5 September 2017

COPPER HILL DEPOSIT SHOWING GROWTH POTENTIAL AT DEPTH

Xanadu Mines Ltd (**ASX: XAM** – **"Xanadu"** or **"Company"**) is pleased to provide an update on the accelerated exploration programme at Kharmagtai (Figure 1), where drilling is targeting near-surface porphyry copper-gold deposits and the continuity of mineralisation below the current resources within this largely under-explored porphyry copper-gold district.

HIGHLIGHTS

- **Extension drilling returns broad zones of high-grade mineralisation at shallow depths;**
  - **180m @ 0.95% Cu and 1.84g/t Au (2.12% eCu) from surface,**

    including 30m @ 1.93% Cu and 4.14g/t Au (4.57% eCu) from 66m,

    and 30m @ 1.55% Cu and 3.45g/t Au (3.75% eCu) from 104m.
- **The mineralisation identified within the resource shell is better than, or similar, to the current resource estimate;**
- **New geological model highlights high-grade target at depth under Copper Hill resource;**
- **Detailed paragenetic and structural work define critical controlling structures;**
- **Drilling continues to target additional high grade off-sets with further results expected in the third week of September.**

Xanadu's MD & CEO, Dr Andrew Stewart, said *"We are very encouraged by these results. The Company has spent a considerable amount of time and resources building an extremely comprehensive geological, geochemical and geophysical dataset in three dimensions. Painstaking as this base data gathering was, the early results are bearing fruit. We completed property wide drilling through shallow cover to gather core samples for geology and geochemistry and on top of our high resolution magnetic survey have recently complete a very close spaced gravity survey. These techniques have provided us with many excellent shallow targets to drill and a much better understanding of previous high grade areas where we are now targeting extensions."*

"We have three rigs drilling at present to test shallow targets for the discovery of new porphyry centres and to extend high grade areas. We are planning a steady stream of news flow as we carry out this accelerated programme and these early results provide us with confidence in the fact that we spent the time to collect and interpret the extensive datasets to refine our targeting."

NEW GEOLOGICAL MODEL FOR COPPER HILL

Detailed geological reconstructions of the Copper Hill deposit at Kharmagtai are underway (Figure 2). Copper Hill consists of a very high-grade pod of copper gold porphyry mineralisation which previous workers have been unable to extend to depth due to geological complexity. A large and detailed relogging programme is being conducted and sectional interpretations generated to define causative intrusives and post mineral faulting to aid with the construction of 3D geological models (Figure 3). This data is being used to focus drilling on potential offset blocks of mineralisation and to identify down-plunge mineralisation.

IMPROVED UNDERSTANDING OF CONTROLS FOR HIGH-GRADE COPPER GOLD MINERALISATION

Copper Hill is a tightly focused elongate zone of very high-grade, high-density stock work-veining. Copper and gold grades within the main body of mineralisation range up to 5% copper and 8g/t Au (Figure 4 & 5). Mineralisation is hosted by very high-density quartz veining where copper and gold are dominantly found within chalcopyrite (Figure 4 & 5). Previous exploration at Copper Hill has been conducted assuming the deposit formed in a vertical pipe like body. When drilling below previous intercepts did not encounter the down dip mineralisation it was assumed mineralisation had been off-set by post mineral faulting.

Recent work by Xanadu has shown that the Copper Hill deposit does form within a pipe like body, however this pipe has been tilted at 50 degrees to the west, meaning that down dip drilling would need to step west to hit the high grade core (Figure 3 & 6). This leaves the deposit open at depth with good potential to add significant shallow tonnes of high-grade copper and gold mineralisation.

A recent drill hole was completed at Copper Hill to support this interpretation by drilling across several previously poorly constrained faults, to confirm the location of a post-mineral intrusive and to test down plunge of the high-grade shoot. This drill hole has provided comprehensive structural data to constrain the faulting and post mineral intrusives and has returned;

180m @ 0.95% Cu and 1.84g/t Au (2.12% eCu) from surface,

including 30m @ 1.93% Cu and 4.14g/t Au (4.57% eCu) from 66m

and 30m @ 1.55% Cu and 3.45g/t Au (3.75% eCu) from 104m.

