New Extension to Gold-Rich High-Grade Copper Zone at Kharmagtai

24.03.2021 | GlobeNewswire

TORONTO, March 24, 2021 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) (Xanadu or the Company) is pleased to report the results of diamond drill hole KHDDH563, located at the Stockwork Hill deposit on the Company's Kharmagtai porphyry copper and gold project in the South Gobi region of Mongolia (Figures 1 and 2).

Highlights

- Drill hole KHDDH563 intersects a broad zone of high-grade gold-rich chalcopyrite and bornite mineralisation south of the Stockwork Hill resource, expanding the high grade bornite zone beyond the defined resources
    - KHDDH563 intersects 181.4m @ 0.68% Cu and 1.78g/t Au (1.59% eCu) from 648.6m

Including 92m @ 1.06% Cu and 3.23g/t Au (2.71% eCu) from 686m

- KHDDH563 expands high-grade mineralisation 70m south and up-dip of previously reported intercept in KHDDH559B
- KHDDH564 identifies new target to the south with similar structural characteristics to the high grade zones at Stockwork Hill
- Deeper step back hole KHDDH564, still in progress, intercepting visual chalcopyrite mineralisation in target zone 400m along down-dip and along strike from KHDDH563.

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said *"KHDDH563 is the first follow-up hole to our high-grade intercept at KHDH559B. We are pleased to report this delivered our expectation of a clear extension of high-grade gold-rich mineralisation along strike and up-dip, outside the current resource model. This result further demonstrates the growth potential through extension of Stockwork Hill, and our team is designing follow-up drilling to test this exciting new zone."*

About KHDDH563

The purpose of drilling KHDDH563 was to test extensions of Stockwork Hill at depth to inform the second phase of drilling focused on higher grade targets. KHDDH563 was drilled from south of Stockwork Hill towards the north, designed as a scissor hole to KHDDH559B (please see ASX/TSX Announcement dated 15 February 2021). KHDDH563 entered mineralisation at 648.6m, expanding the intercept in KHDDH559B 70m up-dip and to the south (Figures 1 and 2).

Figure 1 is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/19e93fbc-f4e3-4bca-8df3-1f313c374fed

KHDDH563 intersected;

181.4m @ 0.68% Cu and 1.78g/t Au (1.59% eCu) from 648.6m

Including 169m @ 0.72% Cu and 1.91g/t Au (1.7% eCu) from 651m

Including 105.6m @ 0.99% Cu and 2.89g/t Au (2.46% eCu) from 680m

Including 92m @ 1.06% Cu and 3.23g/t Au (2.71% eCu) from 686m

It is noteworthy that this maintains the gold tenor of the deeper, high-grade bornite mineralisation seen in KHDDH559B (previously announced), with between 2-4 g/t Au for each percent in copper.

Importantly, structural information from this hole and the surrounding drilling has aided in a new structural interpretation, identifying the potential repeat of high-grade bornite mineralisation south of the current drilling, towards the base of White Hill (Figure 1). Drill Hole KHDDH564 was collared in early March to test this new target and is currently drilling visible sulphide mineralisation within the expected target zone (Figure 4).

About KHDDH564

Drill hole KHDDH564 is designed as a large-scale step out (400m to the south), targeting a repeat of the high-grade bornite zone at Stockwork Hill (Figure 1 and 2). KHDDH564 is currently at 1,200m and entered visible sulphide mineralisation within the predicted target zone at ~1,180m (Figure 4).

Additionally, KHDDH564 passed through a zone of tourmaline breccia (main host rock copper and gold mineralisation) between 570m and 740m (Figure 5). This zone of tourmaline breccia is identical to the tourmaline breccia found above the strongly mineralised tourmaline breccia at Stockwork Hill, identifying another significant target at Kharmagtai. The tourmaline breccia at Stockwork Hill is zoned, with an outer shell of pyrite bearing tourmaline breccia surrounding the high-grade chalcopyrite zone. Interestingly, this zone of breccia terminated against a fault, indicating it has been offset. Structural work is underway to understand the offset on this fault and determine the location of potentially copper bearing tourmaline breccia.

Figure 2 is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/5ac4b027-6f4e-45d4-8d19-b1e53e9be4db

Final Assay Results KHDDH559B

Final assay results from the tail of KHDDH559B have been received. These results did not change the reported intercept (see ASX/TSX Announcement dated 15 February 2021). The remainder of the hole returned broad intervals of patchy low grade copper mineralisation with a narrow intercept at the end of the hole returning 5m @ 1.13g/t Au, relating to a narrow (2m @ 4.91g/t Au) epithermal vein.

Figure 3 is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/1241eb25-1548-42d4-bd84-59162f17acc5

Figure 4 is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/4a9c02a6-8ea7-42d2-a8e4-09b098a73351

Figure 5 is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/c7b34434-7ee1-475b-b9d7-9eb93cced7e4

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 an emerging Tier 1 copper-gold deposit in our flagship Kharmagtai project. For information on Xanadu visit: www.xanadumines.com.

