stockwork Zone, Bavuu Zone, Diorite Zone and Hulan Zone; Figures 2 & 3). Broad spaced drilling has confirmed gold mineralisation is hosted by hematitic-quartz veins with coarse visible gold, which occur as multiple stacked arrays. The veins are

typically narrow but very high-grade with gold assays ranging from 1 g/t to >30 g/t gold over widths of 50cm-1.5m. Mineralised veins are characterised by banded and crustiform quartz and abundant sulphides which are all features commonly found in the lower boiling zone of epithermal system, where bonanza grades are to be expected.

SOIL SURVEY IDENTIFIES WIDESPREAD GOLD ANOMALISM

Xanadu has completed a detailed soil sampling program on a 100m x 50m grid over approximately 20km² which has successfully pinpointed additional areas with anomalous gold (Figure 3). Extensive gold anomalism is mostly located on the edges of magnetic anomalies, which are thought to highlight the link between the structures controlling gold mineralisation and deeper porphyry copper mineralisation hosted in porphyry stocks.

CURRENT DRILLING PROGRAM DETAILS

The main objectives of this drilling program is to investigate the continuity and thickness of gold mineralisation immediately below previously reported surface trenching at Bavuu and Diorite Zones. Drilling will focus on locating the highest grade zones and test the extensions to the limits of the recently discovered shallow high-grade epithermal gold mineralisation. In the next three months, Xanadu expects to complete 3,000m of drilling with the completion of between 25 to 30 diamond holes and 30 to 35 RC drill holes as follows:

- Oxide Mineralisation: Test for high-grade gold oxide mineralisation to depths of between 5 to 25m vertically below the surface (refer to Figure 2);
- Primary Mineralisation: Test for high-grade gold primary mineralisation beneath the oxide mineralisation to depths of between 25 to 100m vertically below the surface (refer to Figure 2);
- Strike Test Including Extensions: RC drilling along a 500m strike length of the Bavuu and Diorite Zones on 50m north-south spaced cross sections.

CURRENT DISTRICT EXPLORATION STRATEGY

In addition to the drill program, the Company intends to complete the following exploration work at Oyut Ulaan in 2016:

- Detailed geologic mapping;
- Detailed metallurgical test work and mineralogical studies to better understand gold mineralisation and alteration and the characteristics of, and controls on, mineralisation;
- Infill geochemical surveys over specific target areas and expand surveys over the entire licence;
- Additional infill magnetic geophysical surveys;
- Additional trenching to test continuity and extent of mineralisation at surface; and
- Various technical studies in support of preliminary economic evaluation including hydrology and environmental base line studies.

This work is aimed at identifying additional shallow epithermal high-grade gold veins and porphyry copper-gold mineralisation.

CONNECTION TO PORPHYRY MINERALISATION

Copper grades within the recently discovered high-grade gold veins typically average 0.3% Cu, which supports the link to the porphyry copper mineralisation at depth (Figure 4). The full porphyry potential of the Oyut Ulaan district is yet to be tested. Two porphyry prospects are known - the Stockwork and Diorite Zones. These have limited shallow drilling and require further exploration. New porphyry style stockwork zones are also being identified during routine geological mapping (Figure 5). This new porphyry target displays high-density mineralised sheeted and stockwork porphyry veining. The extent of this new zone will be mapped and sampled in the coming months with drilling planned for later this year.

ABOUT THE OYUT ULAAN PROJECT

The Oyut Ulaan copper-gold project is strategically located within the South Gobi Copper Belt (which hosts the world class Oyu Tolgoi copper-gold project) and 260km east of Xanadu's flagship Kharmagtai copper-gold project (Figure 1). This large and underexplored porphyry district (covering approximately 40km²) and consists of multiple co-genetic porphyry copper-gold centres, mineralised tourmaline breccia pipes copper-gold/base metal magnetite skarns and epithermal gold veins, which occur within the central part of Mining Licence 17129A (Oyut Ulaan; Figure 1). Previous exploration at Oyut Ulaan delivered good results from several different prospects with a spectrum of mineralisation styles, any combination of which could possibly transform Oyut Ulaan into a significant mining camp. Consistently good exploration results at Oyut Ulaan, particularly over the past three months have considerably elevated its status to a highly attractive project.