Additional drilling will be conducted in the coming months to discover the off-set high grade mineralisation at Copper Hill.

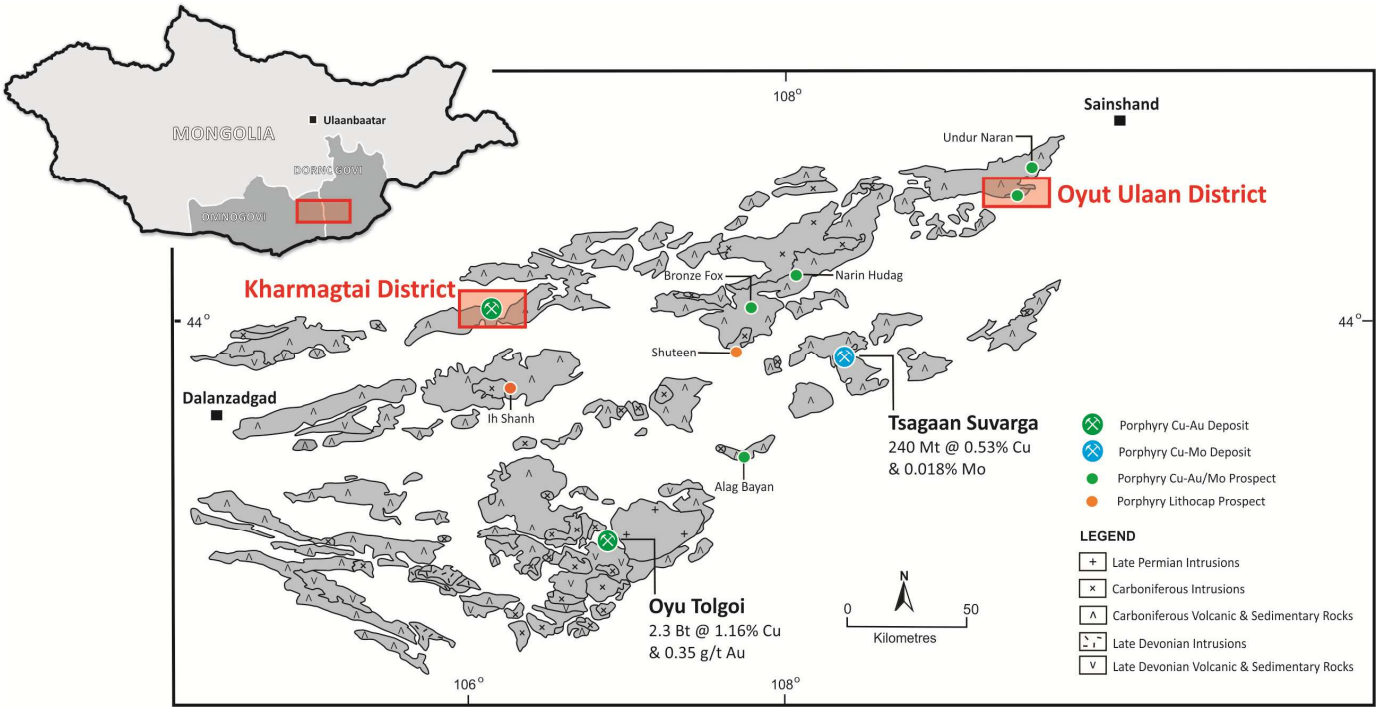

FIGURE 1: Location of the Kharmagtai Project, in the South Gobi porphyry copper belt.

