XANADU MINES

Metallurgical Tests at Kharmagtai Show Strong Sulphide Rougher Flotation Recovery

4 March 2024

Xanadu Mines Ltd (ASX: XAM, TSX: XAM) (**Xanadu, XAM** or the **Company**) is pleased to provide an update on metallurgical test work for the Kharmagtai Project in Mongolia, being developed with the Company's joint venture partner **Zijin Mining Group Co., Ltd. (Zijin**). The sulphide rougher recovery results represent a very positive technical and economic outcome for the Kharmagtai Pre-Feasibility Study (**PFS**). Next stage cleaner recovery and oxide leach test work continues to progress to plan.

Highlights

- PFS stage metallurgical test work completed for sulphide rougher process recoveries.
- Rougher flotation tests delivered **metallurgical recoveries up to 98% copper and 95% gold**, at head grades up to 1.6% Cu and 2.0g/t Au at P80 grind size of 150 micron (**µm**).
- These are in line with or better than Scoping Study[1] assumptions and indicate potential value uplift in final PFS recoveries.
- Grind size selected at 150 µm for Stage 1 (15Mtpa in Scoping Study) and 212 µm for Stage 2 (30Mtpa in Scoping Study), following trade-off studies by DRA Global. Coarse particle flotation remains under investigation to further optimise Stage 2 grind size.
- Process flowsheet includes conventional comminution, followed by rougher flotation, then regrinding and three stages of cleaning to produce a clean concentrate.
- Next stage regrind & cleaner flotation underway, targeting a balance between concentrate grade and recovery. Results expected in May or June 2024.

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

"Strong sulphide rougher flotation results were expected given the clean mineralogy of the deposits at Kharmagtai, and it is very pleasing to have this confirmed here. These results are only part of our

[1] ASX/TSX Announcement 8 April 2022 – Scoping Study Kharmagtai Copper-Gold Project

metallurgical test plan, and we look forward to future announcements including cleaner flotation and an even larger potential value uplift from our oxide leach program being investigated by MPS labs in Perth."

Metallurgical Recoveries

The rougher flotation test program was conducted at ALS laboratory in Perth. It included head grade analysis and rougher flotation recovery test work on 26 samples taken from varying deposits, depths, sulphide and alteration types, using a 150 µm grind size.

Results are shown in **Table 1** and demonstrate achievement of generally high rougher flotation recoveries in both copper and gold. Copper head grade versus copper recovery is shown in **Figure 1**.

Table 1: Rougher Flotation Recovery Results

Sample ID[2]	Drill Hole Number	From (m)	To (m)	Cu Head Grade (%)	Au Head Grade (g/t)	Cu Recovery (%)	Au Recovery (%)
CHCOM_001	336	50	60	0.38	0.14	80.9	76.0
CHCOM_002	416	150	160	0.82	1.96	94.6	89.7
CHCOM_003	434	67	74	0.22	0.06	88.3	89.1
SHCOM_001	250	220	230	0.59	0.88	93.2	93.6
SHCOM_002	263	288	298	0.59	1.67	90.2	86.5
SHCOM_003	279	336	346	0.51	0.12	89.3	90.9
SHCOM_005	343	180	190	0.23	0.13	89.2	79.2
SHCOM_006	346	364	374	0.15	0.21	77.1	na
SHCOM_010	347	502	512	0.23	0.19	79.1	51.5
SHCOM_011	347	170		0.82	0.95	95.8	90.3
SHCOM_012	359	200	210	0.45	0.06	94.5	82.9
SHCOM_013	371	269	279	0.30	0.14	90.5	85.9
SHCOM_014	394	112	122	1.58	0.65	98.1	94.5
SHCOM_015	565	195	205	0.19	0.10	88.8	89.2
WHCOM_001	473	63	74	0.34	0.17	84.6	81.1
WHCOM_002	430	458	468	0.23	0.10	90.6	80.5
WHCOM_003	477	263	274	0.36	0.41	90.3	83.7
WHCOM_004	474	50	60	0.16	0.05	71.5	73.3
WHCOM_005	444	64	74	0.40	0.15	90.2	81.2
WHCOM_006	345	222	232	0.32	0.18	83.8	73.8
WHCOM_007	366	352	362	0.19	0.10	85.1	82.5
WHCOM_008	226	220	230	0.41	0.74	91.1	81.0
WHCOM_009	322	94	104	0.23	0.15	82.7	70.4
WHCOM_010	308	192	202	0.48	0.31	89.0	81.6
WHCOM_011	324	396	406	0.42	0.33	82.2	73.6
WHCOM_012	444	490	500	0.29	0.22	87.7	79.4

