Drilling Underway at Red Mountain Project

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TORONTO, March 27, 2024 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) (Xanadu or the Company) is pleased to advise an initial 5,000m diamond drilling programme to test five main target areas at the highly prospective 100% owned Red Mountain copper and gold Project in the South Gobi region of Mongolia is now underway, with drilling expected to be completed by mid-May, and all assays available by end-June.

Highlights

- Exploration drilling focused on discovery of shallow high-grade gold and copper-gold deposit, akin to the shallower parts of the Northparkes copper gold porphyry deposits in NSW, Australia .
- Systematic diamond drilling program designed to test five high-priority targets, following up on more recent trenching and previous drilling; compelling results from the latter are highlighted, below:
- First results from the drilling program are anticipated late April.

Xanadu's Executive Chairman and Managing Director, Mr Colin Moorhead, said,

"Drilling has commenced at our 100% owned Red Mountain copper and gold project with an initial 5,000m diamond hole programme targeting five of our highest priority targets. Red Mountain offers a rare opportunity to access a large, under-explored mineral district. We are conducting a systematic exploration program, including diamond drilling, that we expect will provide a new perspective on the mineral potential of the Red Mountain district. Xanadu is entering an exciting period of new opportunities for discovery and growth."

Exploration Program Design

Five thousand meters of drilling has been designed to test five shallow high-grade gold and copper-gold targets across the Red Mountain Lease (Figures 1 and 2). Drilling is targeting:

- Shallow gold at Target 33,
- High-grade copper sulphide lodes at Target 10, and
- Shallow porphyry targets at Nowie, Stockwork and Bavuu (Figure 3).

Figure 1: Map of Mongolia, showing location of the Red Mountain Mining Lease.

Figure 2: The Red Mountain Mining Lease with designed drill holes and target locations.

Figure 3: Exploration drilling has commenced at Red Mountain.

Target 33 - Shallow Epithermal Gold Mineralisation

Target 33 is a 1,000-metre-long and 100-wide-zone of alteration and anomalous gold mineralisation associated with an east west trending intrusion. Trenching and limited reverse circulation drilling in 2017

encountered significant widths of gold mineralisation (Figure 4).

Previous results[1] include:

OURC043	40m @ 1.06g/t Au from 26m
Including	22m @ 1.82g/t Au from 40m
Including	10m @ 3.7g/t Au from 50m
OURC055	30m @ 0.68g/t Au from surface
Including	4m @ 2.82g/t Au from surface
Including	8m @ 0.39g/t Au from 4m
And	16m @ 1.13g/t Au from 42m
Including	8m @ 1.7g/t Au from 42m

Current Drilling Program: Five shallow diamond drill holes have been planned to test a 300m strike across the center of the gold anomalism at Target 33. Follow-up drilling will be planned once interpretation of the initial results has been completed.

Figure 4: Target 33 showing previous drilling and trenching[2] and planned drilling 2024.

Target 10 - High-Grade Cu and Porphyry Cu-Au Target
Target 10 was first identified in 2017 as a copper and gold in soil anomaly with a molybdenum halo and coincident bullseye magnetic feature. Two diamond drill holes were drilled into the magnetic feature, returning[3]:

OUDDH089	6.2m @ 4.24% Cu and 1.9g/t Au, from 128m
Including	0.9m @ 22.1%Cu and 8.27g/t Au, from 129m
And	79.5m @ 0.26% Cu and 0.21g/t Au, from 198.5m
OUDDH090	138m @ 0.27% Cu and 0.25g/t Au, from 200m

Current Drilling Program: Three shallow drill holes and one deeper drill hole are planned to follow up on these results. Shallow holes are targeting around the high-grade copper intercept in OUDDH089 and are designed to determine the orientation of this zone, with the aim of delivering further expansion. A single deeper hole is planned to scissor the broad porphyry intercept in OUDDH090, testing the theory that this is associated with a south dipping structure, clearly visible in the magnetics (Figure 5)

Figure 5: Target 10 showing previous drilling and planned drilling 2024[4].

Bavuu Porphyry - Porphyry Cu-Au Target

Bavuu Porphyry was first identified in 2016 as a large-scale copper and gold soil anomaly. Trenching completed in 2016 returned very broad porphyry intercepts of copper and gold mineralisation[5];

OUCS030A	188m @ 0.24% Cu and 0.18g/t Au
Including	52 m @ 0.36% Cu and 0.22g/t Au
OUCS030B	220m @ 0.15% Cu and 0.16g/t Au

Two shallow reverse circulation drill holes were drilled under OUCS030A with the deeper hole returning;

OURC032	168m @ 0.22% Cu and 0.25g/t Au from surface
Including	32m @ 0.31% Cu and 0.4g/t Au from 132m

Current Drilling Program: Two diamond drill holes have been designed to test behind this intercept and along

strike to the west (Figure 6).

Figure 6: Target 10 showing previous drilling and planned drilling 2024[6].

