

# QUARTERLY ACTIVITIES REPORT

ACTIVITIES FOR THE QUARTER ENDING 31 DECEMBER 2016

## HIGHLIGHTS

### New gold-rich porphyry identified under shallow cover at Kharmagtai

- Bedrock drilling delivers immediate success at Kharmagtai;
- Bedrock drilling identifies copper and gold mineralisation under shallow (20 to 50m) cover in at least seven new targets;
- First drill hole discovers new gold-rich porphyry under shallow cover at Kharmagtai:
  - KHDDH395 intersected 220m grading 0.64g/t Au and 0.15% Cu, including 26m grading 2.27g/t Au from 42m;
- Subsequent drilling underway to delineate the near surface oxide enrichment zone and locate the highest-grade primary mineralisation of this new porphyry discovery;
- New gravity data enhance the prospectivity of the Kharmagtai copper-gold district.

### Multiple new targets identified at Oyut Ulaan

- New geochemical survey defines 47 copper-gold and gold targets for exploration;
- Trenching confirms eleven new porphyry targets and nine new epithermal gold targets;
- Trenching returns widespread porphyry mineralisation including:
  - OUCS030A intersected 188m grading 0.18g/t Au and 0.24% Cu, including 52m grading 0.22g/t Au and 0.36% Cu;
  - OUCS045A intersected 30m @ 1.74g/t Au and 0.34% Cu, including 6m grading 5.72g/t Au and 0.98% Cu;
- Numerous high-grade epithermal gold targets confirmed including:
  - OUSC028A intersected 3m grading 13.28g/t Au and 2m @ 7.97g/t Au;
  - OUCS028D intersected 14m @ 2.15g/t Au and 1.02% Cu;
- New gravity survey identifies potential large scale porphyry system at depth.

### Strong financial position and new personnel changes

- Drilling activities are fully funded from existing cash reserves of \$8.3 million;
- Retirement of Mr. Mark Wheatley as Chairman and Non-Executive Director at 2017 AGM;
- Appointment of Mr. Mat Brown as Chief Geologist of Xanadu Mines.

ASX XAM

ABN 92 114 249 026

#### COMPANY DIRECTORS

Mark Wheatley

#### Chairman

Ganbayar Lkhagvasuren

#### Executive Director

Hannah Badenach

#### Non-Executive Director

Darryl Clark

#### Non-Executive Director

Barry Lavin

#### Non-Executive Director

Marcus Engelbrecht

#### Non-Executive Director

Andrew Stewart

#### Managing Director

#### CONTACT DETAILS

##### Registered Office

Level 12

680 George Street

Sydney, NSW 2000

Australia

[www.xanadumines.com](http://www.xanadumines.com)

[info@xanadumines.com](mailto:info@xanadumines.com)

T: +61 2 8280 7497

##### Ulaanbaatar Office

Olympic Street, Khoroo 1

Suite 23, Building 23B

Sukhbaatar District

Ulaanbaatar 14240,

Mongolia

T: +976 7013 0211

Xanadu Mines Ltd (**ASX: XAM** – “Xanadu” or “Company”) is pleased to provide shareholders with an update of exploration results for the period ending 31 December 2016. The current exploration programs, among the largest to be undertaken by a junior ASX-listed exploration company in the coming year, will target the discovery of additional porphyry copper-gold and shallow high-grade epithermal gold mineralisation on the Company’s South Gobi projects at Kharmagtai and Oyut Ulaan (Figure 1).

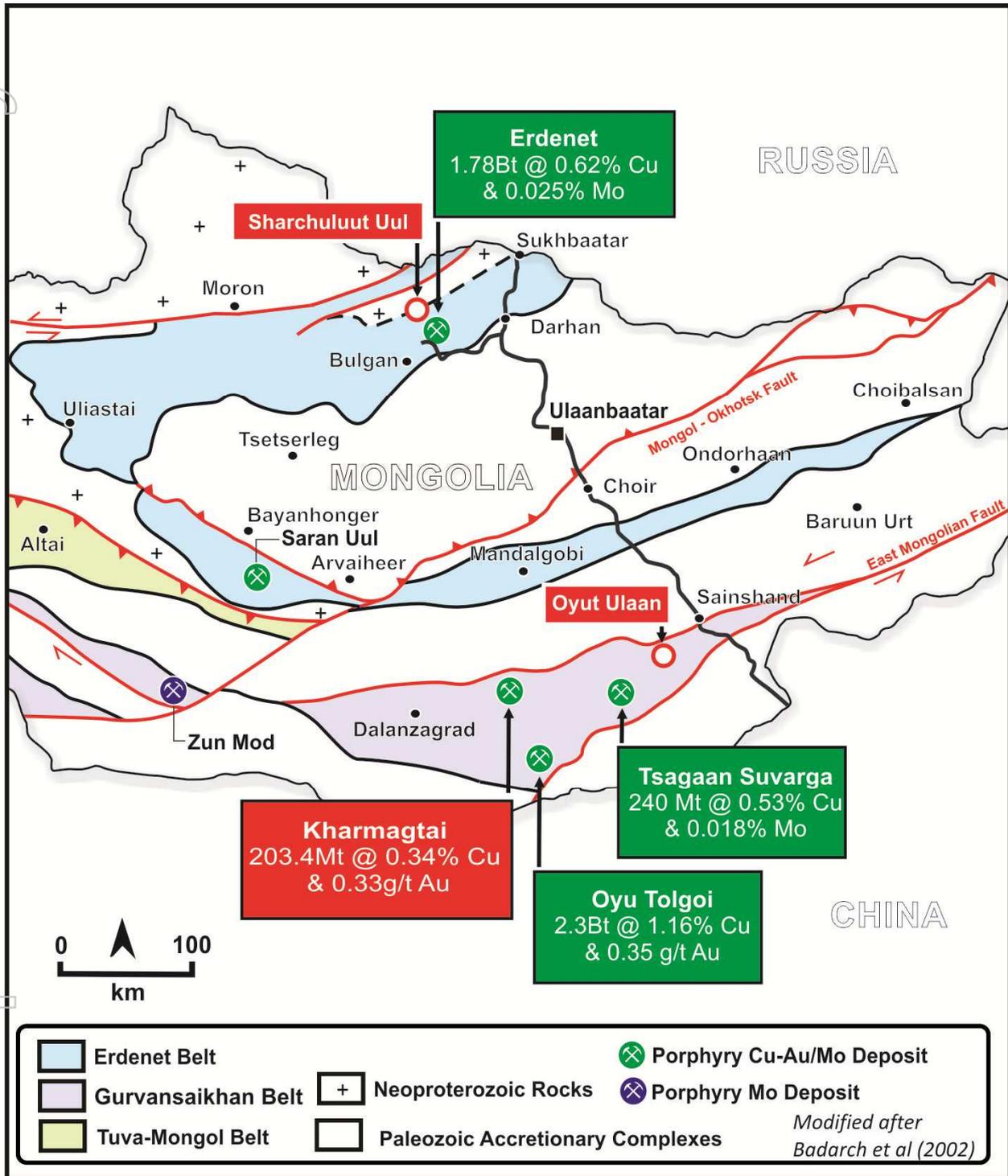
## **EXPLORATION ACTIVITIES**

The company will continue to take a systematic approach throughout 2017 to assess the multiple copper-gold and gold targets we have identified as being the most prospective. Across both projects 1,035m of reverse circulation drilling, 9,578m of PCD drilling, 5,301.8m diamond drill and 7,650m of trenching has been completed during Q4 2016.

### **Kharmagtai Copper-Gold Project**

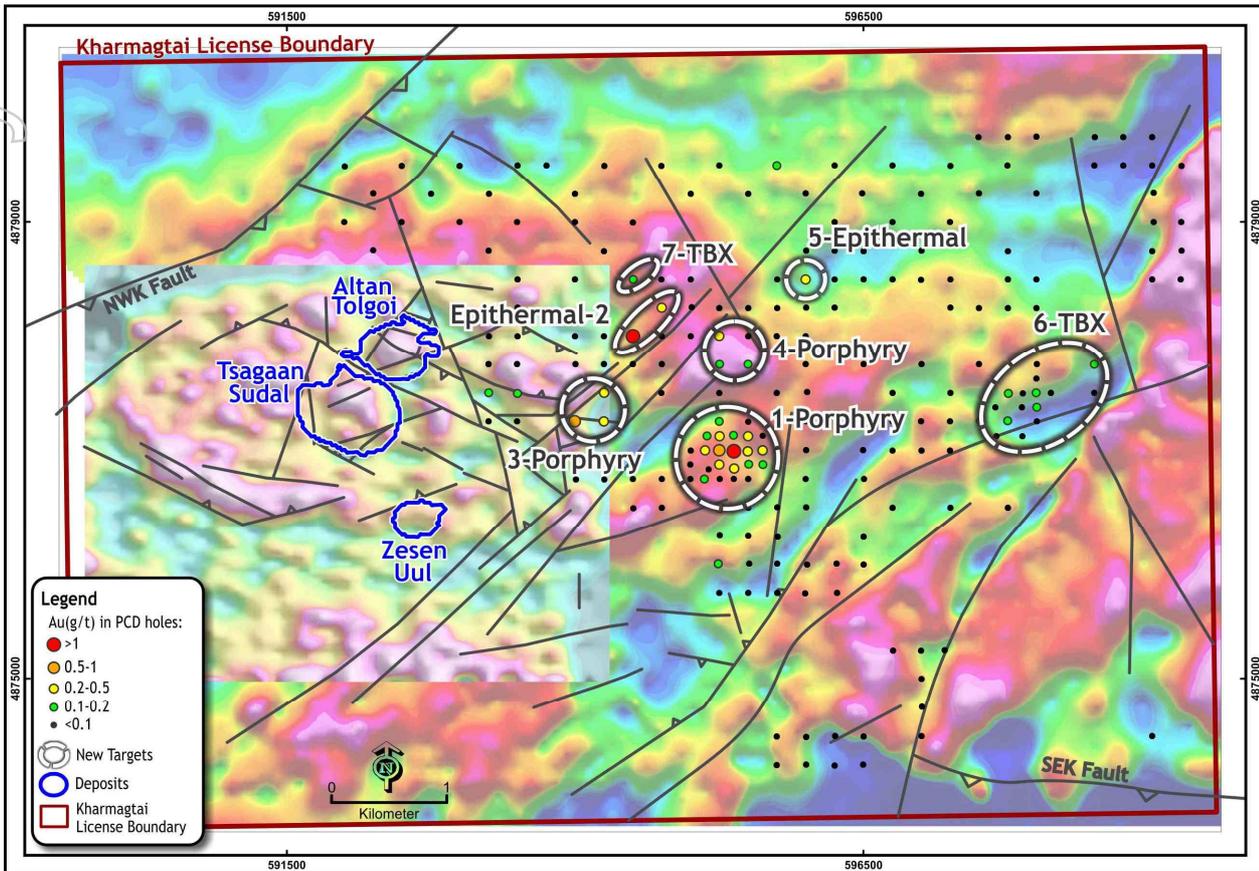
The Kharmagtai copper-gold project is located within the South Gobi porphyry copper province of Mongolia, approximately 420km south-southwest of Ulaanbaatar (Figure 1). Exploration drilling at the Kharmagtai project continues to test a combination of targets which includes high-level gold-rich porphyry mineralisation and deeper high-grade tourmaline breccia mineralisation within the highly prospective 25 km<sup>2</sup> area of interest which has yielded outstanding results to date.

Xanadu has already defined over 1.5 Mlb copper and over 2 million ounces of gold resource at its flagship Kharmagtai copper-gold project (see Xanadu’s ASX announcement – 19 March 2015), which means it is one of the most promising copper-gold projects globally. Xanadu’s exploration is continuing to plan and the company believes there remains excellent potential for more large-scale discoveries within the Kharmagtai porphyry district that has already yielded three porphyry discoveries.



**FIGURE 1:** Location of Xanadu’s copper-gold projects, within Mongolia’s South Gobi Copper Belt (Gurvansaikhan Belt).

Exploration activities in Q4 2016 focused on targeting additional porphyry centres under shallow cover via top-of-basement sampling and completion of a detailed gravity survey. This work has highlighted multiple new porphyry and tourmaline breccia targets validated by robust geochemistry and geology (Figure 2).



**FIGURE 2:** The Kharmagtai Mining Licence showing gravity data and known porphyry deposits. Location of bedrock drilling collars and seven new targets are also shown.

***Bedrock drilling identifies copper and gold mineralisation under shallow (20 to 50m) cover in at least seven new targets***

A top-of-basement drill program consisting of 9,578m of rotary mud drilling and 1,562m of diamond tails has been completed at Kharmagtai. This program was designed to identify new porphyry centres where shallow cover obscures the prospective Kharmagtai Igneous Complex. Drill holes were drilled on a nominal 250m by 250m spaced grid then infilled to 125m spacing as needed. This grid spacing was determined by analysing existing surface data from the three outcropping porphyries at Kharmagtai and would be a sufficient resolution to discover any of these deposits should they be covered. Each hole was drilled an average of six metres into the top of basement and three, two metre samples were collected in each hole. Importantly, this work is generating a robust geology and geochemical map of the basement surface which is a first for the Kharmagtai district. The significance of this cannot be understated considering 70% of the lease is covered shallow sediment and the outcropping 30% contains three known porphyry centres.

Three new high-priority copper-gold porphyry anomalies, two new tourmaline breccia and two new epithermal gold targets have been generated from the initial bedrock drilling (Figure 2). Table 1 presents the key geological characteristics of seven copper-gold and gold anomalies identified in the first pass bedrock drilling. Drill hole details are shown in Table 2 and significant assay results in Table 3.

