New High-Grade Bornite Intersections at Red Mountain

28.09.2021 | GlobeNewswire

TORONTO, Sept. 28, 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 porphyry district, a joint venture with Japan Oil, Gas and Metals National Corporation (JOGMEC). Red Mountain is located within the Dornogovi Province of southern Mongolia, approximately 420km southeast of Ulaanbaatar and 70km west of the provincial centre of Sainshand.

Highlights

- 3,000m diamond drilling program completed at Red Mountain, with targeting focussed on near surface high-grade bornite mineralisation at Stairy and nearby larger-scale porphyry IP targets
- Assays returned for 1,865m, with silver-rich, high-grade copper results in several drill holes, including:

  ? OUDDH115 4m @ 7.34% Cu, 29.3g/t Ag from 60m

  • Including 1m @ 28.9% Cu, 114g/t Ag from 62m

  ? OUDDH119 8m @ 1.31% Cu, 7.00g/t Ag from 94m

  ? OUDDH112 4m @ 1.98% Cu, 9.15g/t Ag from 40m

- Mineralised zones primarily comprised of massive bornite and bornite, along with trace chalcocite
- Structural modelling underway to understand orientation for targeting additional high-grade bornite
- Assays pending for remaining 1,135m, expected within the next two weeks

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said *"We are very excited to see shallow, high-grade bornite mineralisation that is comparable to our Stairy drilling results from earlier this year[1]. This confirms the presence of sub-vertical mineralised structures up to twenty-four meters wide that potentially extend beyond a kilometre. Importantly, our latest geological interpretation suggests these may be linked to a large-scale porphyry system at depth. Red Mountain district, particularly Stairy, continues to improve, laying a strong foundation for future exploration."*

Stairy Drilling Results

Approximately 1,600 metres of the 3,000 metre Red Mountain drilling program was designed to obtain geological (structural) data relating to mineralised zones identified in recent trenching results[2] at Stairy. The remaining 1,400 metres was designed to target large-scale porphyry IP targets.

Multiple intercepts of strong copper mineralisation were encountered in the first batch of assays received, comprising 1,812 metres (Appendix 1: Tables 1 and 2), including drill holes OUDDH112, OUDDH115 and OUDDH119 (Figures 1, 2, 3 and 4). These results indicate extensions to mineralised zones identified in historic trenches. More importantly, the results provide greater structural and pathfinder information for better targeting high-grade bornite zones in future drilling programs.

Hole ID	From	Interval	Cu	Ag
OUDDH112	0	8m	0.15 %	0.96g/t
and	30m	4m	0.16 %	0.80g/t
and	40m	4m	1.98 %	9.15g/t
and	48m	4m	0.19 %	1.20g/t
Hole ID	From	Interval	Cu	Ag

OUDDH115	60m	4m	7.34	%	29.29g/t
including	61.5m	1m	28.90	%	114.0g/t
Hole ID	From	Interval	Cu		Ag
OUDDH119	42m	6m	0.27	%	0.55g/t
including	42m	4m	0.36	%	0.70g/t
and	94m	8m	1.31	%	7.00g/t
including	94m	6m	1.72	%	9.17g/t

True mineralised widths will generally be narrower than those reported. See disclosure in JORC Tables attached in Appendix 3.

The next stage of Red Mountain exploration will be developed by Xanadu and its partner JOGMEC using results reported in this announcement and assays pending. This follow-up targeting program will be announced in due course.

FIGURE 1: Cross Section OUDDH112 is available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/8007eccf-f001-4f88-be94-9c1a6ba25398

FIGURE 2: Cross Section OUDDH115 and OUDDH119 is available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/eff429bc-a21b-4042-bd27-a60c4311f3bc

FIGURE 3: Trenching Results at Stairy, showing surface high-grade mineralisation[3,4] is available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/4876097c-f386-4d70-979e-973521c38f55

FIGURE 4: HQ Core images from Stairy Drilling. Core is 6.4cm high is available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/a49c8d51-0030-42a5-9f6b-ba09858fab26

About Stairy

The Stairy prospect consists of a 1.5km by 1km zone of sheeted mineralised structures hosted within the Stairy Intrusive in central eastern portion of Red Mountain Mining Lease (Figure 5). Structures are interpreted to be sub-vertical, up to twenty-four meters wide and can extend beyond a kilometre.

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

FIGURE 5: Red Mountain Mining Licence, showing ground Landsat data and priority target locations is available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/7518ff65-5da0-4a5c-ad76-8a1d2af0a895

About Red Mountain

The Red Mountain district is located within the Dornogovi Province of southern Mongolia, approximately 420 kilometres southeast of Ulaanbaatar (Figure 6) 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 6: Location of the Red Mountain district in the South Gobi porphyry copper belt [5] is available at: https://www.globenewswire.com/NewsRoom/AttachmentNg/8583f2c4-eff6-4c5e-9c5d-42e1d440fa45

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.