Nowie Porphyry - Porphyry Cu-Au Target

No work has previously been conducted at Nowie by Xanadu. However, multiple drill hole collars and trenches from previous explorers are visible at surface. Soil sampling at Nowie has defined a 500m long copper in soil anomaly greater than 0.1% Cu and 0.25g/t Au. Geological mapping has identified strong oxide copper at surface associated with porphyry veining.

Current Drilling Program: Three diamond drill holes have been designed to test beneath the 500m strike of surface mineralisation.

Stockwork Porphyry - Porphyry Cu-Au Target
Limited work has previously been conducted at Stockwork by Xanadu. However, like the Nowie propsect, multiple drill hole collars and trenches from previous explorers are visible at surface. Soil sampling at Stockwork has defined a 650m long copper in soil anomaly greater than 0.05% Cu. Geological mapping has identified strong oxide copper at surface associated with intense porphyry veining and a reinterpretation based on this mapping has suggested an alternative orientation to drill test for the system at Stockwork.

Current Drilling Program: Three shallow diamond drill holes have been designed to test this target.

About Red Mountain
The 100% owned Red Mountain project, located within the Dornogovi Province of southern Mongolia, approximately 420 kilometres southeast of Ulaanbaatar (Figures 1 and 2).

The project covers approximately 57 square kilometres in a frontier terrane with significant mineral endowment and has a granted 30-year mining licence. Red Mountain comprises a cluster of outcropping mineralising porphyry intrusions which display features typically found in the shallower parts of porphyry systems where narrow dykes and patchy mineralisation branch out above a mineralised stock. This underexplored porphyry district includes multiple porphyry copper-gold centres, mineralised tourmaline breccia pipes copper-gold/base metal skarns and high-grade epithermal gold veins.

Existing porphyry mineralisation at Red Mountain is hosted within narrow stockwork zones that have been focused around several narrow structurally controlled monzonite porphyry dykes. Emplacement of mineralisation appears to be controlled by intersection of northeast and north-northwest trending structures. The quartz-chalcopyrite-bornite stockwork mineralisation is associated with strong reddening albite-sericite-biotite-magnetite (potassic) alteration assemblage in the host lithology. The thin nature of the mineralising dykes, their irregular intrusion geometry, and the patchy distribution of stockwork mineralisation are all features typically found in the shallower parts of porphyry systems, where narrow dykes and patchy mineralisation branch out above a mineralised stock. Similar orebody geometries are found in the shallower parts of the Northparkes porphyry copper-gold (Cu-Au) deposits in NSW, where porphyry mineralisation has also been tightly focused along a controlling structure adjacent to a felsic pluton. Like Northparkes, there is the potential for further mineralisation along the main structures at Diorite Hill and Stockwork Hill, and the likelihood that mineralisation extends (and could amalgamate) at depth.

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:

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This Announcement was authorised for release by Xanadu's Board of Directors.

Appendix 1: Statements and Disclaimers

Competent Person Statement

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

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: Red Mountain Table 1 (JORC Code, 2012)

Set out below is Section 1 and Section 2 of Table 1 under the JORC Code, 2012 for the Red Mountain project. Data provided by Xanadu. This Table 1 updates the JORC Table 1 disclosure dated 27 September 2022.[7]

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

Criteria	Commentary
Sampling techniques	● The exploration results are based on diamond drill core sam ● Representative ½ core samples were split from PQ, HQ & N ● The orientation of the cut line is controlled using the core ori ● Sample intervals are defined and subsequently checked by ● RC chip samples are ¼ splits from 1m intervals using a 75% ● RC samples are uniform 2m samples formed from the comb ● Trench samples are collected as 2m composite from 30m ab ● Sampling generally honours lithological contacts. ● Trench samples are continuous along the length of the trenc
Drilling techniques	● The exploration results are based upon diamond drilling of F ● All drill core drilled by Xanadu has been oriented using the "
Drill sample recovery	● Diamond drill core recoveries were assessed using the stan ● Diamond core recoveries average 97% through mineralisati ● Overall, core quality is good, with minimal core loss. Where ● RC recoveries are measured using whole weight of each 1m ● Analysis of recovery results vs grade shows no significant tr
Logging	● All drill core is geologically logged by well-trained geologists ● Logging of lithology, alteration and mineralogy is intrinsically ● Drill core is also systematically logged for both geotechnical ● Both wet and dry core photos are taken after core has been
Sub -sampling techniques and sample preparation	● All drill core samples are ½ core splits from either PQ, HQ o ● Core is appropriately split (onsite) using diamond core saws ● The diamond saws are regularly flushed with water to minim ● A field duplicate ¼ core sample is collected every 30th samp ● Routine sample preparation and analyses of DDH samples v ● All samples were prepared to meet standard quality control ● ALS Mongolia Geochemistry labs quality management syste ● The sample support (sub-sample mass and comminution) is ● Trench samples by previous explorers between 2001 to 200
Quality of assay data and laboratory tests	● All XAM samples were routinely assayed by ALS Mongolia f ● Au is determined using a 25g fire assay fusion, cupelled to d ● All samples were also submitted to ALS Mongolia for the 48 ● Quality assurance has been managed by insertion of approp ● Assay results outside the optimal range for methods were re ● Ore Research Pty Ltd certified copper and gold standards ha ● QC monitoring is an active and ongoing processes on batch ● Prior to 2014: Cu, Ag, Pb, Zn, As and Mo were routinely det ● Trenching samples from 2001 to 2007 were analysed for 6 e
Verification of sampling and assaying	● All assay data QA/QC is checked prior to loading into Xanad ● The data is managed by Xanadu geologists. ● The data base and geological interpretation is managed by X ● Check assays are submitted to an umpire lab (SGS Mongoli ● 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 gl ● The grid system used for the project is UTM WGS-84 Zone 4 ● Historically, Eastman Kodak and Flexit electronic multi-shot ● More recently (since September 2017), a north-seeking gyro ● The project DTM is based on 1 m contours from satellite ima ● Trenching locations for trenches between 2001 and 2007 we
Data spacing and distribution	● Holes spacings range from <50m spacings within the core o ● Holes range from vertical to an inclination of -60 degrees de ● The data spacing and distribution is sufficient to establish ar ● Holes have been drilled to a maximum of 1,300m vertical de ● The data spacing and distribution is sufficient to establish ge
Orientation of data in relation to geological structure	● Drilling is conducted in a predominantly regular grid to allow ● Scissor drilling, as well as some vertical and oblique drilling,
Sample security	● Samples are delivered from the drill rig to the core shed twic ● Samples are dispatched from site in locked boxes transporte ● Sample shipment receipt is signed off at the Laboratory with ● Samples are then stored at the lab and returned to a locked