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Dr Andrew Stewart who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the "Competent Person" as defined in the 2012 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves". Dr Stewart consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For the purposes of ASX Listing Rule 5.7.1, Xanadu refers to its Table 1 disclosure dated 29 July 2016 which continues to apply as at the date of this announcement.

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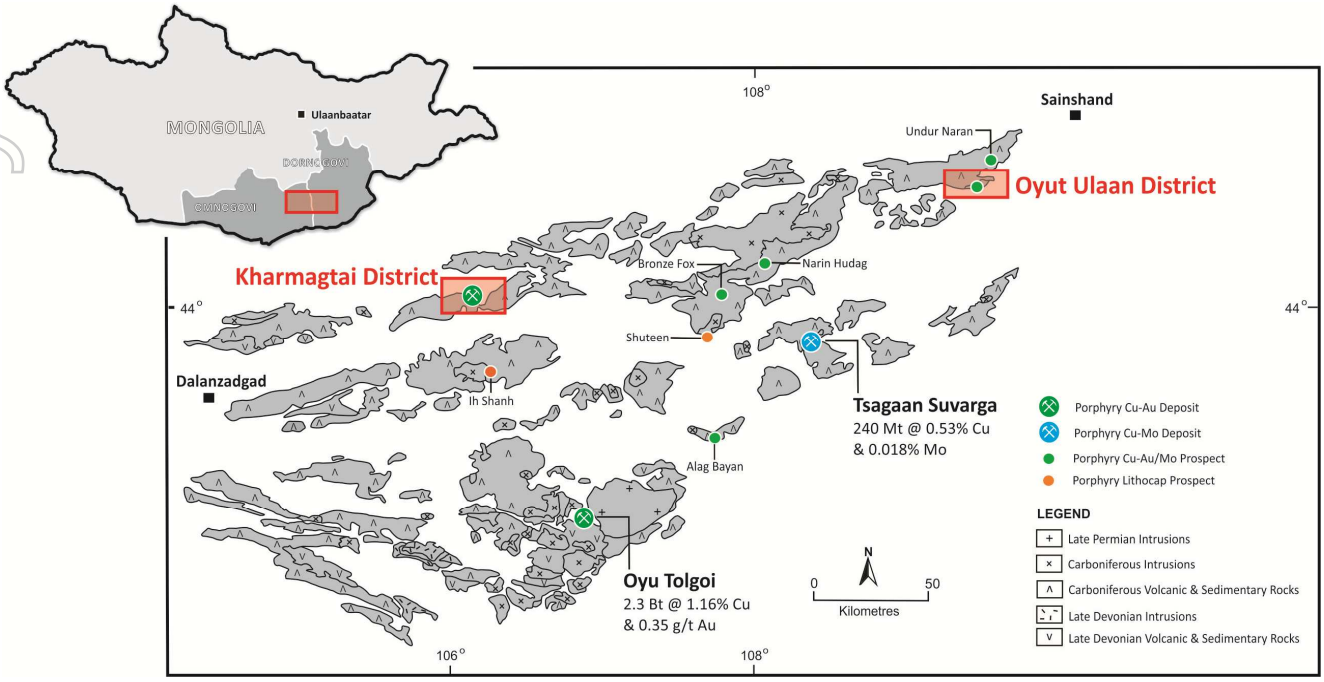

FIGURE 1: South Gobi copper province, showing location of Oyut Ulaan and Kharmagtai.