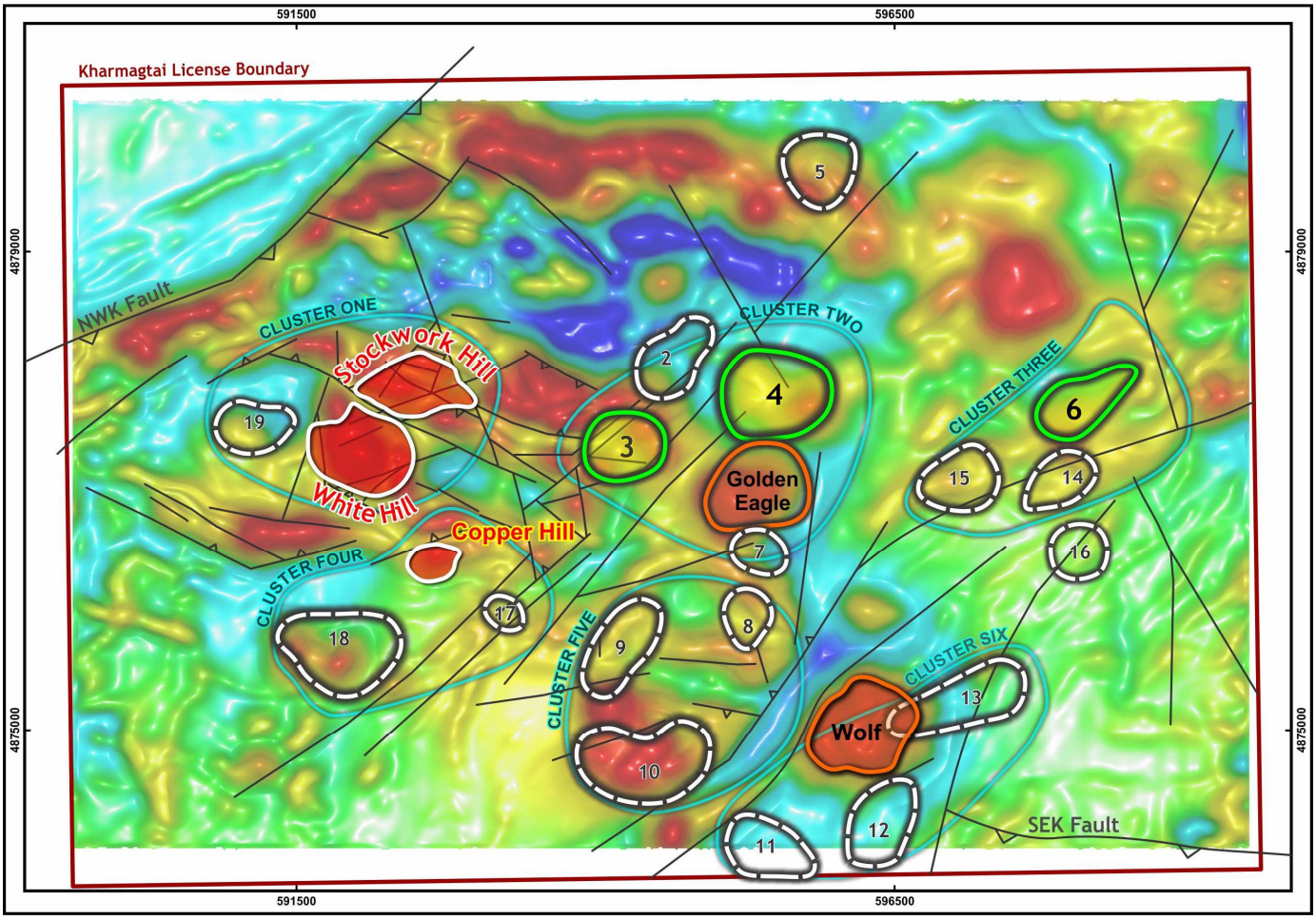

FIGURE 2: The Kharmagtai Mining Licence showing ground magnetic data and the location of Copper Hill.

