Significant Trenching Results And Commencement of Drilling at Red Mountain

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TORONTO, Aug. 05, 2021 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) (Xanadu or the Company) is pleased to provide an exploration update for the Red Mountain copper-gold district (Figure 3), a joint venture with the Japan Oil, Gas and Metals National Corporation (JOGMEC JV).

Highlights

- Drilling commenced at Red Mountain on a targeted approx. 2,450 metre program
- Assay results returned for the 1,000 metres trenching program, confirming additional, shallow high-grade copper mineralisation at Stairy and extending zones of mineralisation seen in historic trenches
- Significant results include:

- OUTR100 returns 8m @ 2.03% eCu from 136m[1]
- OUTR104 returns 8m @ 1.94% eCu from 4m[1]

- Varying thicknesses of copper mineralisation intersected in all trench assays
- Exploration drilling will focus on shallow high-grade targets identified via trenching and previous drilling
- Red Mountain district is being progressed as a standalone high-grade copper project, complementing the advanced large-scale Kharmagtai copper-gold district

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said *"We are very excited by shallow copper mineralisation in our surface trenching at Red Mountain. This confirms the mineralised structures are sub-vertical and up to twenty-four meters wide, potentially extending well over a kilometre. Importantly, our latest geological interpretation suggests these may be linked to a large-scale porphyry system at depth. The quality of Stairy and of the Red Mountain district continues to improve, laying a strong foundation for our new drilling program."*

Stairy Trenching Results

Approximately 1,000 metres of trenching was completed at Stairy (Figure 1), designed to obtain geological (structural) data relating to the zones of mineralisation associated with previous company trenches. Multiple intercepts of strong copper mineralisation have been encountered (Appendix 1: Tables 1 and 2), including Trenches OUTR100 and OUTR104 shown below. These results indicate extensions of the mineralisation zones seen in historic trenches and provide important information for targeting future drilling programs.

Hole ID	From[2]	Interval	Au	Ag	Cu	eCu
OUTR100	22m	6m	0.01g/t	6.17g/t	0.77%	0.78%
and	132m	19m	0.06g/t	8.14g/t	0.88%	0.91%
including	136m	8m	0.13g/t	18.33g/t	1.96%	2.03%
including	136m	6m	0.17g/t	23.60g/t	2.36%	2.45%

Hole ID	From[2]	Interval	Au	Ag	Cu	eCu
OUTR104	0m	14m	0.03g/t	9.43g/t	1.32%	1.34%
including	4m	8m	0.04g/t	13.78g/t	1.92%	1.94%
and	38m	14m	0.02g/t	6.56g/t	0.95%	0.96%
including	40m	12m	0.02g/t	7.62g/t	1.08%	1.09%

Note that true widths will generally be narrower than those reported. See disclosure in JORC explanatory statement attached.

FIGURE 1: Trenching Results at Stairy, showing surface high-grade mineralisation.[3] is available at: https://www.globenewswire.com/NewsRoom/AttachmentNg/c0aee884-7352-43eb-9d0d-36fec08a3142

Stairy Drilling Program Commencing

An approximately 2,450-metre drilling program has commenced at the Red Mountain district, with the objective to delineate a near surface, low tonnage, high-grade copper deposit.

Targets are developed based on results of the recent 1,000 metre trenching program and drilling intercepts from the first quarter of 2021, which included drill hole OUDDH100 with 4m @ 15.85% Cu from 55m within 16m @ 4.09% Cu from 54m.[4]

About Stairy

The Stairy prospect consists of a 1.5km by 1km zone of sheeted mineralised structures hosted within the Stairy Intrusive in the central east of the Red Mountain Mining Lease (Figure 2). These structures are interpreted to be sub-vertical, up to twenty-four meters wide and can extend for over a kilometre.

Copper mineralisation at Stairy consists of bornite and chalcopyrite sulphide with quartz carbonate fill. The current geological interpretations suggest these sheeted structures may be linked to a large-scale porphyry system at depth.