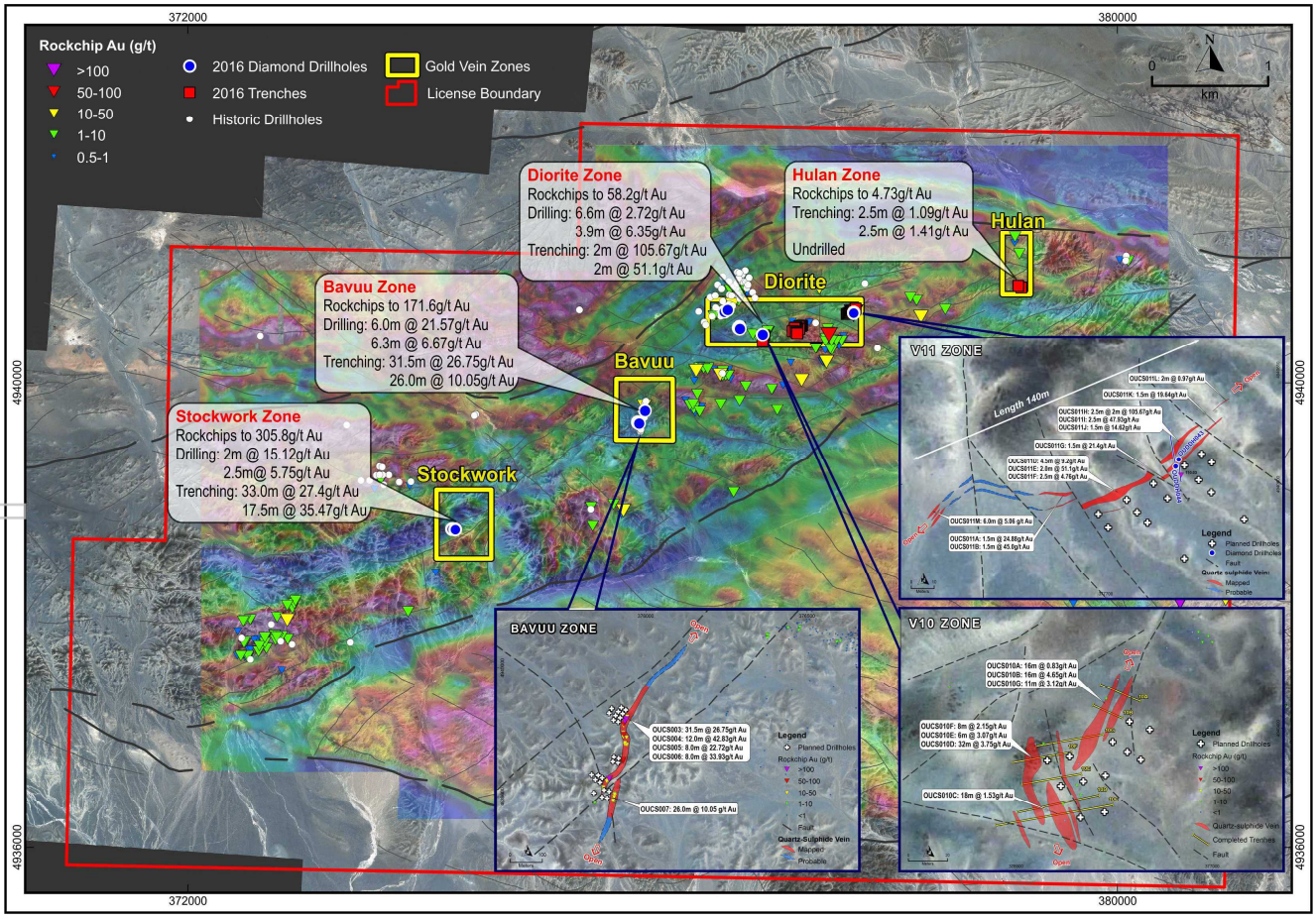

FIGURE 2: Oyut Ulaan porphyry copper-gold district showing main prospects. Plan map showing diamond drill hole locations and previously reported assay results.