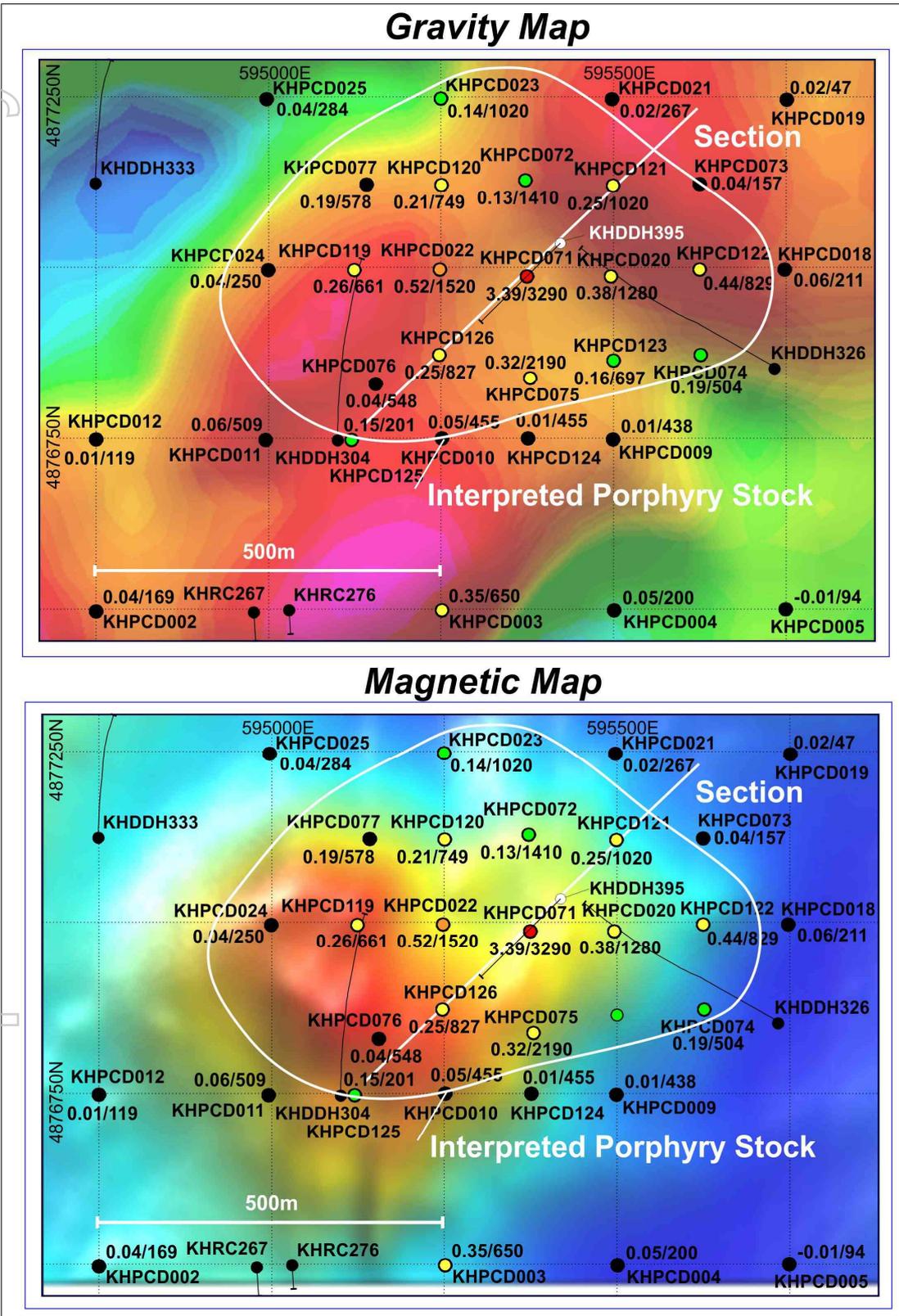
Bedrock samples below shallow cover were generally heavily leached and weathered. When interpreting the assay results from bedrock drilling of this style of copper and gold mineralisation, results are usually subdued and ranges of up to 0.1 - 0.2g/t Au and +1000ppm Cu are often sufficient to identify a valid anomaly.

Results are pending for approximately 30% of the completed drill program conducted under the previously untested 25km<sup>2</sup> of the prospective rocks under cover which comprises 30 holes. Samples have been submitted to the laboratory for analysis and should be available in the March 2017 Quarter.

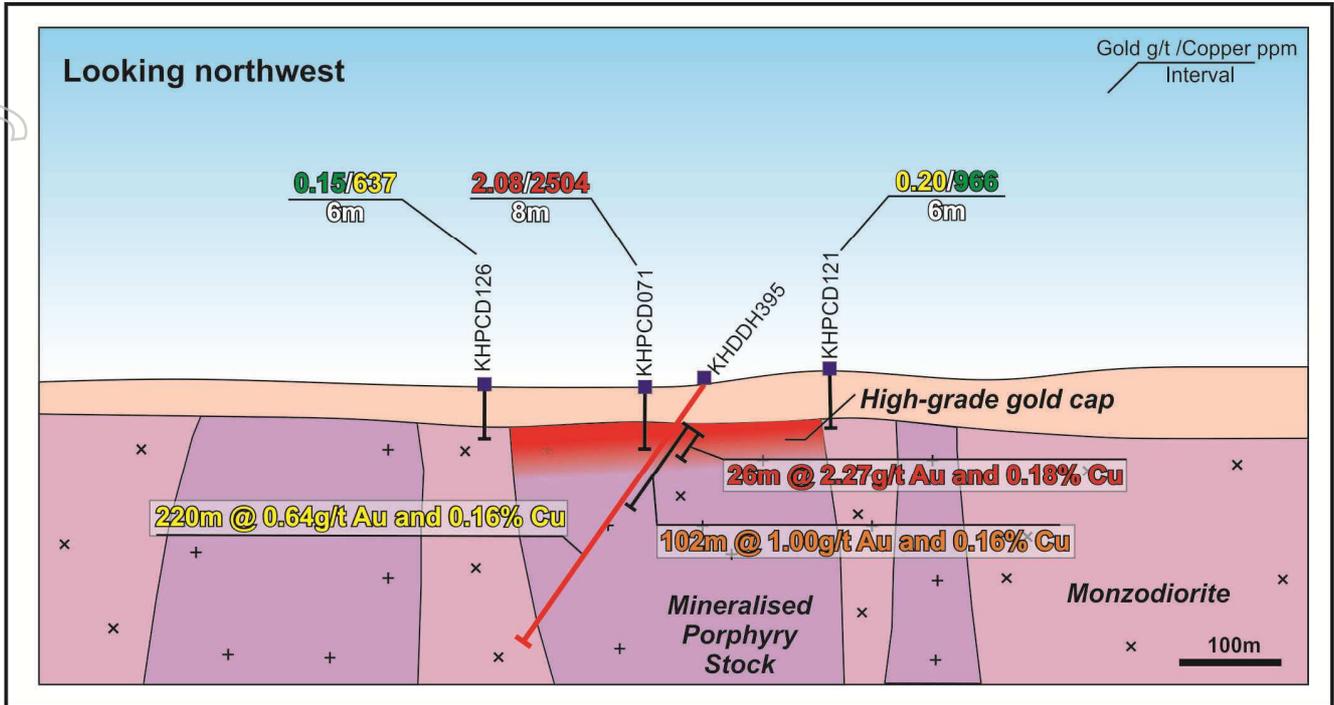
***New gold rich porphyry centre identified under shallow cover***

The first diamond drill hole at the Altan Burged porphyry centre (Figures 2 and 3), KHDDH395 intersected 220m grading 0.64g/t Au and 0.15% Cu from 42m (top of basement), which includes 102m grading 1g/t Au and 0.16% Cu from 42m. This broad intercept includes a shallow zone of supergene gold enrichment of 26m grading 2.27g/t Au from 42m (Figure 4). Both oxide and primary gold and copper mineralisation have been intersected in KHDDH395. The shallow higher grade oxide mineralisation is hosted in a strongly silicified and clay altered zone above a quartz monzodiorite porphyry stock (Figure 5), with fine grained visible gold observed in core. Primary gold and copper mineralisation is associated with high density centreline quartz-sulphide veins and strong albite-chlorite-pyrite alteration (Figure 5). This is a similar assemblage to the high-grade Zesen Uul porphyry and is interpreted to be related to same porphyry mineralisation event, confirming a district-scale mineral event.

The intersection in KHDDH395 represents a significant development for Xanadu's ongoing exploration efforts within the Kharmagtai district. While exploration of this emerging porphyry centre is still at an early stage, the width, intensity of alteration and porphyry stockwork mineralisation, and tenor of the gold mineralisation intersected is very encouraging.

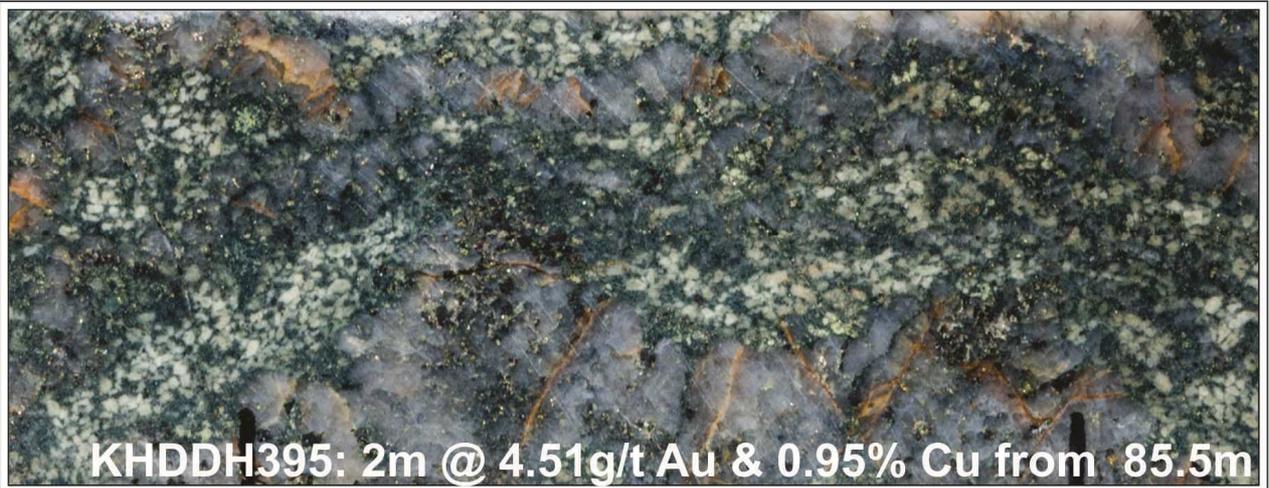
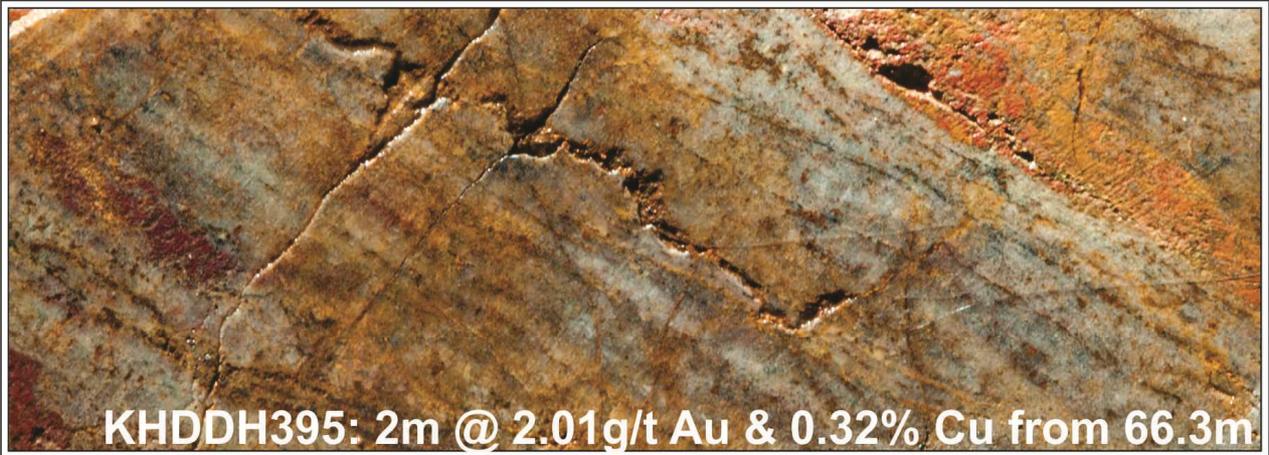


**FIGURE 3:** Gravity and magnetic data over the new Altan Burged porphyry showing PCD drilling results and drill hole KHDDH395. Section line for figure 4 is noted.



**FIGURE 4:** Cross section through new porphyry Altan Burged showing drill hole KHDDH395 with assay intercepts and the location of higher-grade gold cap above a mineralised porphyry stock.

For personal use only



**FIGURE 5:** Core photographs from KHDDH395.

**Top:** Strongly oxidised sheeted centreline quartz-hematite (after sulphide) veins host the high-grade gold rich cap to Altan Burged. **Middle:** Gold rich unidirectional solidification textures (UST's). UST's often form at the top of a porphyry system and are a sign of a fluid rich and potentially high grade porphyry system. **Bottom:** High-density stock work mineralisation.

For personal use only

Mineralisation remains open along strike and down dip with the hole finishing in low density stock work mineralisation grading higher than 0.2 g/t Au. The current exploration target dimensions are 500m long by 300m wide and initial drilling indicates that there is potential for Altan Burged to host a significant high grade porphyry gold-copper deposit adjacent to the three outcropping porphyry deposits (Altan Tolgoi, Tsagaan Sudal and Zesen Uul; Figure 2).

### ***New gravity survey aids targeting at Kharmagtai***

New detailed gravity survey covered the entire district, an area of approximately 67.5km<sup>2</sup> (10km x 6.75km). The total survey distance was approximately 2,225 stations with line spacing of ~100 metres. Detailed processing of the data is currently being conducted by Fathom Geophysicists in Australia. The gravity dataset will be inverted in three dimensions and constrained using lithological and density data obtained from the top of basement drilling to ensure the most accurate models possible. This inversion model will be used to guide deep drilling of targets identified by the bedrock geochemistry, alteration and lithology.

All three known porphyry deposits within Kharmagtai occur as discrete gravity highs. The new gravity survey at Kharmagtai has identified numerous gravity features which may be indicative of porphyry mineralisation (Figure 2). When these features are interpreted relative to the magnetics, known geology and geochemistry a compelling picture emerges where multiple mineralised intrusive potentially lie beneath shallow cover.

