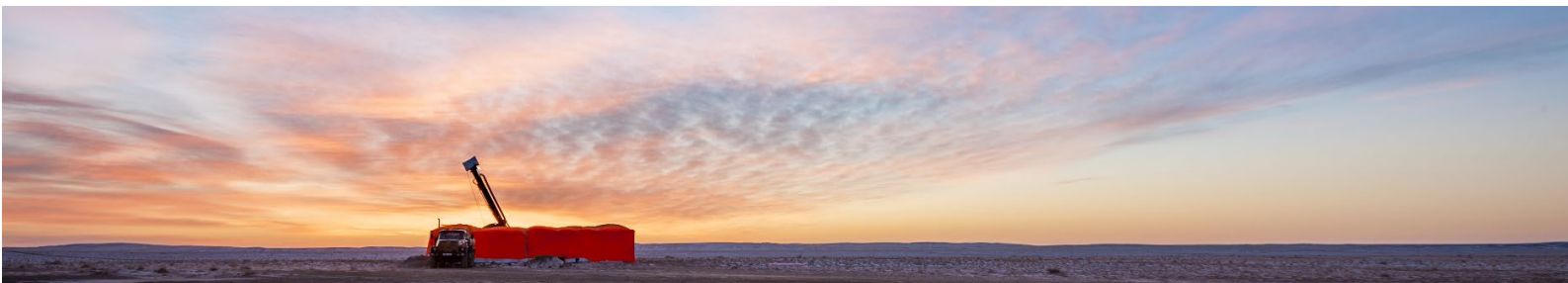


XANADU MINES



Positive Metallurgical Test Results for Oxidised Material at Kharmagtai

1 August 2022

Xanadu Mines Ltd (**ASX: XAM, TSX: XAM**) (**Xanadu** or the **Company**) is pleased to update the market on its on-going metallurgical test program at the Kharmagtai Copper-Gold Project in the South Gobi region of Mongolia.

Highlights

- Preliminary metallurgical test work completed on partially oxidised material from surface to 30 metres depth.
- Glycine and cyanide leach tests delivered **metallurgical recoveries of up to 91% gold and 46% copper**, with head grades ranging between 0.52 g/t to 2.25 g/t Au and 0.12% to 0.67% Cu.
- All partially oxidised material leached readily **at a coarse P₈₀ > 2mm particle size**, indicating the potential for a heap leach treatment.
- Indicates a potential treatment path for approx. 90 million tonnes (**Mt**) of oxidised material treated as waste in the Scoping Study¹ due to low flotation recovery.
- First step in evaluating a material uplift opportunity identified in the Scoping Study, to generate additional cash flow by leaching partially oxidised, near surface material.
- Further mineralogical studies required to confirm viability and optimise the process.

Xanadu's Executive Chairman & Managing Director, Colin Moorhead said:

"These preliminary results are a very positive, first step as we test the uplift opportunities in the Kharmagtai Scoping Study. The base case assumed that all ore is processed through a standard sulphide circuit, which means that the partially oxidised material at the surface, which does not float, ends up being

¹ ASX/TSX Announcement, 6 April 2022 - Scoping Study - Kharmagtai Copper-Gold Project

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treated as zero value waste. If we can turn that material into cash generating ore by leaching with glycine and cyanide, it has potential to drive significant value uplift for the Kharmagtai project.”

Metallurgical Recoveries

Results from bottle roll tests at varying cyanide and glycine addition rates were conducted using 2.5 kilograms per tonne (**kg/t**) cyanide and 2.5kg/t glycine tests over a 48-hour conventional leach time, shown in **Table 1**.

Table 1: Gold, silver and copper recoveries at 2.5kg/t cyanide and 2.5kg/t glycine addition

Sample	Recovery (%)	
	Gold Au	Copper Cu
1	88.5	20.1
2	82.3	13.1
3	91.4	45.8
4	70.3	31.9

These results demonstrate achievement of high gold recoveries at modest cyanide addition rates and in the presence of significant cyanide soluble copper. The coarse particle size indicates that heap leach treatment may be feasible.