FIGURE 2: Red Mountain Mining Licence, showing ground Landsat data and priority target locations is available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/2d585fec-1e9a-4db8-afb4-53faff32ddfb

About Red Mountain

The Red Mountain district is located within the Dornogovi Province of southern Mongolia, approximately 420 kilometres southeast of Ulaanbaatar (Figure 3) and is a joint venture between Xanadu and JOGMEC, in which JOGMEC may earn up to 51% beneficial interest in the project by sole funding up to $US7.2 million in exploration expenditure over 4 years, commencing April 2020.

Red Mountain covers approximately 57 square kilometres in a frontier terrane with significant mineral

endowment, and it 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 includes multiple porphyry copper-gold centres, mineralised tourmaline breccia pipes copper-gold/base metal skarns and high-grade epithermal gold veins.

FIGURE 3: Location of the Red Mountain district in the South Gobi porphyry copper belt is available at: https://www.globenewswire.com/NewsRoom/AttachmentNg/ed706c28-6083-49db-b32c-358dd35706ef

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.

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

Appendix 1: Trenching Results

Table 1: Trench locations

Hole ID	Prospect	East	North	RL	Azimuth (?)	Depth (m)
OUTR100	Stairy	378456	4939918	1056	203	151.1
OUTR101	Stairy	378346	4939874	1056	217	160.0
OUTR102	Stairy	378444	4940018	1058	155	100.0
OUTR103	Stairy	378550	4939640	1050	180	140.0
OUTR103A	Stairy	378550	4939725	1053	180	85.0
OUTR104	Stairy	378656	4939694	1051	152	100.0
OUTR105	Stairy	378370	4939583	1052	180	175.0
OUTR106	Stairy	378980	4939790	1047	180	125.0
OUTR107	Stairy	378725	4939390	1045	180	50.0

Table 2: Significant trench results

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
OUTR100	Stairy	22	28	6	0.01	6.17	0.77	0.78	1.53
and		132	151.1	19.1	0.06	8.14	0.88	0.91	1.77
including		136	144	8	0.13	18.33	1.96	2.03	3.97
including		136	142	6	0.17	23.60	2.36	2.45	4.79
OUTR101	Stairy	96	113	17	0.01	2.32	0.32	0.33	0.64

and	123	131	8	0.01	0.42	0.09	0.09	0.18
OUTR103 Stairy	94	97.5	3.5	0.02	2.86	0.69	0.70	1.37
OUTR104 Stairy	0	14	14	0.03	9.43	1.32	1.34	2.62
including	4	12	8	0.04	13.78	1.92	1.94	3.80
and	38	52	14	0.02	6.56	0.95	0.96	1.88
including	40	52	12	0.02	7.62	1.08	1.09	2.12
OUTR105 Stairy	32	46	14	0.01	0.77	0.24	0.24	0.48
including	34	38	4	0.01	1.10	0.44	0.44	0.86
and	102	114	12	0.01	0.71	0.10	0.10	0.20
and	130	160	30	0.01	0.37	0.12	0.12	0.24
including	130	136	6	0.01	0.70	0.27	0.28	0.54

Appendix 2: 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.

Copper Equivalent Calculations

The copper equivalent (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. The copper equivalent calculation used is based off the eCu calculation defined by CSA in the 2018 Mineral Resource Upgrade for Xanadu's Kharmagtai project.[5]

Copper equivalent (eCu) grade values were calculated using the following formula:

eCu = Cu + Au * 0.62097 * 0.8235,

Where Cu = copper grade (%); Au = gold grade (gold per tonne (g/t)); 0.62097 = conversion factor (gold to copper); and 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 6,834 $ per tonne ($/t)); Gold price = 1,320 $ per ounce ($/oz); Copper recovery = 85%; Gold recovery = 70%; and Relative recovery of gold to copper = 70% / 85% = 82.35%.