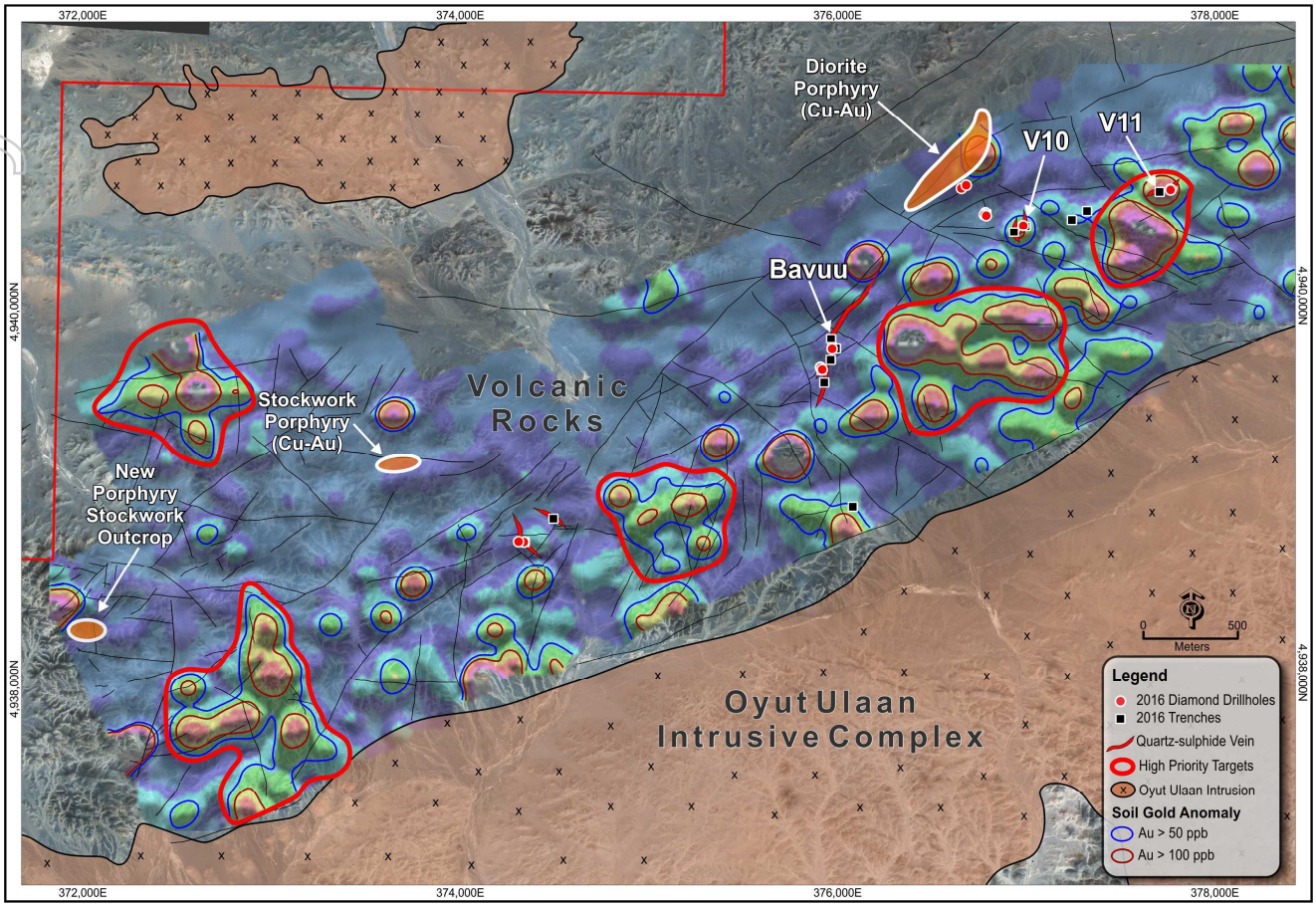

Figure 3: Oyut Ulaan soil survey showing main prospects and new anomalies.