### **OYUT ULAAN COPPER-GOLD PROJECT**

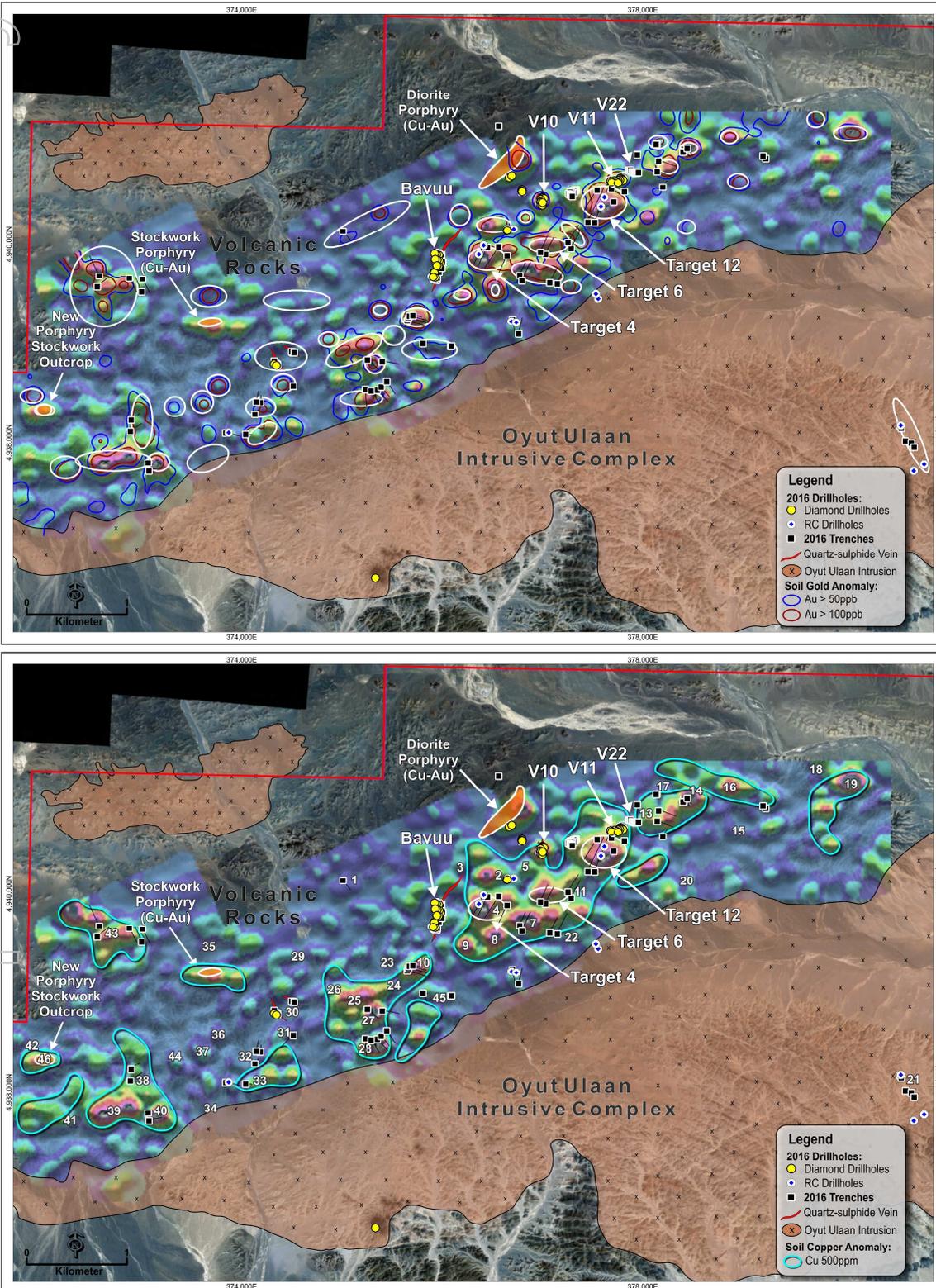
The Oyut Ulaan copper-gold project is strategically located within the South Gobi Copper Belt (which hosts the world class Oyu Tolgoi copper-gold project) and 260km east of Xanadu's flagship Kharmagtai copper-gold project (Figure 1). This large and underexplored porphyry district (covering approximately 40km<sup>2</sup>) 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 6). 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.

Activity during the December quarter of 2016 has been aimed at discovering large scale porphyry and shallow high-grade epithermal gold mineralisation within the Oyut Ulaan lease. To this end, a systematic exploration program was designed. This program started with a detailed soil geochemistry program aimed at identifying initial exploration targets. Each of these targets was ranked based on their size, amplitude and similarities to known porphyry or epithermal mineralisation. The top 23 of these targets were trenched to obtain robust geochemical and geological information and confirm the mineralisation style. To add size potential context to this work, detailed geological mapping and a gravity survey were completed. This work is painting a compelling picture of large scale porphyry systems at Oyut Ulaan for drilling in early 2017.

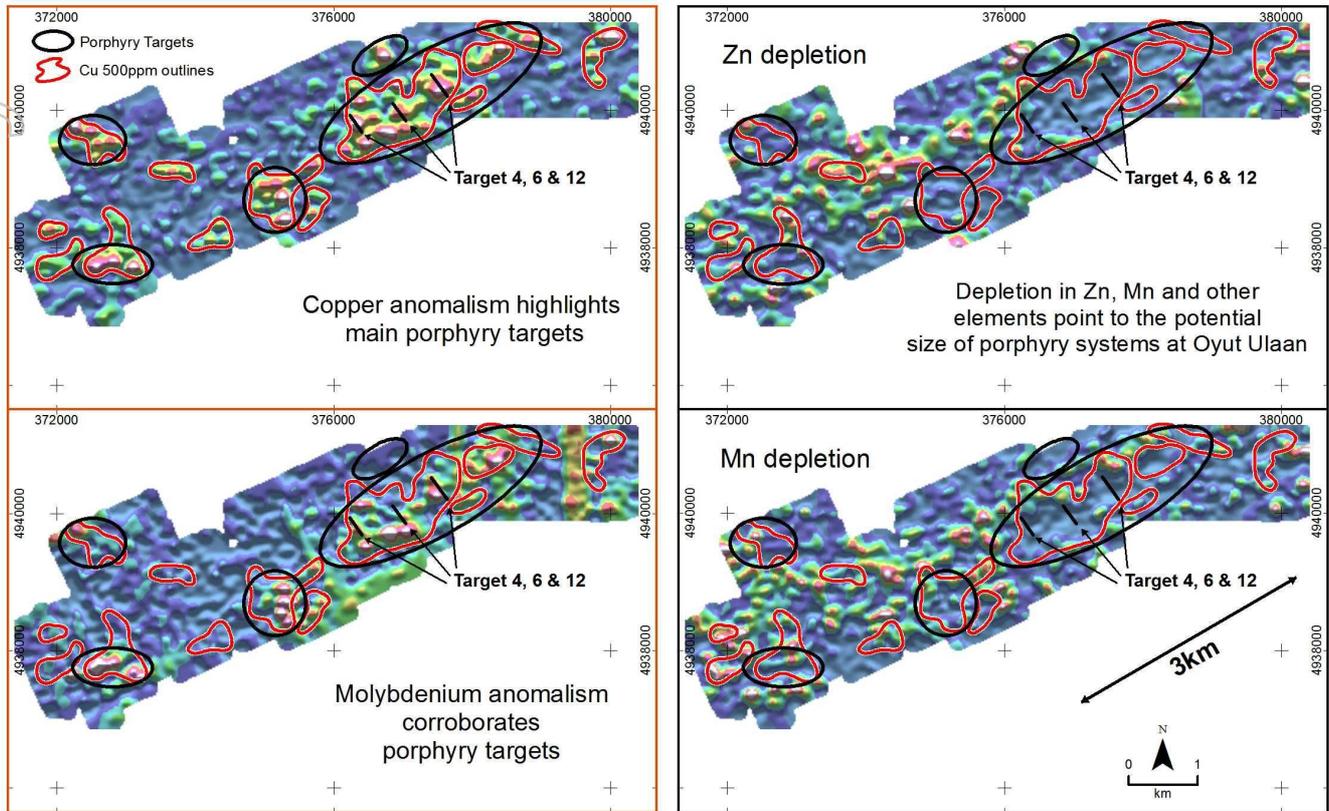
### ***Trenching program returns broad intercepts of porphyry mineralisation***

As reported in the September 2016 quarterly report, a multi-element soil survey was completed over the northern portion of the Oyut Ulaan lease during June 2016 (Figure 7). The aim of this survey was to identify the surface expression of copper-gold porphyry and high-grade gold epithermal deposits. From the gold results alone, 47 targets were identified and ranked for further exploration. A trenching program was initiated to test the top 23 targets from this ranking. This trenching program has been

completed confirming eleven new porphyry targets and nine new epithermal targets (Figure 8 Map showing all targets and best trench intercepts).

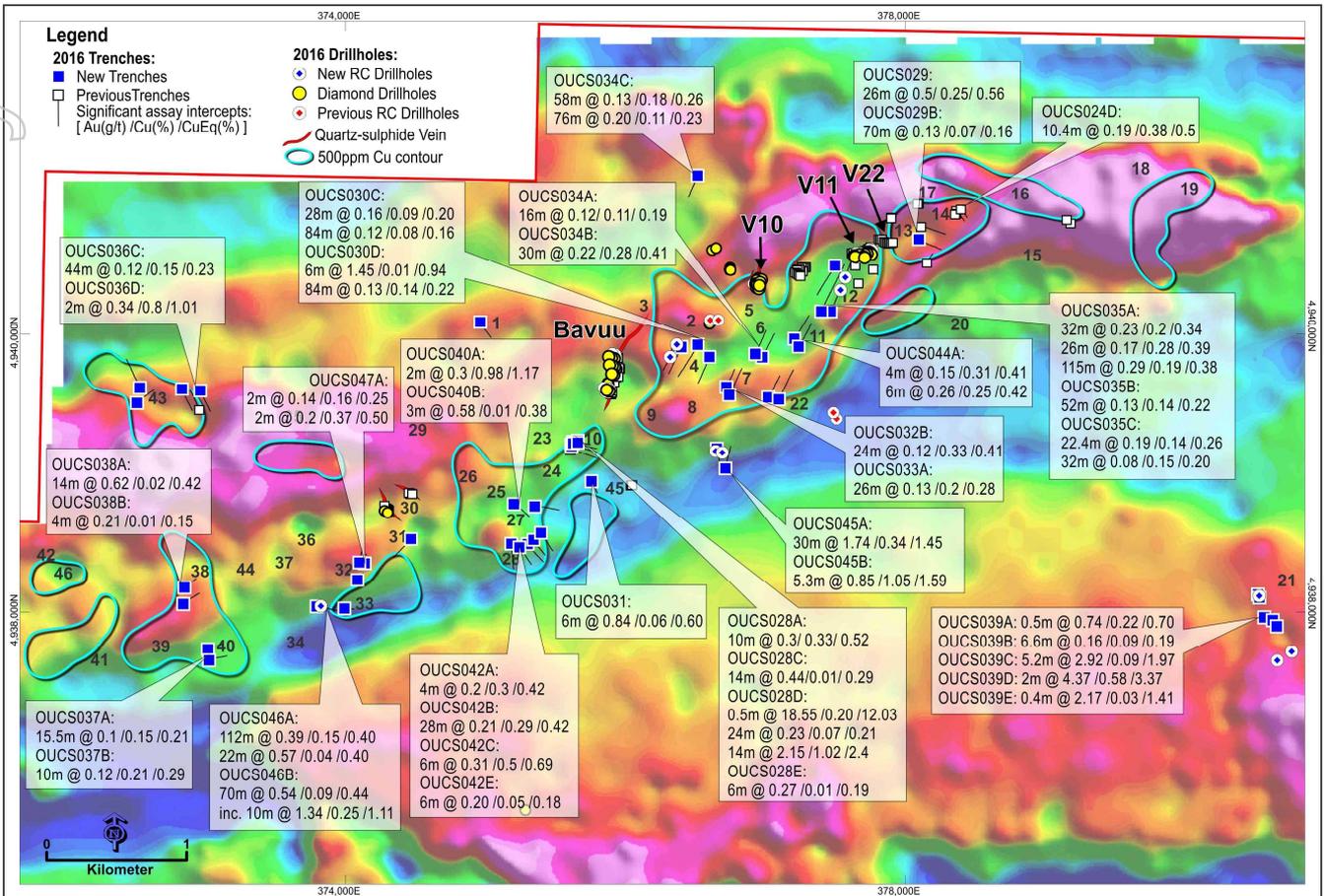


**FIGURE 6:** Forty-seven targets have been identified using Au (top) and Cu (bottom) geochemical data from this year's soil survey.



**FIGURE 7:** Multi-element geochemistry from a detailed soil survey is highlighting significant patterns in both Cu-Au and in porphyry vector elements. Enrichment in molybdenum mimics the Cu-Au anomalism and depletion in Zn, Mn and other elements is helping to define the potential size of porphyry mineralisation.

For personal use only



**FIGURE 8:** Copper geochemistry (+500ppm) over the Gravity, first vertical derivative.

Broad intercepts of porphyry and epithermal style mineralisation have been returned from numerous targets at Oyut Ulaan. Some of the most significant intercepts include:

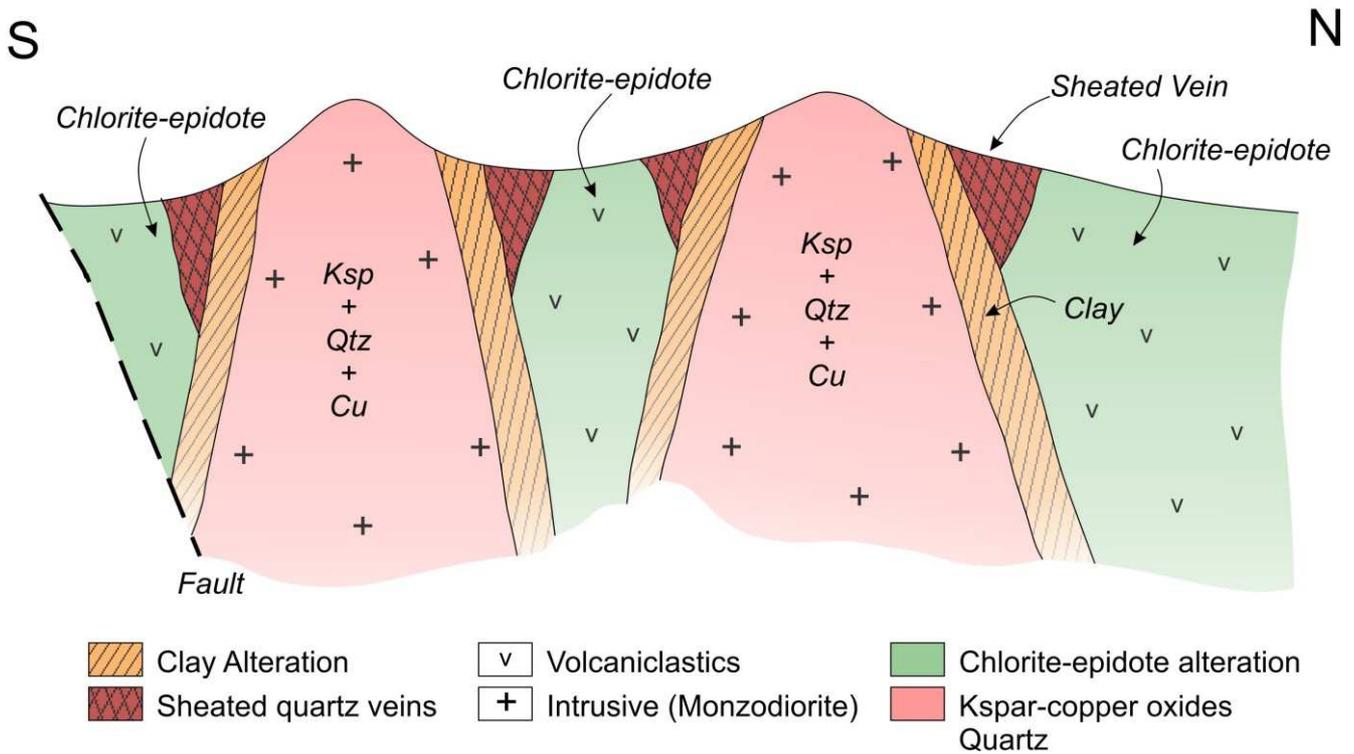
- OUCS028A      3m @ 13.28g/t Au
- And              2m @ 7.97g/t Au
- OUCS028D      14m @ 2.15g/t Au and 1.02% Cu, 2.39% CuEq
- OUCS030A      188m @ 0.18g/t Au and 0.24% Cu, 0.35% CuEq
- Including        52m @ 0.22g/t Au and 0.36% Cu, 0.51% CuEq
- OUCS030B      220m @ 0.16g/t Au and 0.15% Cu, 0.25% CuEq
- OUCS035A      115m @ 0.29g/t Au and 0.19% Cu, 0.38% CuEq
- OUCS045A      30m @ 1.74g/t Au and 0.34% Cu, 1.45% CuEq
- Including        6m @ 5.72g/t Au and 0.98% Cu, 4.63% CuEq
- OUCS046A      112m @ 0.39g/t Au and 0.15% Cu, 0.4% CuEq
- OUCS046B      10m @ 1.34g/t Au and 0.25% Cu, 1.11% CuEq