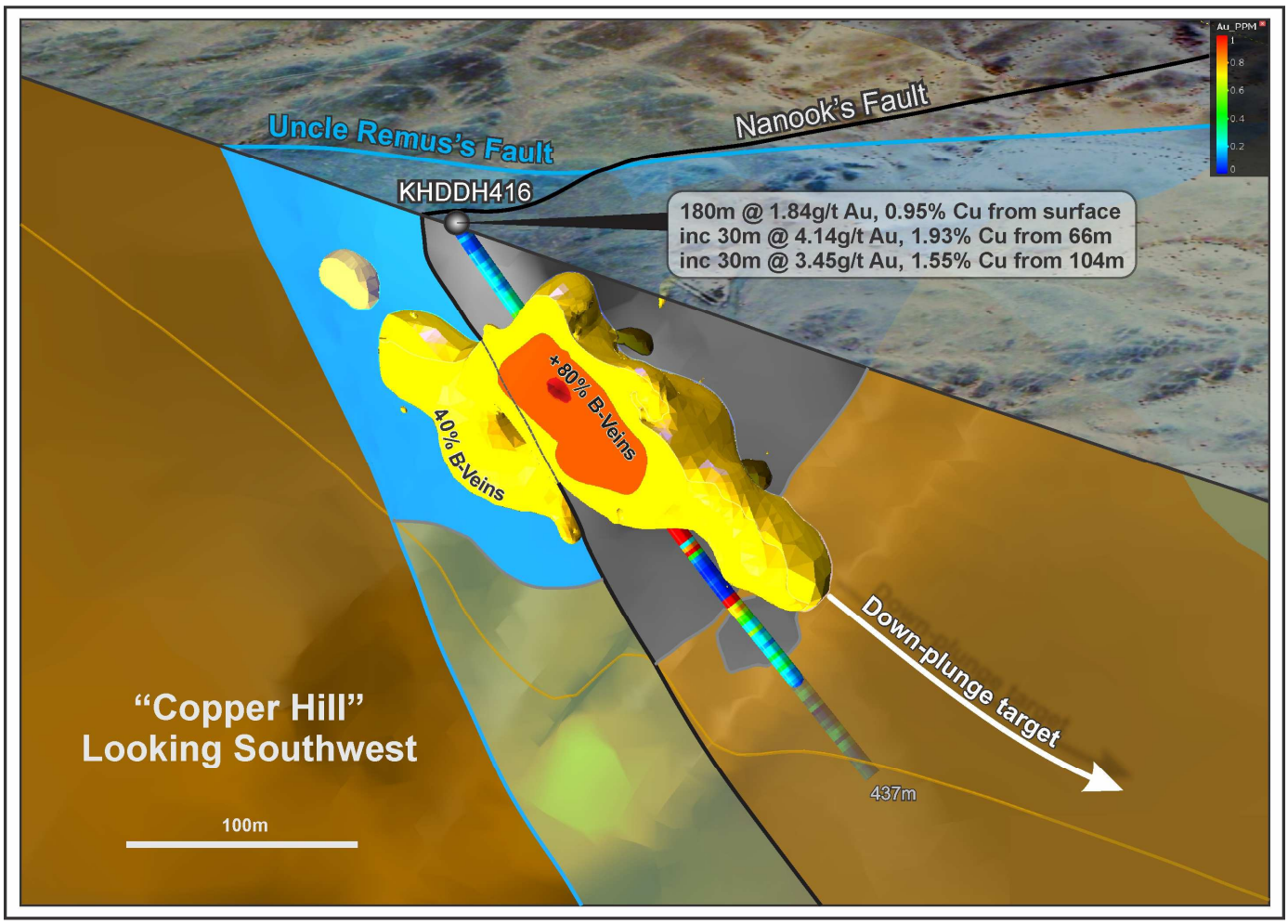

FIGURE 3: New 3D geological model of the Copper Hill Deposit showing fault model and b-vein density.