Audits or reviews	● Internal audits of sampling techniques and data managemer
	● External reviews and audits have been conducted by the fol
	  ● 2012: AMC Consultants Pty Ltd. was engaged to cond
	  ● 2013: Mining Associates Ltd. was engaged to conduct

1.2 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 1 Mining Licence (MV-17129A). ● Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan ● The *Mongolian Minerals Law (2006)* and *Mongolian Land Law (2002)* gover
Exploration done by other parties	● Previous exploration was conducted by Quincunx Ltd, Ivanhoe Mines Ltd. a
Geology	● The mineralisation is characterised as porphyry copper-gold type. ● Porphyry copper-gold deposits are formed from magmatic hydrothermal fluid
Drill hole Information	● Diamond drill holes are the principal source of geological and grade data for ● See figures in this ASX/TSX Announcement.

Data Aggregation methods	● A nominal cut-off of 0.1% CuEq is used in copper dominant systems for iden
	● A nominal cut-off of 0.1g/t AuEq is used in gold dominant systems like for id
	● Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0.6
	● Most of the reported intercepts are shown in sufficient detail, including maxi
	● Informing samples have been composited to two metre lengths honouring th
	● The copper equivalent (CuEq) calculation represents the total metal value fo
	● Copper equivalent (CuEq or eCu) grade values were calculated using the fo
	  ● CuEq = Cu + Au * 0.62097 * 0.8235,
	● Gold Equivalent (AuEq or eAu) grade values were calculated using the follo
	  ● AuEq = Au + Cu / 0.62097 * 0.8235
	● Where: Cu = copper grade (%); Au = gold grade (g/t); 0.62097 = conversion
	● The copper equivalent formula was based on the following parameters (pric
	  ● Copper price = 3.1 $/lb (or 6834 $/t)
	  ● Gold price = 1320 $/oz
	  ● Copper recovery = 85%
	  ● Gold recovery = 70%
	  ● 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 orientati ● Exploration results have been reported as an interval with 'from' and 'to' stat
Diagrams	● See figures in this ASX/TSX Announcement.
Balanced Reporting	● Exploration results have been reported at a range of cut-off grades, above a
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 ope ● Exploration ongoing.

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

Mineral Resources are not reported so this is not applicable to this report.

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.

[1] ASX Announcement - Oyut Ulaan Exploration Update, 28th June 2017, ASX Announcement - XAM Quarterly Report Q2 2017 Final
[2] ASX Announcement - Oyut Ulaan Exploration Update, 28th June 2017, ASX Announcement - XAM Quarterly Report Q2 2017 Final
[3] ASX Announcement - Oyut Ulaan Exploration Update - High Grade Massive Sulphide Mineralisation Intersected, 19 July 2017
[4] ASX Announcement - Oyut Ulaan Exploration Update - High Grade Massive Sulphide Mineralisation Intersected, 19 July 2017
[5] XAM Quarterly Activities Report, Quarter Ending 31 December 2016 and XAM Quarterly Activities Report, Quarter Ending 31 March 2017
[6] XAM Quarterly Activities Report, Quarter Ending 31 December 2016 and XAM Quarterly Activities Report, Quarter Ending 31 March 2017
[7] ASX/TSX Announcement 27 September 2022 - Broad, shallow gold zone at Red Mountain

Photos accompanying this announcement are available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/ab346f65-20aa-4c77-a3a2-c675bed03215

https://www.globenewswire.com/NewsRoom/AttachmentNg/a00507a3-2ea1-4e35-8824-10d7224137ea

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