Generally, gold leaching increases with decreasing particle size, providing a larger specific surface area for solution contact. Gold recoveries are expected to improve by grinding to 150 micrometre (**µm**) particle size, typically used for Carbon in Leach (**CIL**) processing.

Cyanide and glycine consumption was relatively low, indicating high potential for recovering and recycling of both reagents via the eventual optimal processing route. The addition of glycine reduced the cyanide consumption versus the cyanide consumption when leached using traditional cyanidation. Actual cyanide consumption rates ranged from 1.6kg/t to 2.1kg/t.

Test Program Scope

There is up to 90Mt of partially oxidised material at Kharmagtai, with 80% located near surface at Stockwork Hill, White Hill and Golden Eagle. If this material was processed as ore rather than pre-stripping, it could reduce waste rock production by approx. 10%.

The scope of the test program included head grade analysis and combined cyanide and glycine leach test work on four composite samples of previously untested, partially oxidised material from the upper 30m across the Kharmagtai mineralised system. The objective of the leach tests was to determine metallurgical recovery of gold and copper, and gauge potential of glycine addition to enhance recovery and reduce cyanide consumption. These results will inform future variability test work to evaluate an optimal processing route for this material.

Leaching with Glycine and Cyanide

Cyanide and glycine leaching was investigated on this partially oxidised material. Low cyanide addition, coupled with a glycine-dominant lixiviant, has many beneficial properties, particularly for leaching of precious metals with elevated copper content. This occurs due to copper preferentially bonding to glycine rather than cyanide, thus freeing the cyanide to leach gold.

Glycine is a widely available bulk reagent with characteristics favourable for use in mineralogical processing; non-toxic, water soluble, stable, non-volatile and can be recycled. Under alkaline conditions, glycine forms stable complexes with precious and base metals but not with iron, magnesium, or manganese.

Metallurgical test work was undertaken by Perth based Mining and Process Solutions (**MPS**), who hold the rights for leaching metals using glycine with cyanide.

Sample Selection and Preparation

Four composite samples were collected from Stockwork Hill, White Hill and Golden Eagle deposits at Kharmagtai project, as being representative of each of these zones. Samples were coarse rejects (P80>2mm particle size), consisting of mixed oxide and sulphide material taken from previously drilled diamond core holes. There is a risk that aged diamond core will deliver lower metallurgical recovery than test work on newly drilled material, due to post-drilling oxidation. Care was taken during sample selection to avoid those exhibiting evidence of post-drilling oxidation.

Sample preparation consisted of homogenising and splitting samples “as received” into their respective composites and labelling “Sample 1” through to “Sample 4”, with no further crushing or grinding. Each split was rotary split and homogenised for head analysis and sub-samples taken for test work. Head assays for Au, Silver (**Ag**) & Cu were conducted by fire assay for each sample. Prior to leach test work, samples were cured in 10k grams per tonne (**g/t**) sulfuric acid for 24 hours to improve copper extraction.

Metallurgical sample locations, zones and head assay grades are detailed in **Table 2**. Drill hole sample details are outlined in **Table 3**, and collar locations for drill holes sampled are outlined in **Figure 1**.

Table 2: Metallurgical sample details for partially oxidised test work program

Sample	Sample drill holes	Zone	Head assay grade		
			g/t Au	g/t Ag	% Cu
1	KHDDH393, KHDDH415, KHDDH491, KHDDH499	Stockwork Hill (South)	2.25	3.0	0.66
2	KHDDH246, KHDDH266, KHDDH267, KHDDH359, KHDDH527	Stockwork Hill (North)	0.95	2.0	0.67
3	KHDDH401, KHDDH514, KHDDH517, KHDDH518	Golden Eagle	1.39	1.0	0.12
4	KHDDH230, KHDDH340, KHDDH437, KHDDH480, KHDDH489	White Hill	0.52	2.0	0.45