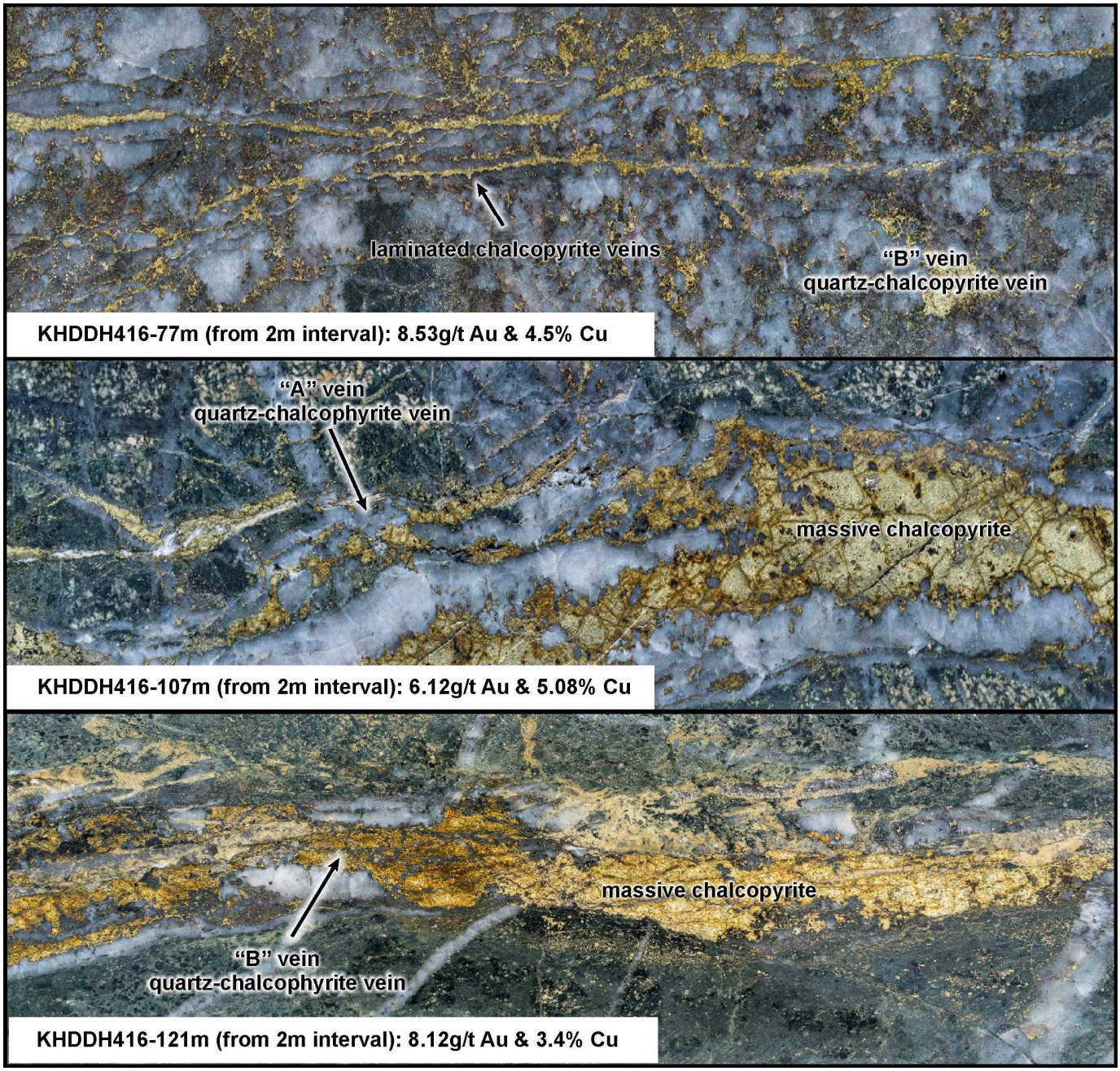

FIGURE 4: High density quartz-chalcopyrite veining from the Copper Hill Deposit.