As reported in the September 2016 quarterly report, many of these targets are displaying geological characteristics with strong affinity to porphyry deposits. Targets 4, 6 and 12 are encountering broad zones of Au-Cu mineralisation associated with porphyry style veining and alteration. This pattern

For personal use only

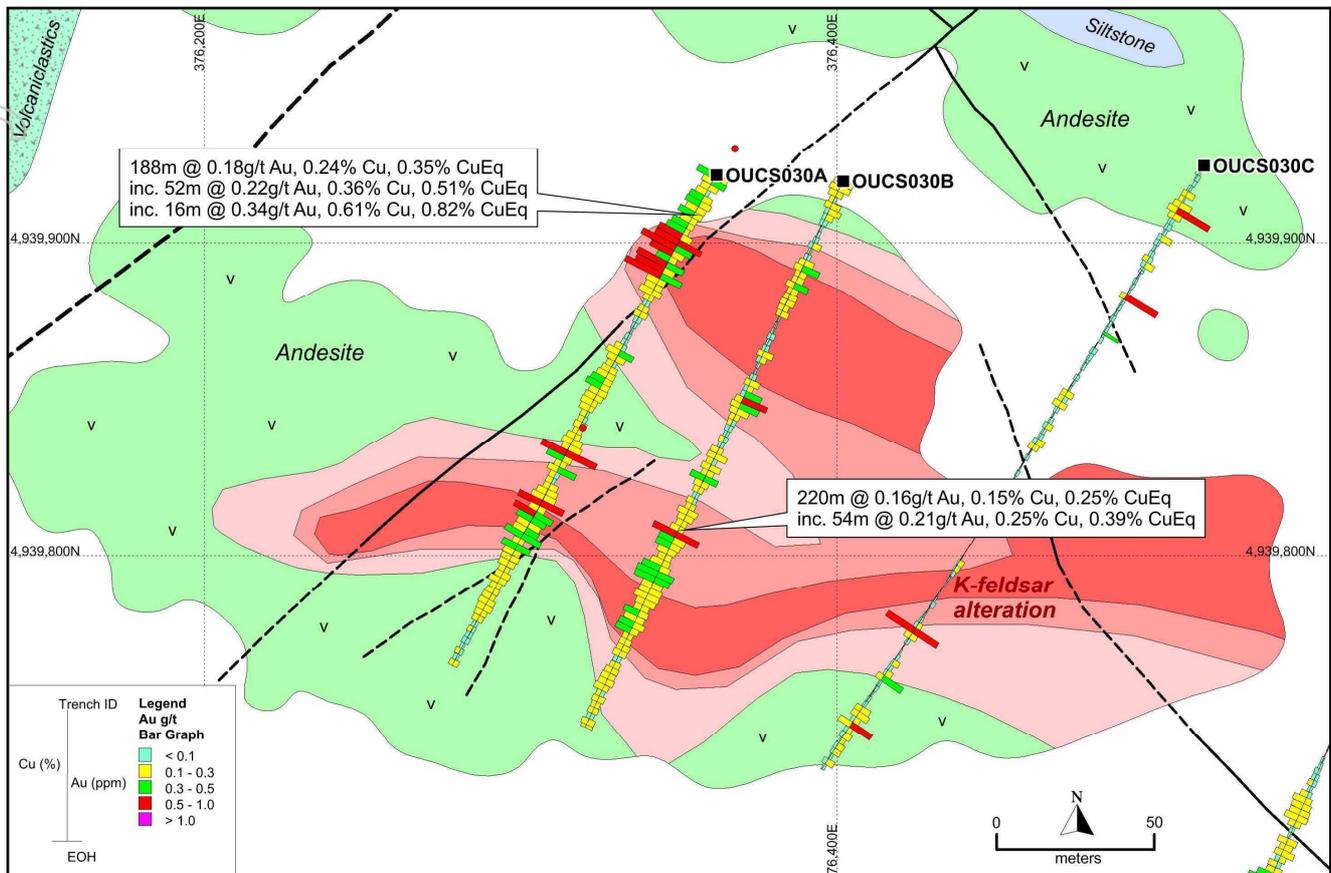
consists of Au-Cu mineralisation associated with quartz-hematite after sulphide veining within strong k-feldspar alteration surrounded by a halo of clay and chlorite-sericite alteration (Figure 9). Assay results for these targets were returned during the quarter and are confirming significant widths of Au-Cu are associated with these targets (Figure 9 and 10).

## TARGET 12 - 6 - 4



**FIGURE 9:** Numerous targets within the main zone of copper anomalism display a very similar pattern that mimics porphyry mineralisation elsewhere in Mongolia and the world.

For personal use only



**FIGURE 10:** Target 12 trenching results over geology. Broad intercepts of gold and copper mineralisation show a strong correlation to porphyry style alteration and veining.

### **Gravity survey highlights potential large scale porphyry system at Oyut Ulaan**

To add context to this targeting a gravity survey has been completed over the Oyut Ulaan lease. This survey was conducted on a nominal 200m spacing, then infilled over areas of interest to 100m spacing. When this data is combined with the surface geochemistry and recent detailed geological mapping a compelling picture of a large scale porphyry system emerges. A large gravity feature in the north-eastern quadrant of the licence area is evident. In the first vertical derivative of this data a gravity halo can be seen around a lower gravity feature. This pattern mimics the well-defined model for alteration patterns around a porphyry deposit. This model describes a core of disseminated and veined chalcopyrite (lower gravity feature) surrounded by a halo of intense pyrite alteration (gravity high). When this feature is overlaid with the surface geochemistry the copper and gold anomalism is found to occur within centre of the gravity halo, right where the model would predict (Figure 8). This same pattern can be observed elsewhere on the Oyut Ulaan lease where previous drilling has encountered smaller porphyry systems, such as Stockwork and Diorite.

Exploration at Oyut Ulaan is ongoing. Over January and February the new gravity data will be inverted into three dimensions then combined with the previous magnetics data. The trenching results and surface geochemistry will continue to be interpreted in the context of the newly acquired geological mapping and geophysics. From this data the large scale porphyry system will be targeted for drilling in early 2017.

## **CORPORATE ACTIVITIES**

Discussions with strategic investors are taking place. Continued exploration success at Kharmagtai over the past year indicates it is one of the most promising copper-gold projects globally, and recent discovery of the tourmaline breccia mineralisation ranks it as one of the highest grade porphyry discoveries in last 12 months. Xanadu is funded to progress exploration but the Company's strategy is also to keep a healthy dialogue open with potential strategic partners as an option for future collaboration.

### **Board and exploration management changes**

Subsequent to the end of the of the December 31 Quarter, Mr. Mark Wheatley decided to step down as Chairman and Non-Executive Director. Mark will be leaving Xanadu at the Company's Annual General Meeting in May 2017. Mark has served as Director since November 2012 and as Chairman since November 2013 where he has acted in both executive and non-executive roles, overseeing the transformation and growth of Xanadu during very tough commodity and equity markets. The Board will commence a search for a suitable replacement.

Following the promotion of Andrew Stewart from Chief Geologist to CEO in 2015 and then to Managing Director earlier in the year, Xanadu is pleased to announce the appointment of Mat Brown as Chief Geologist of Xanadu Mines. Mat will undertake and supervise the responsibilities and duties associated with the Chief Geologist role, drawing on his vast experience with porphyry copper-gold and epithermal gold systems around the world. Mat has over 20 years of experience as an exploration geologist in porphyry, epithermal and iron oxide copper gold-style mineralisation in the circum-Pacific region and Australia and applies cutting edge methods of structural geology and geochemistry towards gold, and base metals exploration. He has previously worked with Ivanhoe Mines for ten years, including six years as Exploration Manager in Cloncurry, Australia. He has been involved with several greenfields discoveries including the Merlin high-grade molybdenum and SWAN copper-gold deposits; and brownfields projects at Osborne, Kulthor, and Starra.

Mr. Brown has been instrumental to date in the implementation of state-of-the-art geophysical and geochemical strategies on site aimed at unlocking the copper-gold potential of the Kharmagtai and Oyut Ulaan districts. These strategies are leading to high-quality porphyry targets for testing in 2017.

### **Share Capital**

As at 31 December 2016, the Company had 511,218,639 fully paid shares, 4,416,667 performance rights and 35,000,000 options issued pursuant to the restructure of the Oyut Ulaan acquisition terms.

### **Financial position**

As at 31 December 2016, the Company had A\$8.3 million cash.

**For further information please visit [www.xanadumines.com](http://www.xanadumines.com) or contact:**

#### **Dr Andrew Stewart**

Managing Director & Chief Executive Officer

T: +976 70130211

M: +976 99999211

[Andrew.stewart@xanadumines.com](mailto:Andrew.stewart@xanadumines.com)

## 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, which is incorporated in the database that was provided to Mining Associates for undertaking a resource estimate. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, Dr Stewart 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.

Kharmagtai Mineral Resource estimate: 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 relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not materially changed from the original market announcement.

## 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) =  $Cu\% + (Au \text{ (ppm)} \times 0.6378)$ . Based on a copper price of \$2.60/lb and a gold price of \$1300/oz.

**Table 1:** Geological characteristics of seven copper-gold and gold anomalies.

Target	Style	Current size	Depth to top	Host	Gold max	Copper max	Comments
Target 1	Porphyry	500m x 300m	35m	Monzodiorite and quartz monzodiorite porphyry	3.39g/t	0.32%	High density porphyry veining associated with porphyry style alteration
Target 2	Epithermal	Unknown	41m	Sheared monzodiorite	1.21g/t	Unknown	Strongly sheared with carbonate replacement and abundant sulphide
Target 3	Porphyry	500m x 300m	19m	Monzodiorite and quartz monzodiorite porphyry	0.59g/t	0.52%	High density porphyry veining associated with porphyry style alteration
Target 4	Porphyry	300m x 300m	27m	Monzodiorite and quartz monzodiorite porphyry	0.27g/t	0.40%	High density D (sulphide) veins indicative of the edges of a porphyry system
Target 5	Epithermal	Unknown	57m	Sheared monzodiorite	0.36g/t	Unknown	Strongly sheared with carbonate replacement and abundant sulphide
Target 6	Tourmaline Breccia	500m x 300m	35m	Sulphide bearing tourmaline breccia's in monzodiorite and quartz monzodiorite porphyry	0.19g/t	0.1%	Sulphide bearing tourmaline breccias
Target 7	Tourmaline Breccia	Unknown	18m	Tourmaline fracture networks in strongly hornfelsed siltstones	0.2g/t	Unknown	Tourmaline fracture networks in strongly hornfelsed siltstones

**Table 2:** Kharmagtai drill hole details from the fourth quarter.

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHDDH338	Altan Tolgoi	592353	4877891	1291	180	-78	225.2
KHDDH358	Altan Tolgoi	592924	4877790	1282	180	-75	120.0
KHDDH372	Altan Tolgoi	592915	4877882	1282	180	-75	231.0
KHDDH388	Zesen Uul	594311	4876230	1281	0	-60	414.5
KHDDH390	Pigeon	594762	4876405	1279	0	-60	520.0
KHDDH392	Tsagaan Sudal	592230	4877128	1300	0	-70	467.2
KHDDH393	Altan Tolgoi	592353	4877891	1291	102	-60	303.5
KHDDH394	Altan Tolgoi	592924	4877790	1282	100	-59	898.0
KHDDH394a	Altan Tolgoi	592924	4877790	1282	100	-59	561.0
KHPCD001	The Basin	594503	4876493	1280	0	-90	27.5

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD002	The Basin	594750	4876499	1277	0	-90	21.5
KHPCD003	The Basin	595251	4876500	1271	0	-90	27.0
KHPCD004	The Basin	595501	4876501	1271	0	-90	33.0
KHPCD005	The Basin	595750	4876502	1271	0	-90	45.0
KHPCD006	The Basin	596001	4876503	1275	0	-90	45.0
KHPCD007	The Basin	596500	4876751	1272	0	-90	28.5
KHPCD008	The Basin	595997	4876750	1273	0	-90	50.0
KHPCD009	The Basin	595500	4876751	1270	0	-90	35.6
KHPCD010	The Basin	595251	4876753	1270	0	-90	32.4
KHPCD011	The Basin	594995	4876750	1273	0	-90	27.8
KHPCD012	The Basin	594750	4876750	1273	0	-90	42.2
KHPCD013	The Basin	594500	4876748	1276	0	-90	24.0
KHPCD014	The Basin	594250	4876746	1279	0	-90	19.8
KHPCD015	The Basin	594003	4876747	1283	0	-90	18.4
KHPCD016	The Basin	595999	4877000	1272	0	-90	51.3
KHPCD017	The Basin	596000	4877252	1272	0	-90	48.8
KHPCD018	The Basin	595748	4876999	1268	0	-90	43.0
KHPCD019	The Basin	595751	4877248	1268	0	-90	38.8
KHPCD020	The Basin	595496	4876989	1269	0	-90	43.0
KHPCD021	The Basin	595497	4877249	1268	0	-90	30.5
KHPCD022	The Basin	595248	4877000	1268	0	-90	32.8
KHPCD023	The Basin	595250	4877250	1267	0	-90	30.3
KHPCD024	The Basin	595000	4876999	1271	0	-90	33.5
KHPCD025	The Basin	594998	4877249	1267	0	-90	28.4
KHPCD026	The Basin	596497	4877001	1272	0	-90	48.0
KHPCD027	The Basin	596747	4876997	1271	0	-90	31.0
KHPCD028	The Basin	597000	4876999	1266	0	-90	25.0
KHPCD029	The Basin	597248	4876998	1269	0	-90	27.7
KHPCD030	The Basin	597248	4877250	1267	0	-90	31.8
KHPCD031	The Basin	596999	4877253	1265	0	-90	28.2
KHPCD032	The Basin	596750	4877251	1269	0	-90	47.5
KHPCD033	The Basin	597750	4877258	1264	0	-90	48.4
KHPCD034	The Basin	598001	4877250	1268	0	-90	56.2
KHPCD035	The Basin	597996	4877500	1265	0	-90	64.0
KHPCD036	The Basin	597754	4877495	1262	0	-90	56.8
KHPCD037	The Basin	593498	4876995	1287	0	-90	28.4
KHPCD038	The Basin	593247	4877251	1292	0	-90	25.4
KHPCD039	The Basin	593497	4877251	1289	0	-90	31.0
KHPCD040	The Basin	593996	4877250	1277	0	-90	26.8
KHPCD041	The Basin	594248	4877250	1275	0	-90	26.5