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: Red Mountain Table 1 (JORC 2012)

Set out below is Section 1 and Section 2 of Table 1 under the JORC Code, 2012 Edition for the Red Mountain project. Data provided by Xanadu. This Table 1 updates the JORC Table 1 disclosure dated 22 July 2021.[6]

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

Criteria	JORC Code explanation
Sampling techniques	● *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised* ● *Include reference to measures taken to ensure sample representivity and the appropriat* ● *Aspects of the determination of mineralisation that are Material to the Public Report.* ● *In cases where 'industry standard' work has been done this would be relatively simple (e*
Drilling techniques	● *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bang*
Drill sample recovery	● *Method of recording and assessing core and chip sample recoveries and results assess* ● *Measures taken to maximise sample recovery and ensure representative nature of the s* ● *Whether a relationship exists between sample recovery and grade and whether sample*
Logging	● *Whether core and chip samples have been geologically and geotechnically logged to a l* ● *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) p* ● *The total length and percentage of the relevant intersections logged.*

Sub - sampling techniques and sample preparation	● *If core, whether cut or sawn and whether quarter, half or all core taken.* ● *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or d* ● *For all sample types, the nature, quality and appropriateness of the sample preparation t* ● *Quality control procedures adopted for all sub-sampling stages to maximise representivi* ● *Measures taken to ensure that the sampling is representative of the in-situ material colle* ● *Whether sample sizes are appropriate to the grain size of the material being sampled.*
Quality of assay data and laboratory tests	● *The nature, quality and appropriateness of the assaying and laboratory procedures used* ● *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters us* ● *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, externa*
Verification of sampling and assaying	● *The verification of significant intersections by either independent or alternative company* ● *The use of twinned holes.* ● *Documentation of primary data, data entry procedures, data verification, data storage (p* ● *Discuss any adjustment to assay data.*
Location of data points	● *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys)* ● *Specification of the grid system used.* ● *Quality and adequacy of topographic control.*
Data spacing and distribution	● *Data spacing for reporting of Exploration Results.* ● *Whether the data spacing, and distribution is sufficient to establish the degree of geologi* ● *Whether sample compositing has been applied.*
Orientation of data in relation to geological structure	● *Whether the orientation of sampling achieves unbiased sampling of possible structures a* ● *If the relationship between the drilling orientation and the orientation of key mineralised s*
Sample security	● *The measures taken to ensure sample security.*
Audits or reviews	● *The results of any audits or reviews of sampling techniques and data.*

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
Mineral tenement and land tenure status	● Type, reference name/number, location and ownership including agreement ● The security of the tenure held at the time of reporting along with any known
Exploration done by other parties	● Acknowledgment and appraisal of exploration by other parties.
Geology	● Deposit type, geological setting and style of mineralisation.
Drill hole Information	● A summary of all information material to the understanding of the exploratio ● easting and northing of the drill hole collar. ● elevation or RL Reduced Level - elevation above sea level in metres) of the ● dip and azimuth of the hole ● down hole length and interception depth ● hole length. ● If the exclusion of this information is justified on the basis that the informatio
Data Aggregation methods	● In reporting Exploration Results, weighting averaging techniques, maximum ● Where aggregate intercepts incorporate short lengths of high grade results a ● The assumptions used for any reporting of metal equivalent values should b
Relationship between mineralisation on widths and intercept lengths	● These relationships are particularly important in the reporting of Exploration ● If the geometry of the mineralisation with respect to the drill hole angle is kn ● If it is not known and only the down hole lengths are reported, there should
Diagrams	● Appropriate maps and sections (with scales) and tabulations of intercepts sh
Balanced Reporting	● Where comprehensive reporting of all Exploration Results is not practicable

Other substantive exploration data	● Other exploration data, if meaningful and material, should be reported inclu
Further Work	● The nature and scale of planned further work (e.g. tests for lateral extension ● Diagrams clearly highlighting the areas of possible extensions, including the

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.

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[1] Refers to horizontal distance along the trench
[2] Refers to horizontal distance long the trench
[3] ASX/TSX Announcement 16 June 2021 - Multiple strong MLEM conductors detected at Stairy
[4] ASX/TSX Announcement 23 March 2021 - Shallow Bornite Mineralisation at Red Mountain
[5] ASX Announcement 31 October 2018 - Major increase in Kharmagtai Open-Cut Resource to 1.9Mt Cu & 4.3Moz AU
[6] ASX Announcement 22 July 2021 - Target Program Completed at Red Mountain