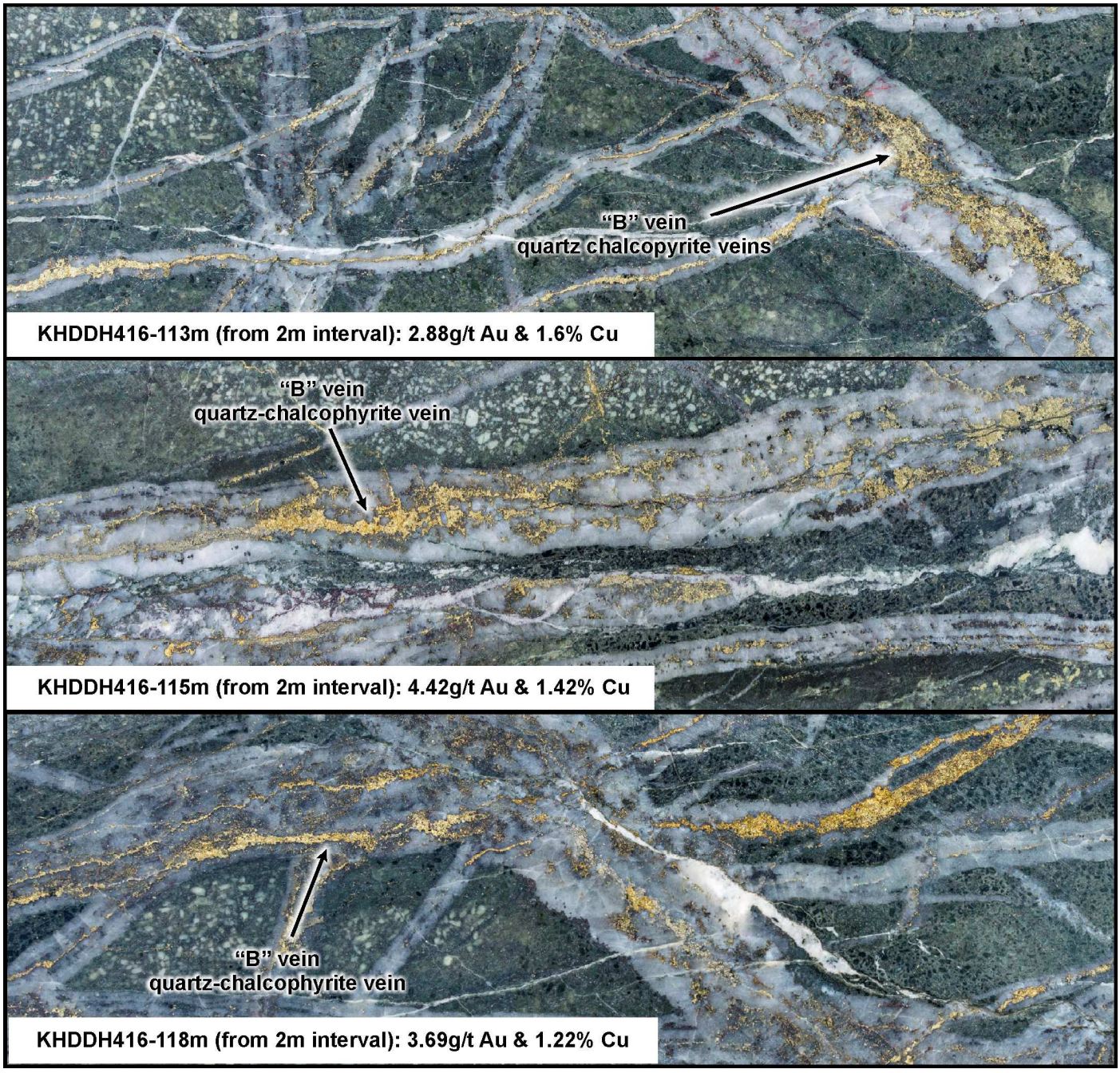

FIGURE 5: High density quartz chalcopyrite veining from the Copper Hill Deposit.