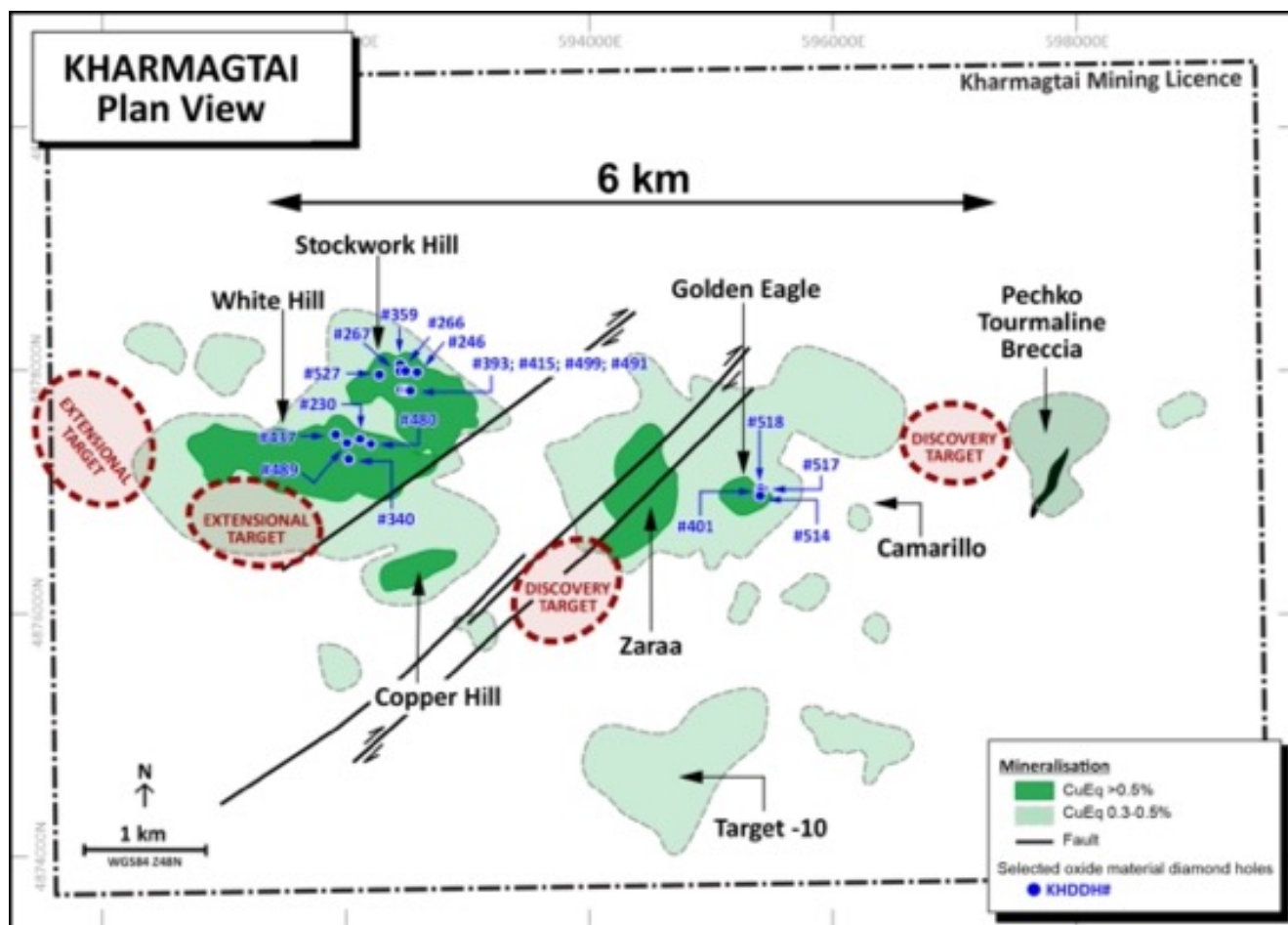
Table 3: Drill hole sample details for partially oxidised test work program