[2] Metallurgical Zones and Locations CH = Copper Hill; SH = Stockwork Hill; WH = White Hill

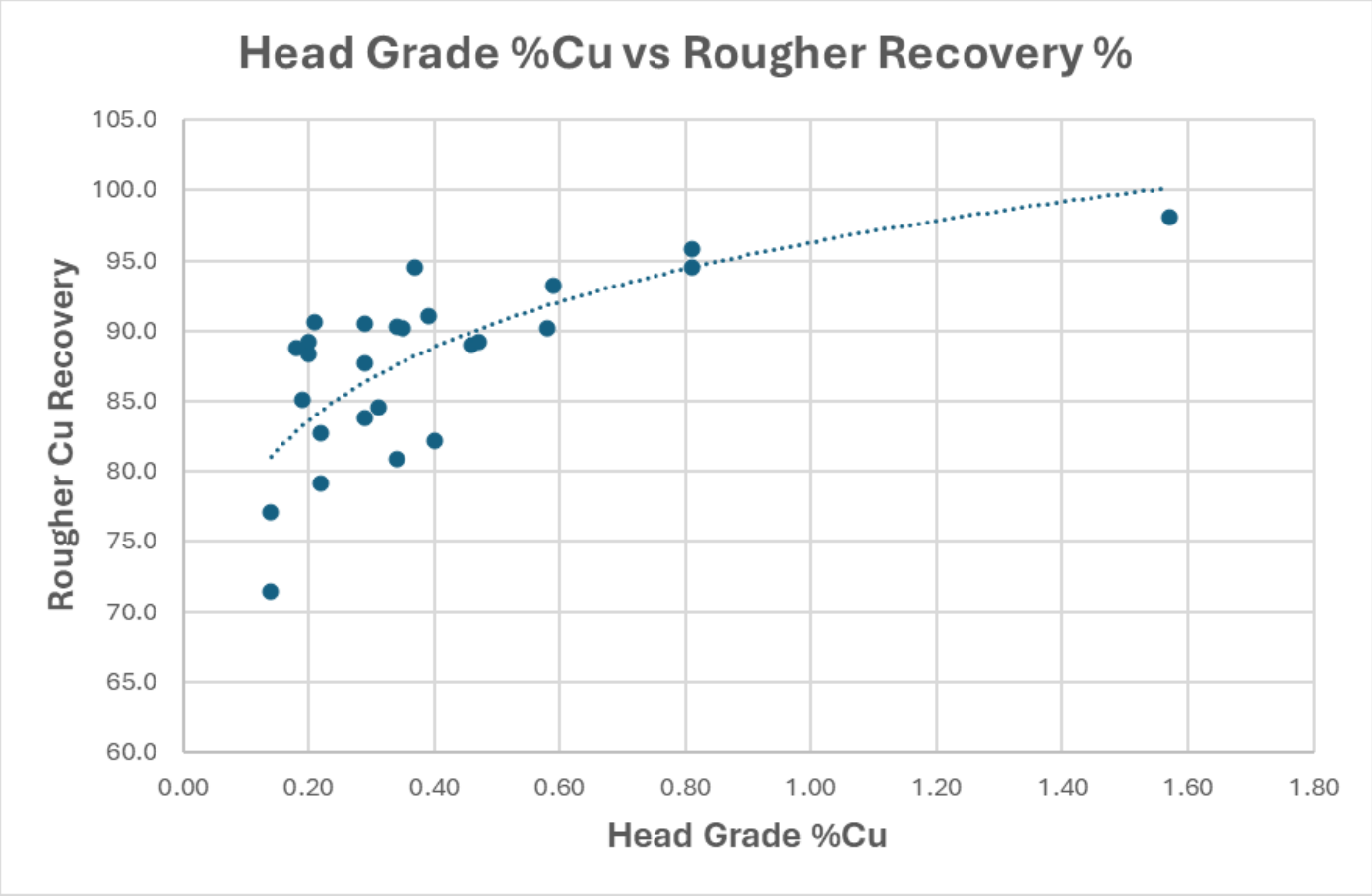

Figure 1. Copper Grade vs Rougher Recovery

Grind Size Selection

The flowsheet considers conventional comminution followed by rougher flotation, rougher concentrate is then reground and followed by three stages of cleaning to produce a final concentrate (**Figure 2**).

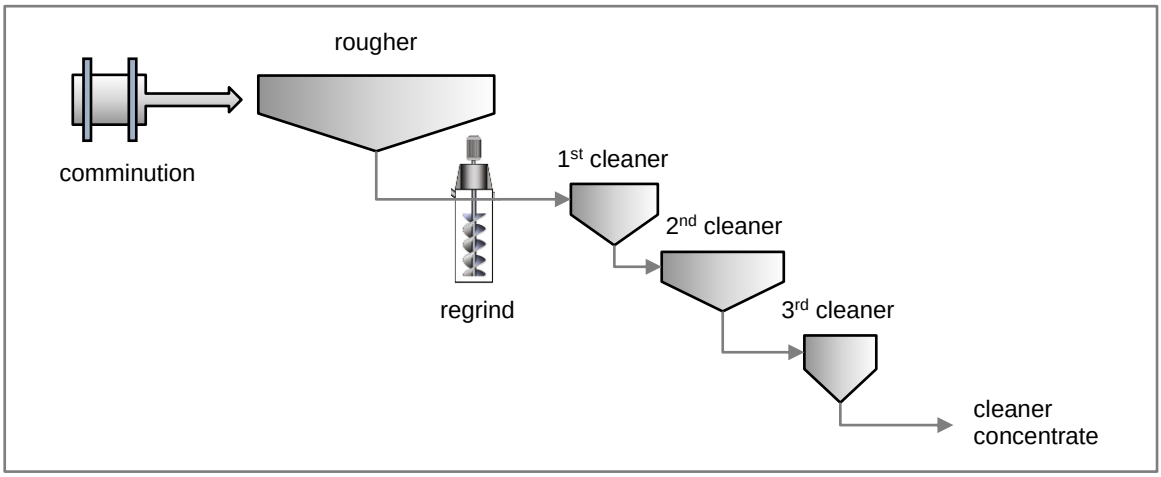

Figure 2. Conventional flowsheet (simplified)

The rougher flotation step represents the key to overall recovery, so comminution circuit grind size selection was based on rougher recoveries at primary grinds of 80% passing 212 (coarser), 180, 150, and 106 (finer) µm.

DRA analysis concluded that 150 µm result is optimum for Stage 1 (defined as 15Mtpa in the Scoping Study[3]) and recommends 212 µm for Stage 2 (30Mtpa in the Scoping Study).

Rougher flotation results for the four grind sizes tested are shown in **Table 2**. These tests were conducted on a composite sample made up from the 26 variability samples with average assays of 0.41% Cu and 0.35g/t Au.

Table 2. Flotation Rougher Recovery at Grind Sizes

Grind Size P_{80} µm	Test	Mass %	Cu %	Au %
106	JS5800	6.1	92.4	NA
150	JS5793	6.8	90.0	NA
180	JS5801	7.7	88.4	82.5
212	JS5802	7.8	85.8	83.2

Copper recovery to the rougher concentrate decreased with increasing grind size (coarser) as would be expected. Recovery versus grind size is shown in **Figure 3**.