For personal use only

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD042	The Basin	593250	4877501	1287	0	-90	18.6
KHPCD043	The Basin	593499	4877495	1288	0	-90	25.0
KHPCD044	The Basin	594250	4877500	1280	0	-90	24.4
KHPCD045	The Basin	594248	4877499	1271	0	-90	28.8
KHPCD046	The Basin	594747	4877499	1267	0	-90	21.7
KHPCD047	The Basin	595249	4877499	1266	0	-90	30.2
KHPCD048	The Basin	595749	4877502	1268	0	-90	39.0
KHPCD049	The Basin	596010	4877507	1271	0	-90	47.4
KHPCD050	The Basin	595997	4877750	1270	0	-90	56.6
KHPCD051	The Basin	595499	4877751	1265	0	-90	30.4
KHPCD052	The Basin	595250	4877750	1264	0	-90	27.4
KHPCD053	The Basin	594750	4877751	1266	0	-90	23.0
KHPCD054	The Basin	594500	4877750	1268	0	-90	30.1
KHPCD055	The Basin	594249	4877751	1274	0	-90	28.0
KHPCD056	The Basin	594001	4877751	1278	0	-90	26.4
KHPCD057	The Basin	593497	4877750	1285	0	-90	19.2
KHPCD058	The Basin	593248	4877750	1281	0	-90	16.9
KHPCD059	The Basin	593249	4877999	1278	0	-90	17.3
KHPCD060	The Basin	593499	4878000	1277	0	-90	24.0
KHPCD061	The Basin	594000	4877998	1279	0	-90	36.0
KHPCD062	The Basin	594249	4878000	1273	0	-90	37.1
KHPCD063	The Basin	594501	4877999	1269	0	-90	47.0
KHPCD064	The Basin	594749	4878001	1264	0	-90	65.4
KHPCD065	The Basin	594999	4878001	1262	0	-90	39.8
KHPCD066	The Basin	595249	4878001	1264	0	-90	39.0
KHPCD067	The Basin	595497	4878001	1264	0	-90	41.0
KHPCD068	The Basin	595747	4878001	1267	0	-90	52.6
KHPCD069	The Basin	595997	4878001	1269	0	-90	66.5
KHPCD070	The Basin	596248	4878251	1267	0	-90	66.0
KHPCD071	The Basin	595375	4876989	1280	0	-90	51.0
KHPCD072	The Basin	595372	4877131	1269	0	-90	38.2
KHPCD073	The Basin	595625	4877125	1280	0	-90	37.2
KHPCD074	The Basin	595626	4876875	1280	0	-90	61.8
KHPCD075	The Basin	595379	4876841	1280	0	-90	38.4
KHPCD076	The Basin	595156	4876832	1280	0	-90	33.5
KHPCD077	The Basin	595142	4877124	1280	0	-90	38.0
KHPCD078	The Basin	595999	4878252	1267	0	-90	60.0
KHPCD079	The Basin	595751	4878250	1267	0	-90	50.7
KHPCD080	The Basin	595499	4878250	1267	0	-90	46.2
KHPCD081	The Basin	595249	4878250	1267	0	-90	41.4

For personal use only

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD082	The Basin	595008	4878253	1267	0	-90	39.0
KHPCD083	The Basin	594749	4878251	1267	0	-90	33.0
KHPCD084	The Basin	594249	4878251	1267	0	-90	28.8
KHPCD085	The Basin	593498	4878252	1267	0	-90	14.0
KHPCD086	The Basin	593499	4878502	1267	0	-90	6.0
KHPCD087	The Basin	593998	4878500	1267	0	-90	20.5
KHPCD088	The Basin	594502	4878498	1267	0	-90	24.0
KHPCD089	The Basin	594746	4878499	1267	0	-90	27.0
KHPCD090	The Basin	594999	4878498	1267	0	-90	33.0
KHPCD091	The Basin	595749	4878498	1267	0	-90	60.0
KHPCD092	The Basin	595998	4878498	1267	0	-90	63.3
KHPCD093	The Basin	596249	4878497	1267	0	-90	75.0
KHPCD094	The Basin	596500	4878500	1267	0	-90	66.2
KHPCD095	The Basin	596750	4878500	1267	0	-90	68.0
KHPCD096	The Basin	596999	4878496	1267	0	-90	63.3
KHPCD097	The Basin	597250	4878250	1267	0	-90	70.3
KHPCD098	The Basin	597249	4878498	1267	0	-90	70.0
KHPCD099	The Basin	597499	4878250	1267	0	-90	70.0
KHPCD100	The Basin	597750	4878248	1267	0	-90	78.0
KHPCD101	The Basin	597999	4878249	1267	0	-90	78.0
KHPCD102	The Basin	597996	4878499	1267	0	-90	88.3
KHPCD103	The Basin	597749	4878500	1267	0	-90	90.0
KHPCD104	The Basin	597998	4878759	1267	0	-90	83.0
KHPCD105	The Basin	597750	4878750	1267	0	-90	77.5
KHPCD106	The Basin	597252	4878748	1267	0	-90	78.0
KHPCD107	The Basin	596999	4878750	1267	0	-90	75.0
KHPCD108	The Basin	596499	4878747	1267	0	-90	69.0
KHPCD109	The Basin	596000	4878750	1267	0	-90	58.5
KHPCD110	The Basin	595005	4878748	1267	0	-90	42.0
KHPCD111	The Basin	594249	4878746	1267	0	-90	26.2
KHPCD112	The Basin	593248	4878751	1267	0	-90	10.1
KHPCD113	The Basin	592248	4878752	1267	0	-90	9.0
KHPCD114	The Basin	597748	4879001	1260	0	-90	85.5
KHPCD115	The Basin	597248	4879001	1267	0	-90	82.0
KHPCD116	The Basin	596749	4878999	1267	0	-90	89.0
KHPCD117	The Basin	596248	4879000	1267	0	-90	78.3
KHPCD118	The Basin	594501	4878997	1267	0	-90	27.0
KHPCD119	The Basin	595125	4876999	1267	0	-90	37.9
KHPCD120	The Basin	595251	4877123	1267	0	-90	36.0
KHPCD121	The Basin	595499	4877123	1267	0	-90	39.0

For personal use only

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD122	The Basin	595625	4876999	1267	0	-90	40.7
KHPCD123	The Basin	595503	4876879	1267	0	-90	43.0
KHPCD124	The Basin	595376	4876753	1267	0	-90	39.2
KHPCD125	The Basin	595120	4876750	1267	0	-90	36.0
KHPCD126	The Basin	595247	4876875	1267	0	-90	38.8
KHPCD127	The Basin	594997	4876875	1267	0	-90	32.0
KHPCD128	The Basin	597500	4877258	1267	0	-90	43.2
KHPCD129	The Basin	597750	4877008	1267	0	-90	41.0
KHPCD130	The Basin	597641	4877374	1267	0	-90	60.0
KHPCD131	The Basin	597650	4877123	1267	0	-90	28.1
KHPCD132	The Basin	597871	4877374	1267	0	-90	45.1
KHPCD133	The Basin	597875	4877123	1267	0	-90	54.0
KHPCD134	The Basin	593998	4878999	1267	0	-90	26.0
KHPCD135	The Basin	593496	4878999	1267	0	-90	14.3
KHPCD136	The Basin	592997	4878999	1267	0	-90	30.2
KHPCD137	The Basin	592494	4878999	1267	0	-90	24.0
KHPCD138	The Basin	591996	4879000	1267	0	-90	15.7
KHPCD139	The Basin	598001	4877375	1267	0	-90	54.3
KHPCD140	The Basin	597879	4877495	1288	0	-90	48.1
KHPCD141	The Basin	597996	4877624	1288	0	-90	39.7
KHPCD142	The Basin	598121	4877499	1288	0	-90	45.0
KHPCD143	The Basin	592250	4879253	1267	0	-90	29.8
KHPCD144	The Basin	592748	4879250	1267	0	-90	38.9
KHPCD145	The Basin	593249	4879250	1267	0	-90	20.0
KHPCD146	The Basin	593999	4879249	1267	0	-90	26.5
KHPCD147	The Basin	594998	4879250	1267	0	-90	46.0
KHPCD148	The Basin	595498	4879250	1260	0	-90	54.2
KHPCD149	The Basin	595998	4879252	1258	0	-90	60.0
KHPCD150	The Basin	596489	4879253	1262	0	-90	70.0
KHPCD151	The Basin	596998	4879250	1262	0	-90	84.0
KHPCD152	The Basin	597499	4879252	1258	0	-90	87.6
KHPCD153	The Basin	597999	4879251	1258	0	-90	85.7
KHPCD154	The Basin	597747	4879501	1257	0	-90	74.5
KHPCD155	The Basin	597249	4879500	1260	0	-90	91.0
KHPCD156	The Basin	596749	4879501	1261	0	-90	82.0
KHPCD157	The Basin	596249	4879502	1258	0	-90	63.5
KHPCD158	The Basin	595747	4879502	1258	0	-90	60.0
KHPCD159	The Basin	595248	4879501	1258	0	-90	50.1
KHPCD160	The Basin	594746	4879500	1256	0	-90	45.0
KHPCD161	The Basin	594252	4879499	1256	0	-90	30.0

For personal use only

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD162	The Basin	593749	4879501	1259	0	-90	23.1
KHPCD163	The Basin	592997	4879500	1266	0	-90	21.0
KHPCD164	The Basin	592497	4879500	1266	0	-90	13.0
KHPCD165	The Basin	592004	4879493	1270	0	-90	17.7
KHPCD166	The Basin	593499	4879501	1261	0	-90	21.2
KHPCD167	The Basin	597497	4879750	1256	0	-90	77.6
KHPCD168	The Basin	597748	4879751	1255	0	-90	76.0
KHPCD169	The Basin	597998	4879753	1256	0	-90	68.0
KHPCD170	The Basin	598504	4879750	1258	0	-90	74.0
KHPCD171	The Basin	598750	4879751	1258	0	-90	86.0
KHPCD172	The Basin	599000	4879750	1258	0	-90	83.5
KHPCD173	The Basin	599254	4879498	1265	0	-90	10.0
KHPCD177	The Basin	599013	4879258	1262	0	-90	52.5
KHPCD178	The Basin	599013	4878999	1267	0	-90	39.0
KHPCD179	The Basin	599251	4879000	1268	0	-90	16.7
KHPCD180	The Basin	599253	4878751	1275	0	-90	7.0
KHPCD181	The Basin	598998	4878747	1270	0	-90	39.0
KHPCD182	The Basin	598999	4878500	1271	0	-90	15.3
KHPCD183	The Basin	599249	4878500	1277	0	-90	8.7
KHPCD184	The Basin	596498	4876240	1277	0	-90	23.0
KHPCD185	The Basin	596499	4875999	1281	0	-90	22.2
KHPCD186	The Basin	596262	4876003	1280	0	-90	18.5
KHPCD187	The Basin	596011	4875995	1281	0	-90	18.0
KHPCD188	The Basin	595751	4876003	1278	0	-90	34.5
KHPCD189	The Basin	595506	4876003	1274	0	-90	22.0
KHPCD190	The Basin	595240	4876002	1274	0	-90	12.3
KHPCD191	The Basin	595250	4876251	1273	0	-90	27.0
KHPCD192	The Basin	595502	4876247	1272	0	-90	29.0
KHPCD193	The Basin	595758	4876240	1273	0	-90	34.0
KHPCD194	The Basin	595248	4875748	1276	0	-90	13.2
KHPCD195	The Basin	595499	4875751	1277	0	-90	21.0
KHPCD196	The Basin	595750	4875751	1280	0	-90	25.1
KHPCD197	The Basin	595995	4875744	1285	0	-90	17.7
KHPCD198	The Basin	596269	4875751	1284	0	-90	14.0
KHPCD199	The Basin	596754	4875250	1291	0	-90	12.0
KHPCD200	The Basin	596998	4875248	1295	0	-90	11.0
KHPCD201	The Basin	597000	4874999	1299	0	-90	9.0
KHPCD202	The Basin	597006	4874756	1303	0	-90	11.0
KHPCD203	The Basin	597002	4874498	1306	0	-90	11.5
KHPCD204	The Basin	596499	4874495	1300	0	-90	13.0