Andrew Stewart
CEO
Xanadu Mines Ltd.
Andrew.stewart@xanadumines.com

+61 409 819 922

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

Appendix 1: Drilling Results

Table 1: Drill hole collar

Hole ID	Prospect	East	North	RL	Azimuth (?)	Inc (?)	Depth (m)
KHDDH559B	Stockwork Hill	592867	4878060	1163	190	-53	1120.1
KHDDH563	Stockwork Hill	592690	4877190	1296	0	-60	951.0
KHDDH564	Stockwork Hill	592668	4876649	1299	0	-60	1200.0

Table 2: Significant drill results

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH559B	Stockwork Hill	218	226	8	0.14	0.11	0.18	0.35
and		236	248	12	0.09	0.06	0.10	0.20
and		284	564	280	0.36	0.46	0.64	1.26
and		290	294	4	0.19	0.28	0.38	0.74
including		308	554	246	0.40	0.51	0.71	1.39
including		318	336	18	0.28	0.67	0.81	1.58
including		346	472	126	0.50	0.70	0.96	1.87
including		346	360	14	1.23	2.36	2.99	5.84
including		370	374	4	0.53	1.11	1.37	2.69
including		392	414	22	0.74	0.73	1.11	2.17
including		510	518	8	0.97	0.27	0.76	1.49
including		534	546	12	0.34	0.41	0.58	1.14
and		611.8	838	226.2	1.43	0.68	1.41	2.75
including		615	790	175	1.83	0.84	1.78	3.47
including		617	637	20	2.09	1.09	2.16	4.22
including		617	635	18	2.28	1.15	2.32	4.53
including		649	783	134	2.04	0.89	1.93	3.77
including		651	712	61	3.76	1.43	3.36	6.57
including		756	763	7	1.67	1.07	1.92	3.76
and		848	908	60	0.05	0.09	0.11	0.22
and		928	938	10	0.05	0.08	0.11	0.21
and		970.3	994	23.7	0.13	0.10	0.16	0.32
and		1115	1120.1	5.1	1.13	0.05	0.62	1.22
KHDDH563	Stockwork Hill	322	332	10	0.06	0.12	0.15	0.29
and		648.6	830	181.4	1.78	0.68	1.59	3.11
including		651	820	169	1.91	0.72	1.70	3.32
including		664	668	4	0.40	0.52	0.72	1.41
including		680	785.6	105.6	2.89	0.99	2.46	4.82
including		686	778	92	3.23	1.06	2.71	5.30
and		860	937.1	77.1	0.10	0.19	0.24	0.47
including		888	892	4	0.07	0.30	0.34	0.66
including		906	936	30	0.16	0.27	0.35	0.69
including		928	934	6	0.38	0.42	0.62	1.20
and		947.5	951	3.5	0.05	0.35	0.38	0.74

Table 3: Selected copper and gold assay results for the high-grade zone

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH563	680	682	2	0.45	0.43	0.66	1.29
KHDDH563	682	684	2	0.60	0.25	0.55	1.08
KHDDH563	684	686	2	0.95	0.37	0.85	1.67
KHDDH563	686	688	2	1.65	1.27	2.11	4.12
KHDDH563	688	690	2	3.40	1.39	3.12	6.11
KHDDH563	690	692	2	1.25	0.38	1.02	2.00
KHDDH563	692	694	2	1.12	0.32	0.89	1.75
KHDDH563	694	696	2	1.73	0.35	1.23	2.41
KHDDH563	696	698	2	2.39	1.00	2.22	4.34
KHDDH563	698	700	2	2.49	0.69	1.97	3.84
KHDDH563	700	702	2	2.66	0.83	2.19	4.29
KHDDH563	702	704	2	1.53	0.59	1.37	2.69
KHDDH563	704	706	2	0.96	0.29	0.78	1.53
KHDDH563	706	708	2	1.78	0.79	1.70	3.32
KHDDH563	708	710	2	2.21	0.64	1.77	3.46
KHDDH563	710	712	2	4.27	1.59	3.77	7.37
KHDDH563	712	714	2	7.71	1.83	5.77	11.28
KHDDH563	714	716	2	15.75	3.45	11.50	22.50
KHDDH563	716	718	2	7.22	2.11	5.80	11.35
KHDDH563	718	720	2	6.33	1.77	5.01	9.79
KHDDH563	720	722	2	1.15	0.47	1.05	2.06
KHDDH563	722	724	2	0.79	0.50	0.90	1.76
KHDDH563	724	726	2	1.44	0.59	1.33	2.60
KHDDH563	726	728	2	2.41	0.80	2.03	3.98
KHDDH563	728	730	2	5.08	1.53	4.13	8.07
KHDDH563	730	732	2	5.80	1.26	4.22	8.25
KHDDH563	732	734	2	10.80	2.14	7.66	14.98
KHDDH563	734	736	2	4.42	1.04	3.30	6.44
KHDDH563	736	738	2	2.57	1.13	2.44	4.78
KHDDH563	738	740	2	2.62	0.88	2.22	4.34
KHDDH563	740	742	2	4.73	1.82	4.23	8.28
KHDDH563	742	744	2	4.58	0.95	3.29	6.43
KHDDH563	744	746	2	4.49	1.08	3.38	6.60
KHDDH563	746	748	2	2.92	0.94	2.43	4.75
KHDDH563	748	750	2	2.89	0.92	2.40	4.69
KHDDH563	750	752	2	2.24	0.72	1.86	3.65
KHDDH563	752	754	2	1.18	0.40	1.00	1.95
KHDDH563	754	756	2	1.94	0.52	1.51	2.96
KHDDH563	756	758	2	1.97	0.66	1.67	3.26
KHDDH563	758	760	2	3.24	1.76	3.42	6.68
KHDDH563	760	762	2	3.19	2.45	4.08	7.98
KHDDH563	762	764	2	0.96	0.50	0.99	1.94
KHDDH563	764	766	2	1.35	0.65	1.34	2.62
KHDDH563	766	768	2	1.44	0.79	1.52	2.98
KHDDH563	768	770	2	0.71	0.45	0.82	1.60
KHDDH563	770	772	2	1.57	0.78	1.58	3.09
KHDDH563	772	774	2	2.52	0.96	2.25	4.41
KHDDH563	774	776	2	3.17	1.86	3.48	6.81
KHDDH563	776	778	2	1.73	1.07	1.95	3.82
KHDDH563	778	780	2	0.70	0.54	0.89	1.75
KHDDH563	780	782	2	0.63	0.59	0.91	1.79