[3] ASX/TSX Announcement 8 April 2022 – Scoping Study Kharmagtai Copper-Gold Project

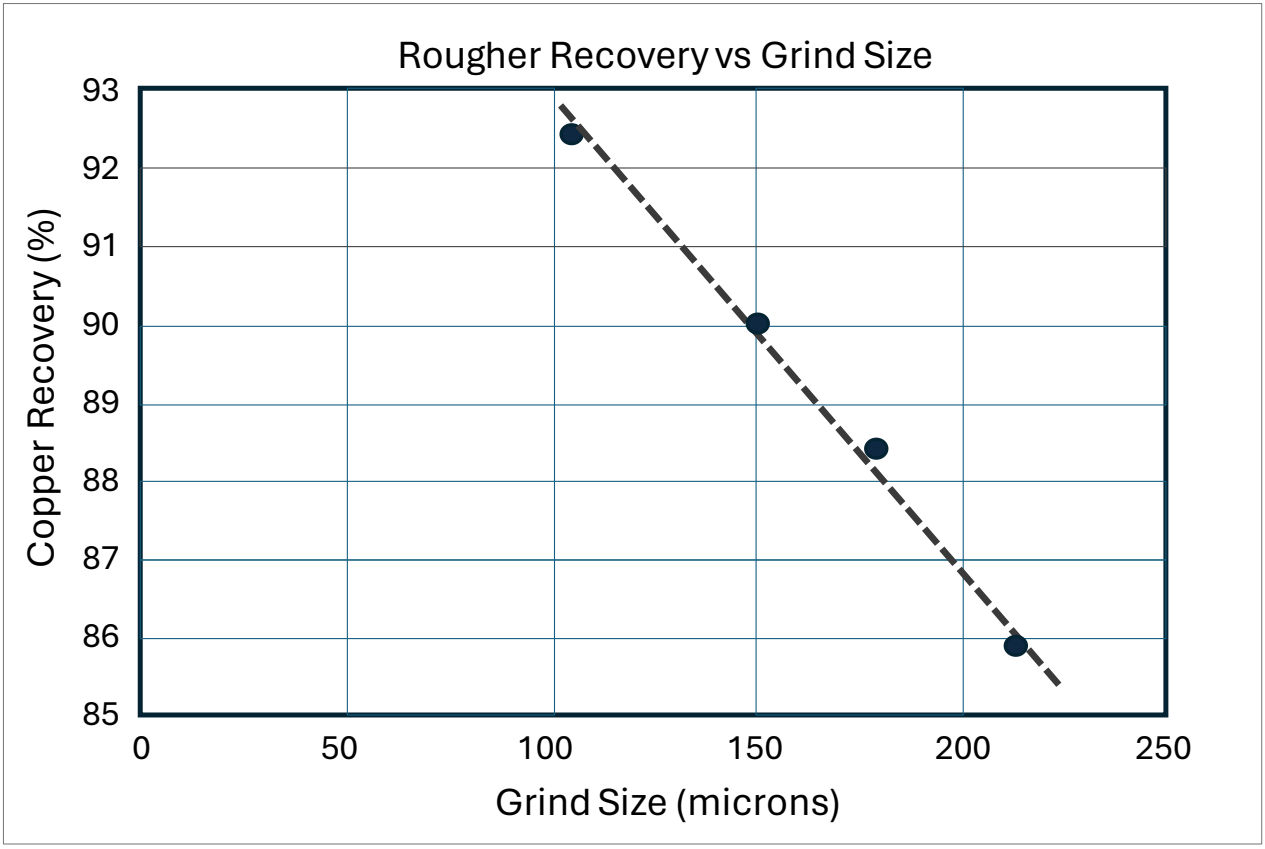

Figure 3. Copper Rougher Recovery versus Grind Size

Flotation Sample Selection and Preparation

Samples were collected from core drilled at Stockwork Hill, White Hill and Copper Hill deposits at the Kharmagtai project, as being representative of each of these zones. Sample preparation consisted of homogenising and splitting samples “as received” into their respective composites and labelling by deposit (CH = Copper Hill; SH = Stockwork Hill; WH = White Hill) and by sample number (between 1 and 15 by deposit), followed by crushing and grinding to 150 µm. Each split was rotary split and homogenised for head analysis and sub-samples taken for test work. Head assays for Cu and Au were conducted by fire assay for each sample.