For personal use only

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD205	The Basin	596251	4874502	1299	0	-90	9.5
KHPCD206	The Basin	596001	4874491	1293	0	-90	59.0
KHPCD207	The Basin	595748	4874496	1294	0	-90	33.4
KHPCD208	The Basin	595747	4874250	1294	0	-90	36.5
KHPCD209	The Basin	596000	4874253	1296	0	-90	70.4
KHPCD210	The Basin	596249	4874247	1300	0	-90	60.6
KHPCD211	The Basin	596495	4874251	1303	0	-90	50.4
KHPCD212	The Basin	597201	4875252	1301	0	-90	12.0
KHPCD213	The Basin	596500	4877750	1300	0	-90	54.3
KHPCD214	The Basin	597000	4877750	1300	0	-90	58.5
KHPCD215	The Basin	597500	4877750	1300	0	-90	46.0
KHPCD216	The Basin	598000	4877750	1300	0	-90	49.0
KHPCD217	The Basin	598250	4877750	1300	0	-90	47.5
KHPCD218	The Basin	598500	4877750	1300	0	-90	50.0
KHPCD219	The Basin	598500	4877500	1300	0	-90	63.0
KHPCD220	The Basin	597250	4877500	1300	0	-90	36.6
KHPCD221	The Basin	596750	4877500	1300	0	-90	49.0
KHPCD222	The Basin	596500	4877250	1300	0	-90	47.4
KHPCD223	The Basin	597000	4876750	1300	0	-90	28.8
KHPCD224	The Basin	597500	4876750	1300	0	-90	41.4
KHPCD225	The Basin	598000	4876750	1300	0	-90	21.0
KHPCD226	The Basin	597750	4876500	1300	0	-90	21.0
KHPCD227	The Basin	597250	4876500	1300	0	-90	30.0
KHPCD228	The Basin	596750	4876500	1300	0	-90	31.0
KHPCD229	The Basin	599000	4875500	1300	0	-90	23.2
KHPCD230	The Basin	599000	4875000	1300	0	-90	24.0
KHPCD231	The Basin	599000	4874500	1300	0	-90	30.0
KHPCD232	The Basin	596500	4878250	1300	0	-90	66.0
KHPCD233	The Basin	597000	4878250	1300	0	-90	67.3
KHPCD234	The Basin	596750	4878000	1300	0	-90	61.7
KHPCD235	The Basin	597750	4878000	1300	0	-90	53.0
KHPCD236	The Basin	598250	4878250	1300	0	-90	75.0
KHPCD237	The Basin	592999	4879989	1300	0	-90	16.5
KHPCD238	The Basin	598250	4877875	1300	0	-90	58.0
KHPCD239	The Basin	598375	4877875	1300	0	-90	57.0
KHPCD240	The Basin	598244	4879750	1290	0	-90	69.0
KHPCD241	The Basin	598500	4879250	1290	0	-90	61.0
KHPCD242	The Basin	598500	4878750	1290	0	-90	73.0
KHPCD243	The Basin	598500	4878250	1300	0	-90	61.5
KHPCD244	The Basin	598250	4878000	1300	0	-90	66.7

For personal use only

Hole ID	Prospect	East	North	RL	Azi (°)	Dip	Drilled Depth (m)
KHPCD245	The Basin	597250	4878000	1300	0	-90	65.5
KHPCD246	The Basin	596250	4878000	1290	0	-90	55.2
KHPCD247	The Basin	596250	4877500	1290	0	-90	50.0
KHPCD248	The Basin	596250	4877000	1300	0	-90	54.0
KHPCD249	The Basin	596250	4876500	1300	0	-90	26.0
KHPCD250	The Basin	596250	4876250	1300	0	-90	33.4
KHPCD251	The Basin	596000	4876250	1300	0	-90	69.0
KHPCD252	The Basin	595500	4878750	1300	0	-90	50.3
KHPCD253	The Basin	595750	4879000	1300	0	-90	53.0
KHPCD254	The Basin	595250	4879000	1300	0	-90	47.0
KHPCD255	The Basin	595250	4878500	1300	0	-90	40.2
KHPCD256	The Basin	598248	4878634	1290	0	-90	83.0
KHPCD257	The Basin	598748	4878634	1290	0	-90	58.0
KHPCD258	The Basin	598748	4879001	1290	0	-90	65.5
KHPCD259	The Basin	598248	4879001	1290	0	-90	78.0

**Table 3:** Kharmagtai significant drill results from the fourth quarter.

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Cu (%)	Au (g/t)	CuEq (%)
KHRC291	Tsagaan Sudal	3	54	51	0.27	0.2	0.40
KHRC292	Tsagaan Sudal	2	60	58	0.23	0.12	0.31
KHRC293	Tsagaan Sudal	9	102	93	0.24	0.19	0.36
KHRC294	Tsagaan Sudal	0	55	55	0.31	0.14	0.41
KHRC295	Tsagaan Sudal	0	100	100	0.22	0.16	0.33
KHRC296	Tsagaan Sudal	2	81	79	0.25	0.16	0.36
KHRC297	Tsagaan Sudal	2	60	58	0.248	0.16	0.35
KHDDH338	Altan Tolgoi	402	412	10	0.48	0.23	0.62
<i>and</i>		424	436	12	0.08	0.15	0.17
<i>and</i>		554	570	16	0.15	0.03	0.17
KHDDH358	Altan Tolgoi	649	658	9	0.44	0.21	0.57
<i>and</i>		663	671	8	0.16	0.03	0.18
KHDDH372	Altan Tolgoi	424	587	163	0.15	0.1	0.22
<i>including</i>		426	456	30	0.22	0.22	0.36
<i>including</i>		462	484	22	0.2	0.2	0.33
KHDDH386	Kitchen	322	336	14	0.35	0.25	0.50
<i>and</i>		365	376	11	0.41	0.11	0.48
<i>and</i>		378	383	5	0.38	0.09	0.44
KHDDH387	Zesen Uul	380	388	8	0.26	0.33	0.48
KHDDH388	Pigeon	366	372	6	0.04	0.12	0.11
KHDDH390	Pigeon	272	328	56	0.04	0.15	0.14

	<i>and</i>	333	338	5	0.18	0.04	0.21
	<i>and</i>	341	346	5	0.21	0.04	0.24
	<i>and</i>	357	359	2	0.34	0.05	0.37
	<i>and</i>	361	366	5	0.14	0.07	0.18
	<i>and</i>	400	403	3	0.37	0.06	0.41
KHDDH391	Tsagaan Sudal	0	415	415	0.24	0.16	0.34
	<i>including</i>	224	232	8	0.45	0.49	0.76
	<i>including</i>	242	248	6	0.51	0.38	0.75
	<i>including</i>	298	415	117	0.31	0.22	0.44
	<i>including</i>	372	415	43	0.36	0.29	0.54
KHDDH392	Tsagaan Sudal	0	467.17	467.17	0.3	0.21	0.43
	<i>including</i>	118	184	66	0.36	0.26	0.53
	<i>including</i>	208	220	12	0.36	0.29	0.55
	<i>including</i>	242	254	12	0.35	0.36	0.58
	<i>including</i>	328	364	36	0.49	0.37	0.72
	<i>including</i>	410.6	416	5.4	0.75	0.33	0.97
	<i>including</i>	450	458	8	0.53	0.62	0.92
KHDDH393	Altan Tolgoi	26	220	194	0.61	1.5	1.59
	<i>including</i>	26	100	74	0.95	2.7	2.67
	<i>including</i>	106	122	16	0.5	1.74	1.62
	<i>and</i>	250	303.5	53.5	0.16	0.13	0.24
KHDDH394	Altan Tolgoi	6	652	646	0.51	0.87	1.06
	<i>including</i>	18	82	64	1.06	3.15	3.07
	<i>including</i>	94	132	38	0.49	1.46	1.42
	<i>including</i>	330	378	48	0.54	1.01	1.19
	<i>including</i>	400	494	94	0.74	0.75	1.22
	<i>including</i>	508	550	42	0.46	1.04	1.12
	<i>and</i>	676	750	74	0.36	0.5	0.68
	<i>including</i>	678	706	28	0.61	1.04	1.28
	<i>and</i>	754	836	82	0.13	0.08	0.18
	<i>and</i>	860	888	28	0.13	0.1	0.19
KHPCD003	The Basin	21.2	27	5.8	0.055	0.22	0.19
KHPCD020	The Basin	37	43	6	0.117	0.35	0.34
KHPCD022	The Basin	26.8	32.8	6	0.112	0.28	0.29
KHPCD023	The Basin	24.3	30.3	6	0.070	0.1	0.13
KHPCD035	The Basin	58	64	6	0.031	0.06	0.07
KHPCD036	The Basin	50.8	56.8	6	0.049	0.15	0.15
KHPCD040	The Basin	20.8	26.8	6	0.220	0.33	0.43
	<i>including</i>	22.8	24.8	2	0.229	0.59	0.61
KHPCD041	The Basin	21.5	26.5	5	0.363	0.33	0.57
	<i>including</i>	25.5	26.5	1	0.519	0.46	0.81
KHPCD044	The Basin	18.4	24.4	6	0.087	0.21	0.22

KHPCD045	The Basin	22.8	28.8	6	0.069	0.05	0.10
KHPCD047	The Basin	24.2	30.2	6	0.113	0.07	0.16
KHPCD051	The Basin	24.4	30.4	6	0.373	0.11	0.44
KHPCD053	The Basin	17	23	6	0.064	0.04	0.09
KHPCD063	The Basin	41	47	6	0.009	0.64	0.42
KHPCD066	The Basin	33	39	6	0.047	0.12	0.12
KHPCD071	The Basin	39	51	12	0.216	1.64	1.26
<i>including</i>		39	41	2	0.253	3.39	2.42
<i>including</i>		39	47	8	0.250	2.08	1.58
KHPCD072	The Basin	32.2	38.2	6	0.126	0.09	0.18
KHPCD074	The Basin	55.8	61.8	6	0.045	0.12	0.12
KHPCD075	The Basin	32.4	38.4	6	0.153	0.24	0.31
KHPCD077	The Basin	36	38	2	0.058	0.19	0.18
KHPCD083	The Basin	27	29	2	0.005	0.32	0.21
KHPCD088	The Basin	22	24	2	0.007	0.2	0.13
KHPCD092	The Basin	61.3	63.3	2	0.002	0.36	0.23
KHPCD119	The Basin	31.9	37.9	6	0.063	0.13	0.15
KHPCD120	The Basin	30	36	6	0.059	0.08	0.11
KHPCD121	The Basin	33	39	6	0.097	0.2	0.22
KHPCD122	The Basin	34.7	40.7	6	0.074	0.32	0.28
KHPCD123	The Basin	37	43	6	0.055	0.12	0.13
KHPCD125	The Basin	30	36	6	0.037	0.11	0.11
KHPCD126	The Basin	32.8	38.8	6	0.064	0.15	0.16
KHPCD133	The Basin	48	54	6	0.060	0.05	0.09
KHPCD140	The Basin	42.1	46.1	4	0.051	0.06	0.09
KHPCD141	The Basin	33.7	39.7	6	0.091	0.04	0.12
KHPCD190	The Basin	6.3	12.3	6	0.080	0.15	0.18
KHPCD193	The Basin	28	34	6	0.066	0.04	0.09
KHPCD204	The Basin	7	13	6	0.067	0.01	0.07
KHPCD210	The Basin	54.6	60.6	6	0.087	0.05	0.12
KHPCD211	The Basin	44.4	50.4	6	0.059	0.04	0.08

**Table 4:** Oyut Ulaan drill hole and trench details from the fourth quarter.

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
OURC032	Target 4	376368	4939930	1080	210	-60	168.0
OURC033	Target 4	376320	4939841	1089	210	-60	110.0
OURC034	Target 12	377571	4940416	1078	210	-60	198.0
OURC035	Target 12	377535	4940322	1078	210	-60	61.0
OURC036	Temee vein	380527	4938117	1024	55	-60	73.0
OURC037	Temee vein	380657	4937658	1023	55	-60	73.0
OURC038	Temee vein	380759	4937721	1023	55	-60	73.0
OURC039	New target	376644	4939165	1070	180	-60	100.0

OURC040	New target	376692	4939154	1067	180	-60	100.0
OURC041	Target 33	373823	4938045	1053	135	-60	79.0
Trench ID	Prospect	Start East	Start North	RL	Azimuth (°)	Length (m)	
OUCS028C	Target 10	375613	4939208	1027	110	192	
OUCS028D	Target 10	375624	4939228	1028	110	180	
OUCS028E	Target 10	375660	4939236	1029	110	94	
OUCS028F	Target 10	375716	4939142	1040	115	84	
OUCS029B	Target 13	378096	4940684	1066	115	176	
OUCS030C	Target 4	376516	4939925	1000	215	264	
OUCS030D	Target 4	376599	4939836	1050	210	200	
OUCS032A	Target 7	376725	4939635	1083	30	136	
OUCS032B	Target 7	376746	4939578	1082	30	206	
OUCS033A	Target 7	377025	4939560	1086	30	170	
OUCS033B	Target 7	377099	4939547	1084	30	230	
OUCS034A	Target 6	376982	4939850	1064	30	180	
OUCS034B	Target 6	376933	4939871	1085	30	180	
OUCS034C	Target 6	376516	4941144	1050	210	168	
OUCS035A	Target 12	377472	4940176	1070	30	366	
OUCS035B	Target 12	377404	4940178	1073	30	370	
OUCS035C	Target 12	377498	4940494	1069	220	246	
OUCS036A	Target 43	372510	4939520	1070	60	150	
OUCS036B	Target 43	372530	4939630	1061	335	220	
OUCS036C	Target 43	372952	4939470	1077	340	160	
OUCS036D	Target 43	372962	4939598	1084	160	164	
OUCS036E	Target 43	372831	4939607	1079	160	170	
OUCS037A	Target 40	373018	4937745	1052	80	110	
OUCS037B	Target 40	373026	4937665	1050	85	132	
OUCS038A	Target 38	372842	4938068	1070	60	136	
OUCS038B	Target 38	372851	4938184	1071	60	104	
OUCS039A	Target 21	380572	4937971	1043	60	56	
OUCS039B	Target 21	380631	4937951	1042	60	54	
OUCS039C	Target 21	380659	4937908	1040	60	50	
OUCS039D	Target 21	380520	4938121	1024	70	42	
OUCS039E	Target 21	380530	4938099	1023	70	36	
OUCS040A	Target 25	375206	4938789	1070	135	152	
OUCS040B	Target 25	375355	4938772	1071	105	176	
OUCS041	Target 1	374963	4940085	1070	150	134	
OUCS042A	Target 28	375185	4938490	1061	180	180	
OUCS042B	Target 28	375303	4938486	1056	145	168	
OUCS042C	Target 28	375343	4938517	1065	145	138	
OUCS042D	Target 28	375398	4938568	1063	150	154	

For personal use only

OUCS042E	Target 28	375241	4938477	1055	150	160
OUCS043	Target 31	374468	4938523	1053	230	184
OUCS044A	Target 11	377207	4939967	1066	35	206
OUCS044B	Target 11	377238	4939910	1053	35	196
OUCS045A	New target	376651	4939194	1069	175	166
OUCS045B	New target	376713	4939048	1062	20	160
OUCS046A	Target 33	373793	4938050	1059	110	150
OUCS046B	Target 33	373990	4938038	1053	110	72
OUCS047A	Target 32	374085	4938241	1056	45	62
OUCS047B	Target 32	374136	4938363	1059	15	62
OUCS047C	Target 32	374099	4938368	1065	15	104