Hole ID	Easting (m)	Northing (m)	Height (m)	Azimuth (°)	Dip (°)	Sample True Depth (m)	
						Start	Finish
KHDDH393 ²	592,455	4,877,833	1,288.22	101.50	-60	33	34
KHDDH415	592,486	4,877,834	1,288.06	123.00	-85	18	20
KHDDH491	592,523	4,877,822	1,287.63	0.00	-90	10	11
KHDDH499	592,504	4,877,828	1,287.89	0.00	-60	15	16
KHDDH246	592,580	4,877,983	1,289.00	0.00	-45	26	28
KHDDH266	592,491	4,877,988	1,289.00	0.00	-45	28	30
KHDDH267 ²	592,450	4,877,989	1,290.50	0.00	-45	32	34
KHDDH359	592,443	4,878,038	1,290.50	180.00	-68	18	20
KHDDH527	592,274	4,877,961	1,292.86	178.00	-72	28	30
KHDDH401 ¹	595,402	4,876,996	1,268.52	216.00	-60	43	45
KHDDH514 ¹	595,398	4,876,972	1,268.74	0.00	-90	46	47
KHDDH517 ¹	595,423	4,877,025	1,268.59	0.00	-90	40	41
KHDDH518 ¹	595,400	4,877,024	1,268.35	0.00	-90	45	46
KHDDH230	592,114	4,877,433	1,300.21	90.00	-50	16	18
KHDDH340 ²	592,023	4,877,266	1,309.38	5.00	-80	48	50
KHDDH437	591,914	4,877,472	1,299.00	205.00	-70	10	12
KHDDH480	592,200	4,877,398	1,300.43	0.00	-60	25	27
KHDDH489	592,005	4,877,400	1,303.00	215.00	-65	10	12
KHDDH491	592,455	4,877,833	1,288.22	101.50	-60	33	34

1 Golden Eagle has 25m barren cover overlaying mineralisation, such that partially oxidised material commences at 25m true depth.

2 Sample true depth exceeds 30m for each of these drill holes given each deposit has a different depth from surface to base of oxidation.

Figure 1: Collar locations for drill holes sampled in metallurgical test work



Future Test Work

Leaching of partially oxidised material will be further investigated as follows:

1. Characterise partially oxidised material to quantify copper species present.
2. Optimise cyanide and glycine reagent addition to maximise metallurgical recovery and minimise cyanide consumption.
3. Undertake variability test work across the mineralised partially oxidised zones to understand leaching kinetics.
4. Undertake grind variability assessment as part of glycine and cyanide leaching to understand liberation and maximum achievable metal recovery.
5. Determine suitable flowsheet options.

Partially oxidised material test work is a subset of the broader Kharmagtai metallurgical test work program. A comprehensive metallurgy program during the Pre-Feasibility Study over next 12 to 18 months will investigate flotation and comminution properties of the mineralisation and alteration styles at Kharmagtai,

aiming to determine optimum flowsheet and generate inputs for engineering design. This will also generate data to inform the copper and gold recovery models, and allow operating costs estimates to be calculated. Concentrate samples will be generated for marketing studies as part of the broader metallurgy program.

About Xanadu Mines

Xanadu is an ASX and TSX listed Exploration company operating in Mongolia. We give investors exposure to globally significant, large-scale copper-gold discoveries and low-cost inventory growth. Xanadu maintains a portfolio of exploration projects and remains one of the few junior explorers on the ASX or TSX who control a globally significant copper-gold deposit in our flagship Kharmagtai project. For information on Xanadu visit: www.xanadumines.com.

Colin Moorhead

Executive Chairman & Managing Director

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This Announcement was authorised for release by Xanadu's Executive Chairman & Managing Director.