Metallurgical sample locations, zones and head assay grades are detailed in **Table 1**. Drill hole sample collar locations are detailed in **Appendix 1** and illustrated in **Figure 3**.

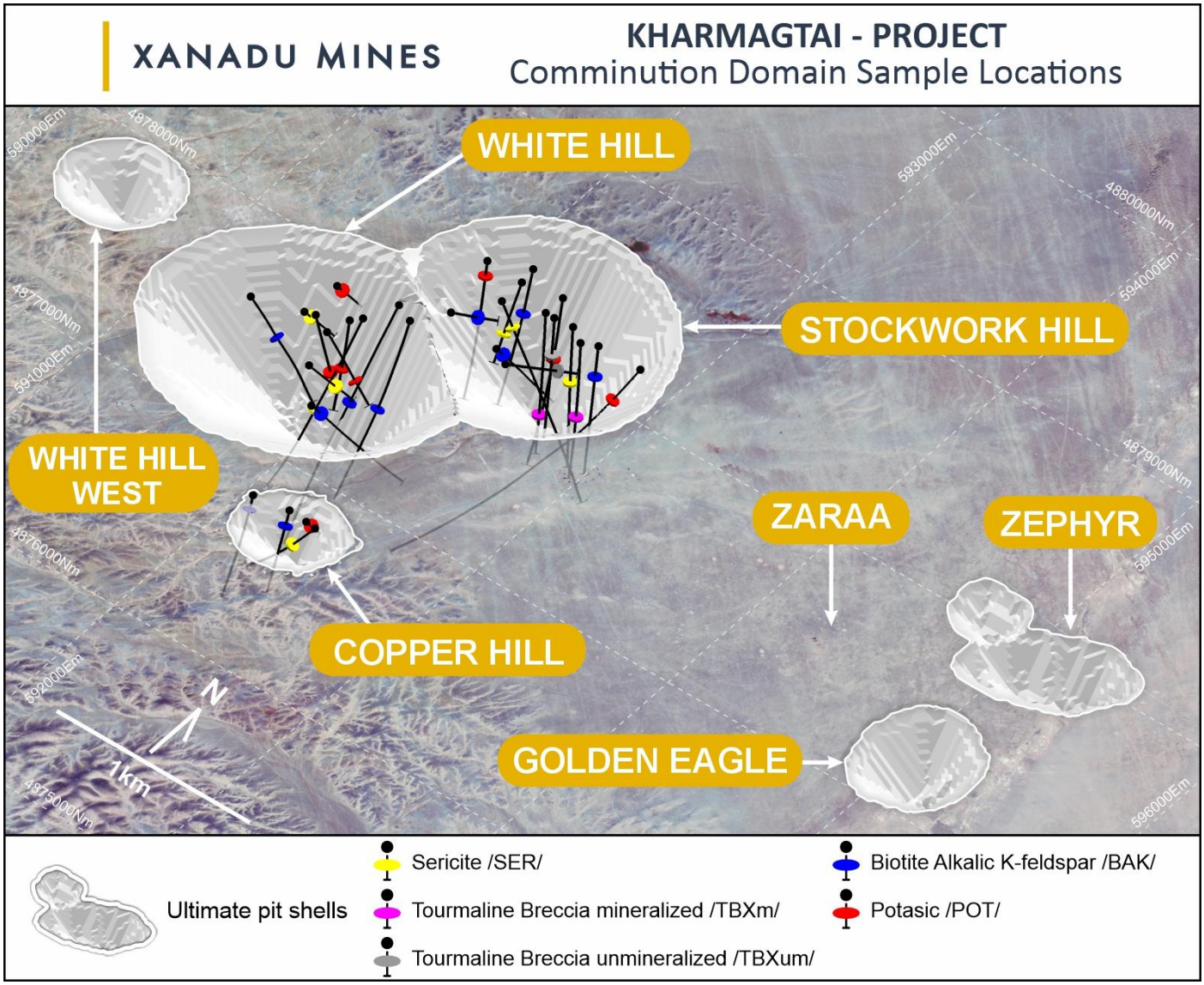

Figure 3: Collar locations for drill holes sampled in metallurgical test work

Future Test Work

The next stage of the flowsheet after the roughers is a regrind followed by three stages of cleaning to produce a final concentrate. Cleaner test work is in progress, focused on determining the optimal balance of concentrate grade and recovery.