KHDDH563	782	784	2	0.41	0.59	0.80	1.56
KHDDH563	784	785.6	1.6	0.35	0.64	0.82	1.60
KHDDH563	785.6	788	2.4	0.14	0.33	0.40	0.78

Appendix 2: Statements and Disclaimers

Mineral Resources and Ore Reserves Reporting Requirements

The 2012 Edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code 2012) sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The Information contained in this Announcement has been presented in accordance with the JORC Code 2012.

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.

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: 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 11 April 2019.

JORC TABLE 1 - SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code explanation
Sampling techniques	● *Nature and quality of sampling (e.g. cut channels, random c* ● *Include reference to measures taken to ensure sample repre* ● *Aspects of the determination of mineralisation that are Mate* ● *In cases where 'industry standard' work has been done this*
Drilling techniques	● *Drill type (e.g. core, reverse circulation, open-hole hammer,*
Drill sample recovery	● *Method of recording and assessing core and chip sample re* ● *Measures taken to maximise sample recovery and ensure re* ● *Whether a relationship exists between sample recovery and*
Logging	● *Whether core and chip samples have been geologically and* ● *Whether logging is qualitative or quantitative in nature. Core* ● *The total length and percentage of the relevant intersections*

Sub-sampling techniques and sample preparation	● *If core, whether cut or sawn and whether quarter, half or all* ● *If non-core, whether riffled, tube sampled, rotary split, etc. a* ● *For all sample types, the nature, quality and appropriatenes* ● *Quality control procedures adopted for all sub-sampling stag* ● *Measures taken to ensure that the sampling is representativ* ● *Whether sample sizes are appropriate to the grain size of th*
Quality of assay data and laboratory tests	● *The nature, quality and appropriateness of the assaying and* ● *For geophysical tools, spectrometers, handheld XRF instrum* ● *Nature of quality control procedures adopted (e.g. standards*
Verification of sampling and assaying	● *The verification of significant intersections by either indepen* ● *The use of twinned holes.* ● *Documentation of primary data, data entry procedures, data* ● *Discuss any adjustment to assay data.*
Location of data points	● *Accuracy and quality of surveys used to locate drill holes (co* ● *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 est* ● *Whether sample compositing has been applied.*
Orientation of data in relation to geological structure	● *Whether the orientation of sampling achieves unbiased sam* ● *If the relationship between the drilling orientation and the ori*
Sample security	● *The measures taken to ensure sample security.*
Audits or reviews	● *The results of any audits or reviews of sampling techniques*

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 ● Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut ● The Kharmagtai mining license MV-17387A is 100% owned by Oyut U ● The Mongolian Minerals Law (2006) and Mongolian Land Law (2002) gover
Exploration done by other parties	● Previous exploration at Kharmagtai was conducted by Quincunx Ltd, Ivanho ● Previous exploration at Red Mountain (Oyut Ulaan) was conducted by Ivanh
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	● The CSAMT data was converted into 2D line data using the Zonge CSAMT ● A nominal cut-off of 0.1% eCu is used in copper dominant systems for ident ● A nominal cut-off of 0.1g/t eAu is used in gold dominant systems like Golden ● 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 (eCu) calculation represents the total metal value for each Copper equivalent (CuEq or eCu) grade values were calculated using the followin eCu or CuEq = Cu + Au * 0.62097 * 0.8235, Gold Equivalent (eAu) grade values were calculated using the following formula: eAu = 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 ● 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 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 the body of the report.
Balanced reporting	● Resources have been reported at a range of cut-off grades, above a minimu
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 on going.