**Table 5: Oyut Ulaan Significant Intercepts.**

Trench ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)
OUCS024D	Target 14	21.6	32	10.4	0.19	0.38	0.5
OUCS027	Hulan	26	54	28	0.14	0.06	0.15
OUCS028A	Target 10	32	34	2	7.97	0.24	5.32
and		68.5	71.5	3	13.28	0.02	8.49
and		94	104	10	0.3	0.33	0.52
OUCS028C	Target 10	86	100	14	0.44	0.01	0.29
OUCS028D	Target 10	22.5	23	0.5	18.55	0.2	12.03
and		26	50	24	0.23	0.07	0.22
and		58	72	14	2.15	1.02	2.39
including		60	65	5	3.06	1.82	3.77
including		70	72	2	5.90	2.11	5.87
OUCS028E	Target 10	28	29.5	1.5	0.35	0.0045	0.23
and		42	48	6	0.27	0.0116	0.18
OUCS029	Target 13	42	76	34	0.16	0.15	0.25
and		88	114	26	0.5	0.25	0.56
and		122	132	10	0.21	0.15	0.28
OUCS029B	Target 13	4	10	6	0.19	0.114	0.24
and		18	24	6	0.14	0.07	0.16
and		56	58	2	0.18	0.134	0.25
and		106	176	70	0.13	0.073	0.16
OUCS030C	Target 4	10	38	28	0.16	0.0935	0.20
and		48	50	2	0.77	0.115	0.61
and		172	256	84	0.12	0.08	0.16
including		174	176	2	0.59	0.68	1.06
OUCS030D	Target 4	0	14	14	0.12	0.06	0.14
and		28	34	6	1.45	0.013	0.94
including		30	31	1	5.06	0.02	3.25

Trench ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)
<i>and</i>		114	198	84	0.13	0.14	0.22
OUCS031	Target 45	86	92	6	0.84	0.06	0.6
OUCS032B	Target 7	40	44	4	0.18	0.52	0.63
<i>and</i>		54	60	6	0.52	1.17	1.5
<i>and</i>		82	94	12	0.1	0.28	0.34
<i>and</i>		100	124	24	0.12	0.33	0.41
<i>and</i>		134	148	14	0.14	0.4	0.49
OUCS033A	Target 7	112	138	26	0.13	0.2	0.28
OUCS034A	Target 6	55	71	16	0.12	0.11	0.19
<i>and</i>		130	138	8	0.17	0.1	0.21
OUCS034B	Target 6	124	154	30	0.22	0.28	0.41
OUCS034C	Target 6	0	58	58	0.13	0.18	0.26
<i>and</i>		84	160	76	0.20	0.11	0.24
<i>including</i>		134	136	2	2.37	0.11	1.62
OUCS035A	Target 12	22.6	34	11.4	0.13	0.34	0.43
<i>and</i>		40	72	32	0.23	0.2	0.34
<i>and</i>		94	120	26	0.17	0.28	0.39
<i>and</i>		126	138	12	0.1	0.18	0.24
<i>and</i>		174	289	115	0.29	0.19	0.38
<i>including</i>		214	242	28	0.56	0.36	0.72
<i>and</i>		334	354	20	0.33	0.15	0.37
<i>including</i>		336	338	2	2.15	0.72	2.09
OUCS035B	Target 12	98	106	8	0.12	0.16	0.24
<i>and</i>		116	168	52	0.13	0.14	0.22
OUCS35C	Target 12	10	16	6	0.25	0.2	0.36
<i>and</i>		92	106	14	0.15	0.13	0.23
<i>and</i>		112	132	20	0.12	0.09	0.17
<i>and</i>		149.6	172	22.4	0.19	0.14	0.26
<i>and</i>		214	246	32	0.08	0.15	0.20
OUCS036C	Target 43	18	62	44	0.12	0.15	0.23
<i>including</i>		42	46	4	0.25	0.39	0.55
<i>and</i>		98	100	2	0.34	0.8	1.01
OUCS036D	Target 43	130	132	2	0.11	0.1	0.17
OUCS037A	Target 40	18	33.5	15.5	0.1	0.15	0.21
OUCS037B	Target 40	72	74	2	0.17	0.17	0.28
<i>and</i>		96	106	10	0.12	0.21	0.29
<i>and</i>		114	118	4	0.1	0.14	0.21
OUCS038A	Target 38	82	96	14	0.62	0.02	0.42
<i>and</i>		98	108	10	0.21	-	0.13
OUCS038B	Target 38	34	38	4	0.21	0.01	0.15

For personal use only

Trench ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)
OUCS039A	Target 21	31	31.5	0.5	0.69	0.01	0.45
<i>and</i>		41.1	41.6	0.5	0.74	0.22	0.7
<i>and</i>		46	52	6	0.01	0.1	0.11
OUCS039B	Target 21	15.4	22	6.6	0.16	0.09	0.19
OUCS039C	Target 21	13.1	18.3	5.2	2.92	0.09	1.97
OUCS039D	Target 21	27.3	29.3	2	4.37	0.58	3.37
<i>including</i>		28.1	29.3	1.2	6.51	0.75	4.90
OUCS039E	Target 21	23.6	24	0.4	2.17	0.03	1.41
OUCS040A	Target 25	10	12	2	0.3	0.98	1.17
<i>and</i>		40	40.5	0.5	1.08	0.01	0.69
<i>and</i>		94	100	6	0.04	0.16	0.19
OUCS040B	Target 25	4	7	3	0.58	0.01	0.38
OUCS042A	Target 28	82	86	4	0.2	0.3	0.42
<i>and</i>		142	148	6	0.12	0.15	0.23
<i>and</i>		152	156	4	0.1	0.09	0.16
OUCS042B	Target 28	6	12	6	0.18	0.18	0.3
<i>and</i>		16	18	2	0.15	0.15	0.25
<i>and</i>		50	78	28	0.21	0.29	0.42
<i>including</i>		54	56	2	0.58	0.84	1.21
OUCS042C	Target 28	31.4	32	0.6	0.15	0.13	0.23
<i>and</i>		44	50	6	0.31	0.5	0.69
<i>and</i>		60	62	2	0.1	0.14	0.2
OUCS042E	Target 28	2	8	6	0.20	0.05	0.18
<i>and</i>		78	80	2	0.10	0.238	0.30
<i>and</i>		92	94	2	0.19	0.215	0.34
<i>and</i>		146	150	4	0.05	0.14	0.17
OUCS044A	Target 11	48	52	4	0.15	0.31	0.41
<i>and</i>		132	138	6	0.26	0.25	0.42
OUCS045A	New Target	4	6	2	0.98	0.169	0.79
<i>and</i>		46	76	30	1.74	0.34	1.45
<i>including</i>		56	62	6	5.72	0.98	4.63
OUCS045B	New Target	58.7	64	5.3	0.85	1.05	1.59
<i>and</i>		92	96	4	0.18	0.05	0.16
OUCS046A	Target 33	2	114	112	0.39	0.15	0.40
<i>including</i>		2	4	2	3.11	0.78	2.76
<i>including</i>		56	58	2	1.98	0.305	1.57
<i>and</i>		124	146	22	0.57	0.04	0.40
<i>including</i>		130	134	4	1.49	0.028	0.98
OUCS046B	Target 33	0	70	70	0.54	0.093	0.44
<i>including</i>		4	14	10	1.34	0.255	1.11

For personal use only

Trench ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)
<i>including</i>		50	64	14	0.82	0.009	0.53
OUCS047A	Target 32	16	18	2	0.14	0.16	0.25
<i>and</i>		22	24	2	0.20	0.375	0.50
<i>and</i>		29.5	31.3	1.8	0.73	0.004	0.47

**Table 6: Tenements held as at 31 December 2016**

Set out below is the relevant information in relation to Xanadu's mining tenements as required under ASX Listing Rule 5.3.3.

Tenement No.	Tenement Name	Location	Change in % Interest	% Interest as at 31 December
MV17387A1	Kharmagtai	Umnugovi Province	-	72% <sup>1</sup>
MV017129	Oyut Ulaan	Dornogovi Province	-	90%
13670x	Sharchuluut	Bulgan Province	-	100%

<sup>1</sup> The Kharmagtai project has been funded through Xanadu's interest in Mongol Metals LLC by a combination of equity and shareholder advances converted to equity periodically. Xanadu's interest in Mongol Metals LLC is equivalent to approximately 79.8% as at 31 December 2016 (an effective 71.8% interest in the Kharmagtai project).

For personal use only

**APPENDIX 1: KHARMAGTAI TABLE 1 (JORC 2012)**

Set out below is Section 1 and Section 2 of Table 1 under the JORC Code, 2012 Edition for the Kharmagtai project. Data provided by Xanadu. This Table 1 updates the JORC Table 1 disclosure dated 31 October 2016.

**1.1 JORC TABLE 1 - SECTION 1 - SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code (Section 1) Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling and assaying.</li> <li>Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>The resource estimate is based on drill samples only.</li> <li>Representative 2 metre samples were taken from ½ NQ or HQ diamond core and chip channel samples from trenches.</li> <li>Only assay results from recognised, independent assay laboratories were used in Resource calculation after QAQC was verified.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type and details.</li> </ul>	<ul style="list-style-type: none"> <li>DDH drilling has been the primary drilling method.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>DDH core recoveries have been very good, averaging between 97% and 99% for all of the deposits. In localised areas of faulting and/or fracturing the recoveries decrease; however this is a very small percentage of the overall mineralised zones.</li> <li>Recovery measurements were collected during all DDH programs. The methodology used for measuring recovery is standard industry practice.</li> <li>Analysis of recovery results vs. grade indicates no significant trends. Indicating bias of grades due to diminished recovery and / or wetness of samples.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Drill and trench samples are logged for lithology, mineralisation and alteration and geotechnical aspects using a standardised logging system, including the recording of visually estimated volume percentages of major minerals.</li> <li>Drill core was photographed after being logged by a geologist.</li> <li>The entire interval drilled and trenched has been logged by a geologist.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to</li> </ul>	<ul style="list-style-type: none"> <li>DDH Core is cut in half with a diamond saw, following the line marked by the geologist. The rock saw is regularly flushed with fresh water.</li> <li>Sample intervals are a constant 2m interval down-hole in length.</li> <li>Trench chip channel samples taken close to the base of the trench wall (about 10cm above the floor). Samples are about 3kg.</li> <li>Trench Sample collected with a plastic</li> </ul>

Criteria	JORC Code (Section 1) Explanation	Commentary
	<p>maximise representivity of samples.</p> <ul style="list-style-type: none"> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>sheet or tray.</p> <ul style="list-style-type: none"> <li>Routine sample preparation and analyses of DDH samples were carried out by SGS Mongolia LLC (SGS Mongolia), who operates an independent sample preparation and analytical laboratory in Ulaanbaatar.</li> <li>All samples were prepared to meet standard quality control procedures as follows: Crushed to 90% passing 3.54 mm, split to 1kg, pulverised to 90% - 95% passing 200 mesh (75 microns) and split to 150g.</li> <li>Certified reference materials (CRMs), blanks and pulp duplicate were randomly inserted to manage the quality of data.</li> <li>Sample sizes are well in excess of standard industry requirements.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were routinely assayed by SGS Mongolia for gold, copper, silver, lead, zinc, arsenic and molybdenum.</li> <li>Au is determined using a 30g fire assay fusion, cupelled to obtain a bead, and digested with Aqua Regia, followed by an atomic absorption spectroscopy (AAS) finish, with a lower detection (LDL) of 0.01 ppm.</li> <li>Cu, Ag, Pb, Zn, As and Mo were routinely determined using a three-acid-digestion of a 0.3g sub-sample followed by an AAS finish (AAS21R). Samples are digested with nitric, hydrochloric and perchloric acids to dryness before leaching with hydrochloric acid to dissolve soluble salts and made to 15ml volume with distilled water. The LDL for copper using this technique was 2ppm. Where copper is over-range (&gt;1% Cu), it is analysed by a second analytical technique (AAS22S), which has a higher upper detection limit (UDL) of 5% copper.</li> <li>Quality assurance was provided by introduction of known certified standards, blanks and duplicate samples on a routine basis.</li> <li>Assay results outside the optimal range for methods were re-analysed by appropriate methods.</li> <li>Ore Research Pty Ltd certified copper and gold standards have been implemented as a part of QAQC procedures, as well as coarse and pulp blanks, and certified matrix matched copper-gold standards.</li> <li>QAQC monitoring is an active and ongoing</li> </ul>

For personal use only

Criteria	JORC Code (Section 1) Explanation	Commentary
		processes on batch by batch basis by which unacceptable results are re-assayed as soon as practicable.
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All assay data QAQC is checked prior to loading into the Geobank data base.</li> <li>The data is managed by XAM geologists.</li> <li>The data base and geological interpretation is collectively managed by XAM.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill holes and trenches have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy.</li> <li>All diamond drill holes have been down hole surveyed to collect the azimuth and inclination at specific depths. Two principal types of survey method have been used over the duration of the drilling programs including Eastman Kodak and Flexit.</li> <li>UTM WGS84 48N grid.</li> <li>The DTM is based on 1m contours with an accuracy of <math>\pm 0.01</math>m.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling and trenching has been completed on nominal north-south sections, commencing at 120m spacing and then closing to 40m for resource estimation.</li> <li>Vertical spacing of intercepts on the mineralised zones similarly commences at 100m spacing and then closing to 50m for resource estimation.</li> <li>Drilling has predominantly occurred with angled holes approximately 70° to 60° inclination below the horizontal and either drilling to north or south, depending on the dip of the target mineralised zone.</li> <li>Holes have been drilled to 1,000m vertical depth.</li> <li>The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation procedure and has been taken into account in 3D space when determining the classifications to be applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</li> </ul>	<ul style="list-style-type: none"> <li>Drilling and trenching has been predominantly completed on north-south section lines along the strike of the known mineralised zones and from either the north or the south depending on the dip.</li> <li>Limited trenching has been completed along strike (subparallel) orientations to mineralisation - no conclusion regarding</li> </ul>

Criteria	JORC Code (Section 1) Explanation	Commentary
	should be assessed and reported if material.	width and grade can be drawn from this data; <ul style="list-style-type: none"> <li>Vertical to South dipping ore bodies were predominantly drilled to the north.</li> <li>Scissor drilling, (drilling from both north and south), as well as vertical drilling, has been used in key mineralised zones to achieve unbiased sampling of possible structures and mineralised zones.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are dispatched from site through via company employees and secure company vehicles to the Laboratories.</li> <li>Samples are signed for at the Laboratory with confirmation of receipt sent by email.</li> <li>Samples are then stored at the lab and returned to a locked storage site.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul style="list-style-type: none"> <li>Internal audits of sampling techniques and data management on a regular basis, to ensure industry best practice is employed at all times.</li> <li>External review and audit have been conducted by the following groups: <ul style="list-style-type: none"> <li>2012 – AMC Consultants Pty Ltd. was engaged to conduct an Independent Technical Report which reviewed drilling and sampling procedures. It was concluded that sampling and data record was appropriate for use in resource estimation including that required by NI 43-101 standards.</li> <li>2013 - Mining Associates Ltd. was engaged to conduct an Independent Technical Report to review drilling, sampling techniques, QAQC and previous resource estimates. Methods were found to conform to international best practice.</li> </ul> </li> </ul>