Appendix 1: Statements and Disclaimers

Competent Person Statements

The information in this Announcement that relates to exploration results is based on information compiled by Dr Andrew Stewart, who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is an employee of Xanadu and is a Member of the Australasian Institute of Geoscientists, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as the “Competent Person” as defined in the 2012 Edition of the *Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves* and the *National Instrument 43-101*. Dr Stewart consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this Announcement that relates to metallurgy and metallurgical test work has been reviewed by Andrew Goulsbra, AusIMM, B.App Sci (Met). Mr Goulsbra is not an employee of the Company but is employed as a contract consultant. Mr Goulsbra is a member of the Australasian Institute of Mining and Metallurgy; he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent as defined in the 2012 Edition of the *Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves* and the *National Instrument 43-101*. Mr Goulsbra consents to the inclusion in this report of the contained technical information in the form and context as it appears.

Forward-Looking Statements

Certain statements contained in this Announcement, including information as to the future financial or operating performance of Xanadu and its projects may also include statements which are ‘forward-looking statements’ that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These ‘forward-looking statements’ are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Xanadu, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Xanadu disclaims any intent or obligation to update publicly or release any revisions to any forward-looking statements, whether as a result of new information, future events, circumstances or results or otherwise after the date of this Announcement or to reflect the occurrence of unanticipated events, other than required by the *Corporations Act 2001* (Cth) and the Listing Rules of the Australian Securities Exchange (**ASX**) and Toronto Stock Exchange (**TSX**). The words ‘believe’, ‘expect’, ‘anticipate’, ‘indicate’, ‘contemplate’, ‘target’, ‘plan’, ‘intends’, ‘continue’, ‘budget’, ‘estimate’, ‘may’, ‘will’, ‘schedule’ and similar expressions identify forward-looking statements.

All ‘forward-looking statements’ made in this Announcement are qualified by the foregoing cautionary statements. Investors are cautioned that ‘forward-looking statements’ are not guarantee of future performance and accordingly investors are cautioned not to put undue reliance on ‘forward-looking statements’ due to the inherent uncertainty therein.

For further information please visit the Xanadu Mines’ Website at www.xanadumines.com.

Appendix 2: Kharmagtai Table 1 (JORC Code, 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 8 December 2021.

JORC TABLE 1, SECTION 1 - SAMPLING TECHNIQUES & DATA

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

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> Sampling techniques reported herein are described in detail in the text of this report Representative $\frac{1}{2}$ core samples were split from PQ, HQ & NQ diameter diamond drill core on site using rock saws, on a routine 2m sample interval that also honours lithological/intrusive contacts. The orientation of the cut line is controlled using the core orientation line ensuring uniformity of core splitting wherever the core has been successfully oriented. Sample intervals are defined and subsequently checked by geologists, and sample tags are attached (stapled) to the plastic core trays for every sample interval. Reverse Circulation (RC) chip samples are $\frac{1}{4}$ splits from one meter (1m) intervals using a 75%:25% riffle splitter to obtain a 3kg sample RC samples are uniform 2m samples formed from the combination of two $\frac{1}{4}$ split 1m samples.
Drilling techniques	<ul style="list-style-type: none"> The Mineral Resource Estimation and metallurgical sampling has been based upon diamond drilling of PQ, HQ and NQ diameters with both standard and triple tube core recovery configurations, RC drilling and surface trenching with channel sampling. All drill core drilled by Xanadu has been oriented using the "Reflex Ace" tool.
Drill sample recovery	<ul style="list-style-type: none"> Diamond drill core recoveries were assessed using the standard industry (best) practice which involves removing the core from core trays; reassembling multiple core runs in a v-rail; measuring core lengths with a tape measure, assessing recovery against core block depth measurements and recording any measured core loss for each core run. Diamond core recoveries average 97% through mineralisation. Overall, core quality is good, with minimal core loss. Where there is localised faulting and or fracturing core recoveries decrease, however, this is a very small percentage of the mineralised intersections. RC recoveries are measured using whole weight of each 1m intercept measured before splitting Analysis of recovery results vs grade shows no significant trends that might indicate sampling bias introduced by variable recovery in fault/fracture zones.
Logging	<ul style="list-style-type: none"> All drill core is geologically logged by well-trained geologists using a modified "Anaconda-style" logging system methodology. The Anaconda method of logging and mapping is specifically designed for porphyry Cu-Au mineral systems and is entirely appropriate to support Mineral Resource Estimation, mining and metallurgical studies. Logging of lithology, alteration and mineralogy is intrinsically qualitative in nature. However, the logging is subsequently supported by 4 Acid ICP-MS (48 element) geochemistry and SWIR spectral mineralogy (facilitating semi-quantitative/calculated mineralogical, lithological and alteration classification) which is integrated with the logging to improve cross section interpretation and 3D geological model development. Drill core is also systematically logged for both geotechnical features and geological structures. Where drill core has been successfully oriented, the orientation of structures