Sulphide flotation is a subset of the broader Kharmagtai metallurgical test work program. The comprehensive metallurgy program during the Pre-Feasibility Study includes comminution properties of the mineralisation and alteration styles at Kharmagtai 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. This will be important for reinforcing concentrate saleability, which we expect to be a clean and in-demand concentrate, in a very tight concentrate market.

The broader metallurgical program also includes oxide leach test work to determine the value and viability of using a heap leach to capture value from partially oxidised, near-surface pre-strip material which was treated as waste in the Scoping Study[4] and identified as a significant uplift opportunity to turn pre-strip costs into positive revenue for the Kharmagtai project.

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 jointly control a globally significant copper-gold deposit in our flagship Kharmagtai project. Xanadu is the Operator of a 50-50 JV with Zijin Mining Group in Khuiten Metals Pte Ltd, which controls 76.5% of the Kharmagtai project.

For further information on Xanadu, please visit: **www.xanadumines.com** or contact:

Colin Moorhead
Executive Chairman & Managing Director
E: colin.moorhead@xanadumines.com
P: +61 2 8280 7497

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

[4] ASX/TSX Announcement 8 April 2022 – Scoping Study Kharmagtai Copper-Gold Project

Appendix 1: Metallurgical Sample Composition & Location

Table 1: Drill hole sample details for rougher flotation test work

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH250	Stockwork Hill	592456	4877956	1290	180	-55	351.8
KHDDH263	Stockwork Hill	592636	4877991	1287	180	-75	814.7
KHDDH276	Stockwork Hill	592612	4877623	1288	0	-60	655.3
KHDDH277	Stockwork Hill	592344	4877662	1291	0	-45	346.4
KHDDH279	Stockwork Hill	592693	4877582	1288	0	-45	447.0
KHDDH343	Stockwork Hill	592680	4877890	1285	180	-80	617.6
KHDDH346	Stockwork Hill	592849	4877851	1283	175	-80	680.7
KHDDH347	Stockwork Hill	592636	4877890	1285	175	-80	704.7
KHDDH359	Stockwork Hill	592443	4878038	1291	180	-68	626.5
KHDDH371	Stockwork Hill	592768	4877899	1283	180	-80	700.0
KHDDH372	Stockwork Hill	592915	4877882	1281	180	-75	607.0
KHDDH394	Stockwork Hill	592460	4877833	1288	100	-59	898.0
KHDDH527	Stockwork Hill	592274	4877961	1293	178	-72	652.0
KHDDH565	Stockwork Hill	593128	4877885	1280	233	-55	1609.4
KHDDH336	Copper Hill	592647	4876448	1304	0	-60	158.6
KHDDH416	Copper Hill	592698	4876440	1305	246	-50	437.0
KHDDH434	Copper Hill	592554	4876456	1302	180	-62	366.2
KHDDH457	Copper Hill	592388	4876430	1305	180	-65	454.9
KHDDH473	White Hill	591894	4877307	1305	0	-60	300.6
KHDDH430	White Hill	592097	4877422	1301	200	-60	851.7
KHDDH477	White Hill	592100	4877097	1305	0	-60	438.8
KHDDH474	White Hill	591900	4877496	1299	0	-60	250.1
KHDDH444	White Hill	592159	4877565	1296	205	-60	1225.5
KHDDH345	White Hill	592065	4877380	1305	176	-73	426.8
KHDDH366	White Hill	591943	4877319	1309	5	-82	433.0
KHDDH226	White Hill	592041	4877274	1310	90	-50	336.7
KHDDH322	White Hill	592248	4876940	1302	0	-60	856.0
KHDDH308	White Hill	591674	4877243	1305	90	-53	496.2
KHDDH324	White Hill	592247	4877529	1294	180	-60	861.2

Appendix 2: 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 Graham Brock, BSc (Eng), ARSM. Mr Brock is not an employee of the Company but is employed as a contract consultant. Mr Brock is a Fellow 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 Brock 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 3: 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 8 December 2023.