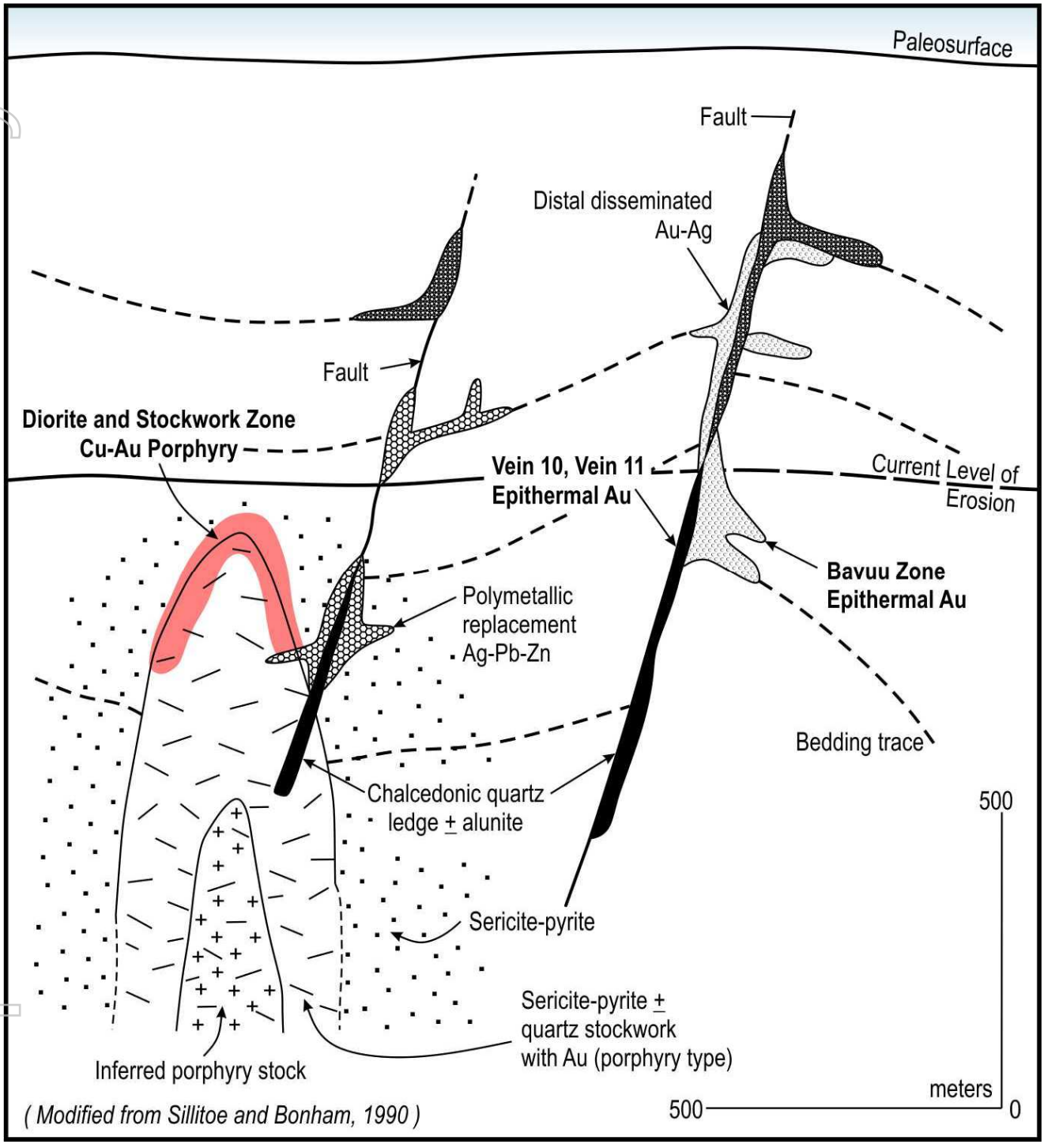

Figure 4: Geological model for epithermal gold mineralisation at Oyut Ulaan.

Figure 5: New discovered outcropping porphyry stockwork mineralisation at Oyut Ulaan, see Figure 3 for location.