	<p>and geotechnical features are also routinely measured.</p> <ul style="list-style-type: none"> Both wet and dry core photos are taken after core has been logged and marked-up but before drill core has been cut.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> All drill core samples are ½ core splits from either PQ, HQ or NQ diameter cores. A routine 2m sample interval is used, but this is varied locally to honour lithological/intrusive contacts. The minimum allowed sample length is 30cm. Core is appropriately split (onsite) using diamond core saws with the cut line routinely located relative to the core orientation line (where present) to provide consistency of sample split selection. The diamond saws are regularly flushed with water to minimize potential contamination. A field duplicate ¼ core sample is collected every 30th sample to ensure the “representivity of the in-situ material collected”. The performance of these field duplicates is routinely analysed as part of Xanadu’s sample QC process. Routine sample preparation and analyses of DDH samples were carried out by ALS Mongolia LLC (ALS Mongolia), who operates an independent sample preparation and analytical laboratory in Ulaanbaatar. All samples were prepared to meet standard quality control procedures as follows: Crushed to 75% passing 2mm, split to 1kg, pulverised to 85% passing 200 mesh (75 microns) and split to 150g sample pulp. ALS Mongolia Geochemistry labs quality management system is certified to ISO 9001:2008. The sample support (sub-sample mass and comminution) is appropriate for the grainsize and Cu-Au distribution of the porphyry Cu-Au mineralization and associated host rocks. Sample preparation at Mining And mineral Process Solutions (MPS), Perth, consisted of homogenising and splitting samples “as received” into their respective composites and labelling them “Sample 1” through to “Sample 4”. Each split was then rotary split and homogenised for head analysis and sub-samples were taken for testwork.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> All samples were routinely assayed by ALS Mongolia for gold Au is determined using a 25g 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. All samples were also submitted to ALS Mongolia for the 48-element package ME-ICP61 using a four-acid digest (considered to be an effective total digest for the elements relevant to the Mineral Resource Estimate (MRE)). Where copper is over-range (>1% Cu), it is analysed by a second analytical technique (Cu-OG62), which has a higher upper detection limit (UDL) of 5% copper. Quality assurance has been managed by insertion of appropriate Standards (1:30 samples – suitable Ore Research Pty Ltd certified standards), Blanks (1:30 samples), Duplicates (1:30 samples – ¼ core duplicate) by Xanadu. Assay results outside the optimal range for methods were re-analysed by appropriate methods. Ore Research Pty Ltd certified copper and gold standards have been implemented as a part of QC procedures, as well as coarse and pulp blanks, and certified matrix matched copper-gold standards. QC monitoring is an active and ongoing processes on batch by batch basis by which unacceptable results are re-assayed as soon as practicable. Prior to 2014: 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) at SGS Mongolia. Samples were 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 was