JORC TABLE 1 - SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

Criteria	Commentary
Sampling techniques	• Representative ½ 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 ¼ 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 ¼ split 1m samples.
Drilling techniques	• The Mineral Resource Estimation 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	• 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	• 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

Criteria	Commentary
	structures and geotechnical features are also routinely measured. • 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	• 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 ALS Perth Labs consisted of homogenising and splitting samples "as received" into their respective composites and labelling them by deposit and as "Sample 1" through to "Sample 15". 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	• 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 XAM. • 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

Criteria	Commentary
	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 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. • Assays as part of the rougher flotation metallurgical test work 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	• All assay data QA/QC is checked prior to loading into XAM's Geobank data base. • The data is managed by XAM geologists. • The data base and geological interpretation is managed by XAM. • 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	• 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	• 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 1,304m 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	• 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

Criteria	Commentary
	mineralised hydrothermal tourmaline-sulphide breccia domains.
Sample security	• 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 XAM company vehicles to ALS lab in Ulaanbaatar. • Sample shipment from Ulaanbaatar to ALS lab in Perth is dispatched in locked barrels and transported via air freight. • 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	• 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 QAQC. 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 MRE 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	• The Project comprises 2 Mining Licences (MV-17129A Oyut Ulaan and (MV-17387A Kharmagtai):
	  ○ Xanadu now owns 90% 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 *Mongolian Minerals Law (2006)* and *Mongolian Land Law (2002)* govern exploration, mining and land use rights for the project.

Exploration done by other parties	• 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	• 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 thought out the wall rock. Porphyry deposits are typically large tonnage deposits ranging from low to high grade and are generally mined by large

Criteria	Commentary
	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	• 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	• The CSAMT data was converted into 2D line data using the Zonge CSAMT processing software and then converted into 3D space using a UBC inversion process. Inversion fit was acceptable, and error was generally low. • A nominal cut-off of 0.1% 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. • A nominal cut-off of 0.1g/t 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). 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 with a metallurgical recovery factor applied. The copper equivalent calculation used is based off the CuEq calculation defined by CSA Global in the 2018 Mineral Resource Upgrade. Copper equivalent (**CuEq**) grade values were calculated using the following formula: CuEq = Cu + Au * 0.62097 * 0.8235, Gold Equivalent (**AuEq**) grade values were calculated using the following formula: AuEq = Au + Cu / 0.62097 * 0.8235. Where: Cu - copper grade (%) Au - gold grade (g/t) 0.62097 - conversion factor (gold to copper) 0.8235 - relative recovery of gold to copper (82.35%) The copper equivalent formula was based on the following parameters (prices are in USD): ○ Copper price - 3.1 $/lb (or 6834 $/t) ○ Gold price - 1320 $/oz ○ Copper recovery - 85% ○ Gold recovery - 70%

Criteria	Commentary
	○ Relative recovery of gold to copper = 70% / 85% = 82.35%.
Relationship between mineralisation on widths and intercept lengths	• 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	• See figures in the body of this ASX/TSX Announcement.
Balanced reporting	• 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.
Other substantive Exploration data	• Extensive work in this area has been done and is reported separately.
Further Work	• 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 RL) shows widths and grades potentially suitable for underground extraction. • Exploration on going.

JORC TABLE 1 - SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

Mineral Resources are not reported so this is not applicable to this Announcement. Please refer to the Company's ASX Announcement dated 8 December 2023 for Xanadu's most recent reported Mineral Resource Estimate and applicable Table 1, Section 3.

JORC TABLE 1 - SECTION 4 - ESTIMATION AND REPORTING OF ORE RESERVES

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