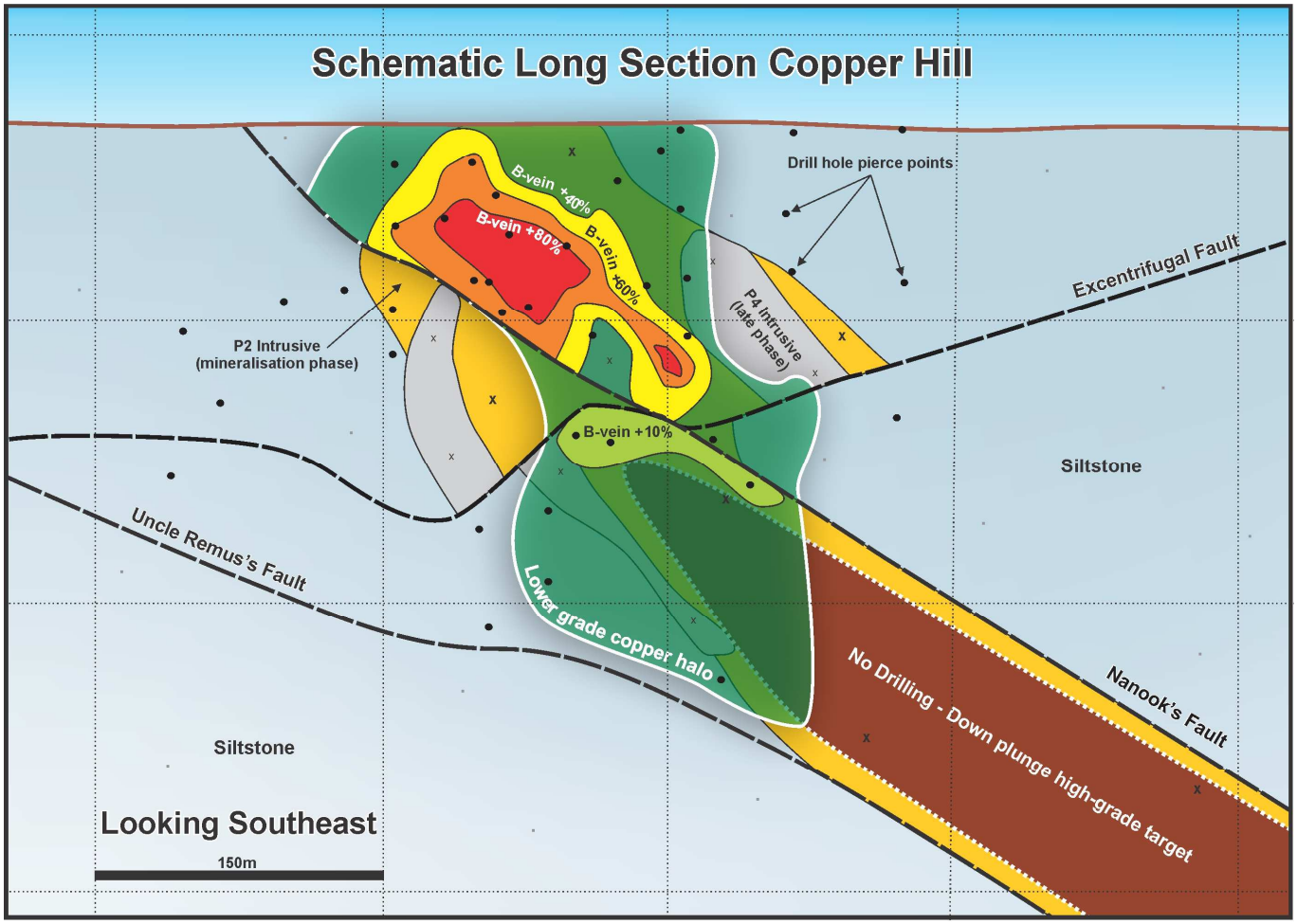

FIGURE 6: 3D long section showing pipe like mineralised body and down plunge targets.

COMPETENT PERSON STATEMENT

The information in this announcement 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.

COPPER EQUIVALENT CALCULATIONS

The copper equivalent (CuEq) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. Grades have not been adjusted for metallurgical or refining recoveries and the copper equivalent grades are of an exploration nature only and intended for summarising grade. The copper equivalent calculation is intended as an indicative value only. The following copper equivalent conversion factors and long-term price assumptions have been adopted: Copper Equivalent Formula (CuEq) = Cu% + (Au (ppm) x 0.6378). Based on a copper price of $2.60/lb and a gold price of $1,300/oz.

TABLE 1: Drill hole collar location.

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH416	Copper Hill	592700	4876440	1305	246	-50	437.0

TABLE 2: Significant intercepts.

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)
KHDDH416	Copper Hill	0	180	180	1.84	0.95	2.12
including		66	96	30	4.14	1.93	4.57
including		104	134	30	3.45	1.55	3.75

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