## 1.2 JORC TABLE 1 - SECTION 2 - REPORTING OF EXPLORATION RESULTS

(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code (Section 2) Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Project comprises 1 Mining Licence (MV 17387A).</li> <li>100% owned by Oyut Ulaan LLC.</li> <li>Xanadu and its joint venture partner, Mongol Metals can earn a 90% interest in the Kharmagtai porphyry copper-gold project. The remaining 10% is owned by Quincunx Ltd, which in turn is owned by an incorporated joint venture between Kerry Holdings Ltd. and MCS Holding LLC.</li> <li>The Mongolian Minerals Law (2006) and</li> </ul>

Criteria	JORC Code (Section 2) Explanation	Commentary
		Mongolian Land Law (2002) govern exploration, mining and land use rights for the project.
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration was conducted by Quincunx Ltd, Ivanhoe Mines Ltd and Turquoise Hill Resources Ltd including extensive drilling, surface geochemistry, geophysics, mapping and mineral resource estimation to NI 43-101 standards.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation is characterised as porphyry copper-gold type.</li> <li>Porphyry copper-gold deposits are formed from magmatic hydrothermal fluids typically associated with felsic intrusive stocks that have deposited metals as sulphides both within the intrusive and the intruded host rocks. Quartz stockwork veining is typically associated with sulphides occurring both within the quartz veinlets and disseminated throughout the wall rock. Porphyry deposits are typically large tonnage deposits ranging from low to high grade and are generally mined by large scale open pit or underground bulk mining methods. The deposits at Kharmagtai are atypical in that they are associated with intermediate intrusions of diorite to quartz diorite composition, however the deposits are in terms of contained gold significant, and similar gold-rich porphyry deposits.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar.</li> <li>elevation or RL Reduced Level – elevation above sea level in metres) of the drill hole collar .</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill holes are the principal source of geological and grade data for the Project.</li> <li>See figures in main report.</li> </ul>
<b>Data Aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Where aggregate intercepts incorporate</li> </ul>	<ul style="list-style-type: none"> <li>A nominal cut-off of 0.1% Cu is used for identification of potentially significant intercepts for reporting purposes.</li> <li>Most of the reported intercepts are shown in sufficient detail, including maxima and subintervals, to allow the reader to make</li> </ul>

For personal use only

Criteria	JORC Code (Section 2) Explanation	Commentary
	<p>short lengths of high grade results and longer lengths 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.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>an assessment of the balance of high and low grades in the intercept.</p> <ul style="list-style-type: none"> <li>Informing Samples have been composited to two metre lengths honouring the geological domains and adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit).</li> <li>Metal equivalents used the following formula:  <math display="block">\text{CuEq} = \text{Cu\%} \times (\text{Aug/t} \times 0.6378)</math>           Formula is based on a \$2.60/lb copper price and a \$1,300/oz gold price. A gold recovery factor of 78.72% was used.</li> </ul>
<b>Relationship between mineralisation on widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Mineralised structures are variable in orientation, and therefore drill orientations have been adjusted from place to place in order to allow intersection angles as close as possible to true widths.</li> <li>Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts. Tables clearly indicate that true widths will generally be narrower than those reported.</li> <li>Limited trenching has been completed along strike (subparallel) orientations to mineralisation - no conclusion regarding width and grade can be drawn from this data;</li> <li>Resource estimation, as reported later, was done in 3D space.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included 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.</li> </ul>	<ul style="list-style-type: none"> <li>See figures in main report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Resources have been reported at a range of cut-off grades, above a minimum suitable for open pit mining, and above a minimum suitable for underground mining.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Extensive work in this area has been done, and is reported separately.</li> </ul>

For personal use only

Criteria	JORC Code (Section 2) Explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation is open at depth and along strike.</li> <li>Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-300m rl) shows widths and grades potentially suitable for underground extraction.</li> <li>Exploration on going.</li> </ul>

### 1.3 JORC TABLE 1 – SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code (Section 3) Explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The database is a Geobank data base system.</li> <li>Data is logged directly into an Excel spreadsheet logging system with drop down field lists.</li> <li>Validation checks are written into the importing program ensures all data is of high quality.</li> <li>Digital assay data is obtained from the Laboratory, QAQC checked and imported</li> <li>Geobank exported to Access, and connected directly to the GemcomSurpac Software.</li> <li>Data was validated prior to resource estimation by the reporting of basic statistics for each of the grade fields, including examination of maximum values, and visual checks of drill traces and grades on sections and plans.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Andrew Vigar of Mining Associates visited site from 24 and 25 October 2014.</li> <li>The site visit included a field review of the exploration area, an inspection of core, sample cutting and logging procedures and discussions of geology and mineralisation with exploration geologists.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit).</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation resulted in the formation of comprises quartz-chalcopyrite-pyrite-magnetite stockwork veins and minor breccias.</li> <li>The principle ore minerals of economic interest are chalcopyrite, bornite and gold, which occur primarily as infill within these veins. Gold is intergrown with chalcopyrite and bornite.</li> <li>The ore mineralised zones at Altan Tolgoi, Tsagaan Sudal and Zesen Uul are associated with a core of quartz veins that</li> </ul>

Criteria	JORC Code (Section 3) Explanation	Commentary
		<p>were intensely developed in and the quartz diorite intrusive stocks and/or dykes rocks. These vein arrays can be described as stockwork, but the veins have strong developed preferred orientations.</p> <ul style="list-style-type: none"> <li>• Sulphidemineralisation is zoned from a bornite-rich core that zone outwards to chalcopyrite-rich and then outer pyritic haloes, with gold closely associated with bornite.</li> <li>• Drilling indicates that the supergene profile has been oxidised to depths up to 60 metres below the surface. The oxide zone comprises fracture controlled copper and iron oxides; however there is no obvious depletion or enrichment of gold in the oxide zone.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>• Altan Tolgoi comprises two main mineralised zones, northern and southern stockwork zones (AT-N and AT-S) which are approximately 100 metres apart and hosted in diorite and quartz diorite porphyries. The AT-S is at least 550 metres long, 600 metres deep and contains strong quartz-chalcopyrite-pyrite stockwork veining and associated high grade copper-gold mineralisation. The stockwork zone widens eastward from a 20 to 70 metres wide high-grade zone in the western and central sections to a 200 metres wide medium-grade zone in the eastern most sections. Mineralisation remains open at depth and along strike to the east.</li> <li>• The AT-N consists of a broad halo of quartz that is 250 metres long, 150 metres wide long and at least 350 metres deep.</li> <li>• TS consists of a broad halo of quartz veins that is 850 metres long, 550 metres wide long and at least 500 metres deep, and forms a pipe like geometry.</li> <li>• ZU forms a sub vertical body of stockwork approximately 350 × 100 metres by at least 200 metres and plunges to the southeast.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>• The availability of check estimates,</li> </ul>	<ul style="list-style-type: none"> <li>• The estimate Estimation Performed using Ordinary Kriging.</li> <li>• Variograms are reasonable along strike.</li> <li>• Minimum &amp; Maximum Informing samples is 5 and 20 (1st pass), Second pass is 3 and 20.</li> <li>• Copper and Gold Interpreted separately on NS sections and estimated as separate domains.</li> <li>• Halo mineralisation defined as 0.12% Cu</li> </ul>

For personal use only

Criteria	JORC Code (Section 3) Explanation	Commentary
	<p>previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</p> <ul style="list-style-type: none"> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>and 0.12g/t Au Grade.</p> <ul style="list-style-type: none"> <li>• The mineralised domains were manually digitised on cross sections defining mineralisation. Three dimensional grade shells (wireframes) for each of the metals to be estimated were created from the sectional interpretation. Construction of the grade shells took into account prominent lithological and structural features. For copper, grade shells were constructed for each deposit at a cut-off of 0.12% and 0.3% Cu. For gold, wireframes were constructed at a threshold of 0.12g/t and 0.3 g/t. These grade shells took into account known gross geological controls in addition to broadly adhering to the above mentioned thresholds.</li> <li>• Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% appropriate for a large bulk mining open pit and 0.5% for bulk block caving underground.</li> <li>• A set of plans and cross-sections that displayed colour-coded drill holes were plotted and inspected to ensure the proper assignment of domains to drill holes.</li> <li>• The faulting interpreted to have had considerable movement, for this reason, the fault surface were used to define two separate structural domains for grade estimation.</li> <li>• Six metre down-hole composites were chosen for statistical analysis and grade estimation of Cu and Au. Compositing was carried out downhole within the defined mineralisation halos. Composite files for individual domains were created by selecting those samples within domain wireframes, using a fix length and 50% minimum composite length.</li> <li>• A total of 4,428 measurements for specific gravity are recorded in the database, all of which were determined by the water immersion method. The average density of all samples is 2.74 t/m<sup>3</sup>. In detail there are some differences in density between different rock types, but since the model does not include geological domains a single pass ID2 interpolation was applied.</li> <li>• Primary grade interpolation for the two metals was by ordinary kriging of capped 6m composites. A two-pass search approach was used, whereby a cell failing to receive a grade estimate in a previous pass would be resubmitted in a subsequent</li> </ul>

For personal use only

Criteria	JORC Code (Section 3) Explanation	Commentary
		and larger search pass. <ul style="list-style-type: none"> <li>The Mineral Resource estimate meets the requirements of JORC 2012 and has been reported considering geological characteristics, grade and quantity, prospects for eventual economic extraction and location and extents. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories using relevant copper-equivalent cut-off values;  <math>CuEq = Cu\% \times (Aug/t \times 0.6378)</math>            Formula is based on a \$2.60/lb copper price and a \$1,300/oz gold price. A gold recovery factor of 78.72% was used.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>All tonnages are reported on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for possible open pit and 0.5% for underground.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No mining factors have been applied to the in situ grade estimates for mining dilution or loss as a result of the grade control or mining process.</li> <li>The deposit is amenable to large scale bulk mining.</li> <li>The Mineral resource is reported above an optimised pit shell. (Lerch Grossman algorithm), mineralisation below the pit shell is reported at a higher cut-off to reflect the increased costs associated with block cave underground mining</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical factors have been applied to the in situ grade estimates.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of</li> </ul>	<ul style="list-style-type: none"> <li>An environmental baseline study was completed in 2003 by Eco Trade Co. Ltd. of Mongolia in cooperation with Sustainability</li> </ul>

For personal use only

Criteria	JORC Code (Section 3) Explanation	Commentary
	<p>the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</p>	<p>Pty Ltd of Australia. The baseline study report was produced to meet the requirements for screening under the Mongolian Environmental Impact Assessment (EIA) Procedures administered by the Mongolian Ministry for Nature and Environment (MNE).</p>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>• A total of 4,428 measurements for specific gravity are recorded in the database, all of which were determined by the water immersion method.</li> <li>• The average density of all samples is approximately 2.74 t/m<sup>3</sup>. In detail there are some differences in density between different rock types, but since the model does not include geological domains a single estimation pass (ID2) was applied to a density attribute.</li> <li>• There is no material impact on global tonnages, but it should be noted that density is a function of both lithology and alteration (where intense magnetite/sulphide is present).</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>• Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>• The mineral resource classification protocols, for drilling and sampling, sample preparation and analysis, geological logging, database construction, interpolation, and estimation parameters are described in the Main Report have been used to classify the 2015 resource.</li> <li>• The Mineral Resource statement relates to global estimates of in situ tonnes and grade</li> <li>• The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. The classifications reflect the competent person's view of the Kharmagtai Copper Gold Project.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• XAM's internal review and audit of the Mineral Resource Estimate consisted of data analysis and geological interpretation of individual cross-sections, comparing drill-hole data with the resource estimate block model.</li> <li>• Good correlation of geological and grade boundaries were observed</li> <li>• 2013 - Mining Associates Ltd. was</li> </ul>

For personal use only

Criteria	JORC Code (Section 3) Explanation	Commentary
		engaged to conduct an Independent Technical Report to review drilling, sampling techniques, QAQC and previous resource estimates. Methods were found to conform to international best practice.
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>An approach to the resource classification was used which combined both confidence in geological continuity (domain wireframes) and statistical analysis. The level of accuracy and risk is therefore reflected in the allocation of the measured, indicated and inferred resource categories.</li> <li>Resource categories were constrained by geological understanding, data density and quality, and estimation parameters. It is expected that further work will extend this considerably.</li> <li>Resources estimates have been made on a global basis and relates to in situ grades.</li> <li>Confidence in the Indicated resource is sufficient to allow application of Modifying Factors within a technical and economic study. The confidence in Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters.</li> <li>The deposits are not currently being mined.</li> <li>There is surface evidence of historic artisanal workings.</li> <li>No production data is available.</li> </ul>

#### 1.4 JORC TABLE 1 – SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

Ore Reserves are not reported so this is not applicable to this report.

For personal use only

## Appendix 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

**Name of entity**

<b>XANADU MINES LIMITED</b>
-----------------------------

**ABN**

92 114 249 026
----------------

**Quarter ended ("current quarter")**

31 December 2016
------------------

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(1,855)	(4,202)
(b) development	-	-
(c) production	-	-
(d) staff costs	(441)	(1,953)
(e) administration and corporate costs	(286)	(1,213)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	10	36
1.5 Interest and other costs of finance paid	(101)	(396)
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(2,673)</b>	<b>(7,728)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

For personal use only

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	(4,129)
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-</b>	<b>(4,129)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	900	12,166
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(55)	(764)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>845</b>	<b>11,402</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	9,784	8,639
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,673)	(7,728)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(4,129)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	845	11,402
4.5	Effect of movement in exchange rates on cash held	321	93
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>8,277</b>	<b>8,277</b>

For personal use only

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	8,277	9,784
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>8,277</b>	<b>9,784</b>

<b>6. Payments to directors of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to these parties included in item 1.2	252
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

N/A

<b>7. Payments to related entities of the entity and their associates</b>	<b>Current quarter \$A'000</b>
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

N/A

For personal use only

## Mining exploration entity and oil and gas exploration entity quarterly report

8. <b>Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities	3,813	3,813
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

Secured loan facility by Noble Resources International Pte.Ltd at interest rate LIBOR + 10%.

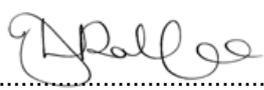
9. <b>Estimated cash outflows for next quarter</b>	\$A'000
9.1 Exploration and evaluation	1,368
9.2 Development	-
9.3 Production	-
9.4 Staff costs	481
9.5 Administration and corporate costs	288
9.6 Other (provide details if material)	101
<b>9.7 Total estimated cash outflows</b>	<b>2,238</b>

10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	N/A			
10.2 Interests in mining tenements and petroleum tenements acquired or increased	N/A			

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here:

  
.....  
Company secretary

Date: 31 January 2017

Print name: Janine Rolfe

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

For personal use only