For further information, please contact:

Andrew Stewart
Chief Executive Officer
T: +61 2 8280 7497

M: +61 409 819 922
E: Andrew.stewart@xanadumines.com

W: www.xanadumines.com

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

Appendix 1: Drilling Results

Table 1: Drill hole locations

Hole ID	Prospect	East	North	RL	Azimuth (?)	Inc (?)	Depth (m)
OUDDH106	Stairy	378390	4939816	1055	0	-58	145.0
OUDDH107	Stairy	378426	4939852	1055	0	-58	95.0
OUDDH108	Stairy	378342	4939821	1055	0	-58	75.0
OUDDH109	Stairy	378388	4939917	1056	180	-60	125.0
OUDDH110	Stairy	378392	4939522	1051	0	-58	75.5
OUDDH111	Stairy	378598	4939602	1049	0	-58	75.5
OUDDH112	Stairy	378699	4939648	1050	0	-58	75.5
OUDDH113	Stairy	378393	4939413	1049	0	-58	75.0
OUDDH114	Stairy	378644	4939610	1049	0	-58	75.5
OUDDH115	Stairy	378237	4939758	1056	0	-60	80.5
OUDDH116	Stairy	378995	4939675	1044	0	-60	75.0
OUDDH117	Stairy	378396	4939764	1054	0	-58	85.0
OUDDH118	Stairy	378451	4939784	1054	0	-58	75.0
OUDDH119	Stairy	378239	4939837	1056	180	-60	120.0
OUDDH120	Stairy	378285	4939774	1055	0	-58	85.0
OUDDH121	Stairy	378473	4939874	1055	0	-58	75.0
OUDDH122	Stairy	378501	4939846	1054	0	-58	75.0
OUDDH123	Stairy	378246	4939803	1056	180	-55	55.0
OUDDH124	Stairy	378228	4939804	1056	180	-55	55.0
OUDDH125	Bavuu	376700	4939549	1081	0	-75	400.0
OUDDH126	Diorite	378398	4940329	1064	180	-75	400.0
OUDDH127	Diorite	377800	4940430	1071	0	-65	550.0

Table 2: Significant drill results

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Cu (%)	Ag (g/t)
OUDDH106	Stairy	8	12	4	0.19	0.90
and		42	45.4	3.4	0.58	3.18
and		56	64	8	0.29	1.39
including		56	60	4	0.40	2.20
OUDDH107	Stairy	68	74	6	0.20	0.90
OUDDH108	Stairy	0	4	4	0.12	0.38
and		10	14	4	0.34	1.85
and		26	32	6	0.51	2.27
and		40	44	4	0.45	2.50
and		68	72	4	0.15	0.53
OUDDH109	Stairy	102	108	6	0.28	1.27
and		118	124	6	0.49	2.37
OUDDH110	Stairy	18	24	6	0.15	0.67
and		66	72	6	0.60	3.10
including		68	72	4	0.75	3.85
OUDDH112		0	8	8	0.15	0.96
and		30	34	4	0.16	0.80
and		40	44	4	1.98	9.15
and		48	52	4	0.20	1.20
OUDDH113	Stairy	16	26	10	0.24	1.26
including		32	54	22	0.21	1.03
OUDDH115	Stairy	60	64	4	7.34	29.29
including		61.5	62.5	1	28.90	114.00
OUDDH117	Stairy	70	74	4	0.14	0.55
OUDDH119	Stairy	42	48	6	0.27	0.55
including		42	46	4	0.36	0.70
and		94	102	8	1.31	7.00
including		94	100	6	1.72	9.17
OUDDH120	Stairy	72	76	4	0.30	1.13
OUDDH121	Stairy	42	48	6	0.39	0.40
OUDDH122	Stairy	*Assays pending*				
OUDDH123	Stairy	*Assays pending*				
OUDDH124	Stairy	*Assays pending*				
OUDDH125	Bavuu	54	72	18	0.05	0.59
OUDDH126	Diorite	*Assays pending*				
OUDDH127	Diorite	*Assays pending*				

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.

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 5 August 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 spec* ● *Include reference to measures taken to ensure sample representivity and the app* ● *Aspects of the determination of mineralisation that are Material to the Public Repo* ● *In cases where 'industry standard' work has been done this would be relatively sir*
Drilling techniques	● *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auge*

Drill sample recovery	● *Method of recording and assessing core and chip sample recoveries and results a* ● *Measures taken to maximise sample recovery and ensure representative nature o* ● *Whether a relationship exists between sample recovery and grade and whether sa*
Logging	● *Whether core and chip samples have been geologically and geotechnically logged* ● *Whether logging is qualitative or quantitative in nature. Core (or costean, channel,* ● *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 w* ● *For all sample types, the nature, quality and appropriateness of the sample prepa* ● *Quality control procedures adopted for all sub-sampling stages to maximise repre* ● *Measures taken to ensure that the sampling is representative of the in-situ materia* ● *Whether sample sizes are appropriate to the grain size of the material being samp*
Quality of assay data and laboratory tests	● *The nature, quality and appropriateness of the assaying and laboratory procedure* ● *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parame* ● *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, e*
Verification of sampling and assaying	● *The verification of significant intersections by either independent or alternative co* ● *The use of twinned holes.* ● *Documentation of primary data, data entry procedures, data verification, data stor* ● *Discuss any adjustment to assay data.*
Location of data points	● *Accuracy and quality of surveys used to locate drill holes (collar and down-hole su* ● *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 g* ● *Whether sample compositing has been applied.*
Orientation of data in relation to geological structure	● *Whether the orientation of sampling achieves unbiased sampling of possible struc* ● *If the relationship between the drilling orientation and the orientation of key minera*

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.

---

[1] ASX/TSX Announcement 23 March 2021 - Shallow Bornite-Rich Copper Mineralisation at Red Mountain
[2] ASX/TSX Announcement 5 August 2021 - Significant Trenching Results & Drilling Commences at Red

Mountain
[3] ASX/TSX Announcement 16 June 2021 - Multiple strong MLEM conductors detected at Stairy
[4] ASX/TSX Announcement 5 August 2021 - Significant Trenching Results & Drilling Commences at Red Mountain
[5] ASX/TSX Announcement 31 October 2018 - Major Increase in Kharmagtai Open-Cut Resources to 1.9Mt Cu & 4.3Moz Au
[6] ASX Announcement 5 August 2021 - Significant Trenching Results & Drilling Commences at Red Mountain