	<p>over-range (>1% Cu), it was analysed by a second analytical technique (AAS22S), which has a higher upper detection limit (UDL) of 5% copper. Gold analysis method was essentially unchanged.</p> <ul style="list-style-type: none"> • All metallurgical testwork assays were carried out at ALS, Perth. Gold and copper solid assays were determined using Fire Assay followed by AAS. Solution assays were determined using AAS.
Verification of sampling and assaying	<ul style="list-style-type: none"> • All assay data QA/QC is checked prior to loading into Xanadu's Geobank data base. • The data is managed by Xanadu geologists. • The data base and geological interpretation is managed by Xanadu. • Check assays are submitted to an umpire lab (SGS Mongolia) for duplicate analysis. • No twinned drill holes exist. • There have been no adjustments to any of the assay data.
Location of data points	<ul style="list-style-type: none"> • Diamond drill holes have been surveyed with a differential global positioning system (DGPS) to within 10cm accuracy. • The grid system used for the project is UTM WGS-84 Zone 48N • Historically, Eastman Kodak and Flexit electronic multi-shot downhole survey tools have been used at Kharmagtai to collect down hole azimuth and inclination information for the majority of the diamond drill holes. Single shots were typically taken every 30m to 50m during the drilling process, and a multi-shot survey with readings every 3-5m are conducted at the completion of the drill hole. As these tools rely on the earth's magnetic field to measure azimuth, there is some localised interference/inaccuracy introduced by the presence of magnetite in some parts of the Kharmagtai mineral system. The extent of this interference cannot be quantified on a reading-by-reading basis. • More recently (since September 2017), a north-seeking gyro has been employed by the drilling crews on site (rented and operated by the drilling contractor), providing accurate downhole orientation measurements unaffected by magnetic effects. Xanadu have a permanent calibration station setup for the gyro tool, which is routinely calibrated every 2 weeks (calibration records are maintained and were sighted) • The project Digital Terrain Model (DTM) is based on 1m contours from satellite imagery with an accuracy of ± 0.1 m.
Data spacing and distribution	<ul style="list-style-type: none"> • Holes spacings range from <50m spacings within the core of mineralization to +500m spacings for exploration drilling. Hole spacings can be determined using the sections and drill plans provided. • Holes range from vertical to an inclination of -60 degrees depending on the attitude of the target and the drilling method. • The data spacing and distribution is sufficient to establish anomalism and targeting for porphyry Cu-Au, tourmaline breccia and epithermal target types. • Holes have been drilled to a maximum of 1,400m vertical depth. • The data spacing and distribution is sufficient to establish geological and grade continuity, and to support the Mineral Resource classification.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Drilling is conducted in a predominantly regular grid to allow unbiased interpretation and targeting. • Scissor drilling, as well as some vertical and oblique drilling, has been used in key mineralised zones to achieve unbiased sampling of interpreted structures and mineralised zones, and in particular to assist in constraining the geometry of the mineralised hydrothermal tourmaline-sulphide breccia domains.
Sample security	<ul style="list-style-type: none"> • Samples are delivered from the drill rig to the core shed twice daily and are never left unattended at the rig. • Samples are dispatched from site in locked boxes transported on Xanadu company vehicles to ALS lab in Ulaanbaatar.

	<ul style="list-style-type: none"> • Sample shipment receipt is signed off at the Laboratory with additional email confirmation of receipt. • Samples are then stored at the lab and returned to a locked storage site.
Audits or reviews	<ul style="list-style-type: none"> • Internal audits of sampling techniques and data management are undertaken on a regular basis, to ensure industry best practice is employed at all times. • External reviews and audits have been conducted by the following groups: • 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 to an appropriate standard. • 2013: Mining Associates Ltd. was engaged to conduct an Independent Technical Report to review drilling, sampling techniques and QA/QC. Methods were found to conform to international best practice. • 2018: CSA Global reviewed the entire drilling, logging, sampling, sample shipping and laboratory processes during the competent persons site visit for the 2018 Mineral Resource Estimate and found the systems and adherence to protocols to be to an appropriate standard.

JORC TABLE 1, SECTION 2 - REPORTING OF EXPLORATION RESULTS

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

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • The Project comprises 2 Mining Licences (MV-17129A Oyut Ulaan and (MV-17387A Kharmagtai): <ul style="list-style-type: none"> ○ Xanadu now owns 100% of Vantage LLC, the 100% owner of the Oyut Ulaan mining licence. ○ The Kharmagtai mining license MV-17387A is 100% owned by Oyut Ulaan LLC. Xanadu has an 85% interest in Mongol Metals LLC, which has 90% interest in Oyut Ulaan LLC. The remaining 10% in Oyut Ulaan LLC is owned by Quincunx (BVI) Ltd ("Quincunx"). • The <i>Mongolian Minerals Law (2006)</i> and <i>Mongolian Land Law (2002)</i> govern exploration, mining and land use rights for the project.
Exploration done by other parties	<ul style="list-style-type: none"> • Previous exploration at Kharmagtai was conducted by Quincunx Ltd, Ivanhoe Mines Ltd and Turquoise Hill Resources Ltd including extensive drilling, surface geochemistry, geophysics, mapping. • Previous exploration at Red Mountain (Oyut Ulaan) was conducted by Ivanhoe Mines.
Geology	<ul style="list-style-type: none"> • The mineralisation is characterised as porphyry copper-gold type. • 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.
Drill hole information	<ul style="list-style-type: none"> • Diamond drill holes are the principal source of geological and grade data for the Project. • See figures in this ASX/TSX Announcement.
Data aggregation methods	<ul style="list-style-type: none"> • A nominal cut-off of 0.1% copper equivalent (CuEq) is used in copper dominant systems for identification of potentially significant intercepts for reporting purposes. Higher grade cut-offs are 0.3%, 0.6% and 1% CuEq.

Criteria	Commentary
	<ul style="list-style-type: none"> A nominal cut-off of 0.1g/t gold equivalent (AuEq) is used in gold dominant systems like Golden Eagle for identification of potentially significant intercepts for reporting purposes. Higher grade cut-offs are 0.3g/t, 0.6g/t and 1g/t AuEq. Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0.6% and 1% CuEq. Most of the reported intercepts are shown in sufficient detail, including maxima and subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept. 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). <p>The copper equivalent (CuEq or eCu) calculation represents the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage with a metallurgical recovery factor applied.</p> <p>Copper equivalent (CuEq or eCu) grade values were calculated using the following formula: $\text{CuEq or eCu} = \text{Cu} + \text{Au} * 0.60049 * 0.86667,$</p> <p>Gold equivalent (AuEq or eAu) grade values were calculated using the following formula: $\text{AuEq or eAu} = \text{Au} + \text{Cu} / 0.60049 * 0.86667.$</p> <p>Where: Cu - copper grade (%), Au - gold grade (g/t), 0.60049 - conversion factor (gold to copper), 0.86667 - relative recovery of gold to copper (86.67%)</p> <p>The copper equivalent formula was based on the following parameters (prices are in USD):</p> <ul style="list-style-type: none"> Copper price - 3.4 \$/lb Gold price - 1400 \$/oz Copper recovery - 90% Gold recovery - 78% Relative recovery of gold to copper = 78% / 90% = 86.67%.
Relationship between mineralisation on widths and intercept Lengths	<ul style="list-style-type: none"> 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. 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.
Diagrams	<ul style="list-style-type: none"> See figures in the body of this ASX/TSX Announcement.
Balanced reporting	<ul style="list-style-type: none"> 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. All metallurgical results are presented.
Other substantive Exploration data	<ul style="list-style-type: none"> Extensive work in this area has been done and is reported separately.
Further Work	<ul style="list-style-type: none"> The mineralisation is open at depth and along strike. Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-300m relative level (mRL)) shows widths and grades potentially suitable for underground extraction. Exploration on going.

JORC TABLE 1, SECTION 3 - ESTIMATION & REPORTING OF MINERAL RESOURCES

Mineral Resources are not reported so Section 4 is not applicable to this Announcement.

JORC TABLE 1, SECTION 4 - ESTIMATION & REPORTING OF ORE RESERVES

Ore Reserves are not reported so Section 4 is not applicable to this Announcement.