Further Extensions to High Grade Zones at Stockwork Hill

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TORONTO, Dec. 01, 2021 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) (Xanadu or the Company) is pleased to update the market on its on-going exploration program for porphyry copper and gold deposits at the Kharmagtai District in the South Gobi region of Mongolia.

Highlights

- Strong step-out drilling results pave the way for further growth of both the gold-rich bornite and high-grade tourmaline breccia zones at Stockwork Hill, with copper and gold grades materially exceeding the 2018 Mineral Resource Estimate[1].
- High-grade intercept from drill hole KHDDH584 at Stockwork Hill extends the gold-rich bornite zone by 80 metres up-dip and 30 metres down-dip returning:
  - 229.5m @ 0.57% CuEq from 747.5m
  - including 88m @ 0.96% CuEq
  - including 28m @ 1.35% CuEq
- High-grade partial intercepts from drill hole KHDDH585 at Stockwork Hill expands the Tourmaline Breccia Zone by 25 metres north and 25 metres south returning:
  - 309m @ 0.80% CuEq from 250m
  - including 225m @ 1.04% CuEq
  - including 124m @ 1.55% CuEq
  - Including 50m @ 2.18% CuEq
- Drilling between White Hill and Zaraa intercepts a broad zone of mineralisation indicating another porphyry system is nearby and mineralisation likely extends between the two deposits.
- Xanadu is on track for an updated Mineral Resource Estimate for Kharmagtai in December 2021.

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said *"We are very pleased with new results from ongoing step-out drilling at Stockwork Hill. This includes outstanding results from drill hole KHDDH584 that has significantly expanded the higher-grade copper and gold core, supporting our view that this is a big system with huge untested potential. Upside exists not only for increased tonnage, but more importantly for increasing gold to copper ratio, as we drill deeper into the core of the system.*

These latest results continue to exceed the grades that were estimated in the 2018 Kharmagtai Mineral Resource, and our geology team has been working hard on an interim Mineral Resource Estimate (MRE) update, to incorporate significant drilling since 2018. We are pleased to confirm that we remain on schedule to release the updated interim MRE this month."

Full intercepts and drill hole details can be found in Appendix 1, Tables 1 and 2.

Drill Hole KHDDH584

Drill hole KHDDH584 (see Figure 1, 2 & 3) was designed to target down-dip extensions to the higher-grade bornite zone at the Stockwork Hill deposit. It intercepted wide zones of mineralisation, grading up to 0.71% copper (Cu) and 1.26g/t gold (Au) within a broader intercept of 229.5m grading 0.57% copper equivalent (CuEq) from 747.5m.

Hole ID	Interval	Cu	Au	CuEq	From
KHDDH584	12m	1.10%	0.14g/t	1.17%	520m
and	229.5m	0.34%	0.45g/t	0.57%	747.5m
including	124m	0.48%	0.61g/t	0.79%	779m

including	88m	0.57%	0.77g/t	0.96%	813m
including	12m	0.64%	0.86g/t	1.07%	819m
including	28m	0.71%	1.26g/t	1.35%	853m
and	14m	0.88%	0.07g/t	0.91%	1031m
including	6m	1.20%	0.09g/t	1.25%	1033m

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

Drill hole KHDDH584 extended the higher-grade bornite zone by 80 metres up-dip and 30 metres down-dip at Stockwork Hill, which represents an increase to the interpreted tonnage of higher-grade material at Stockwork Hill.

Significantly, two zones of copper-rich, mineralisation were encountered above and below the main bornite zone. At 520m, a breccia body containing 12m @ 1.1% Cu was returned and at 1,033m, a second breccia was drilled returning 6m @ 1.2% Cu. These breccias occur well outside the stockwork Hill deposit and may represent a vector to a new target.

Drill Hole KHDDH585

Drill hole KHDDH585 (see Figure 1, 2 & 3) was designed to target northern and southern extensions to the high-grade tourmaline breccia zone at the Stockwork Hill deposit. Assays have been returned to 812m, intercepting wide zones of mineralisation, grading up to 1.87% Cu and 0.61g/t Au within a broader intercept of 309m grading 0.80% CuEq from 250m. Furthermore, gold grade was of very high tenor at 784m, returning 10m @ 2.65g/t Au. We look forward to receipt of remaining assays for the end of hole, to better understand the potential for high gold mineralisation at depth.

Hole ID	Interval	Cu	Au	CuEq	From
KHDDH585	309m	0.65%	0.30g/t	0.80%	250m
including	225m	0.84%	0.38g/t	1.04%	284m
including	124m	1.28%	0.52g/t	1.55%	322m
including	50m	1.87%	0.61g/t	2.18%	330m
including	56m	1.00%	0.58g/t	1.29%	390m
including	14m	0.40%	0.60g/t	0.71%	479m
and	147m	0.19%	0.42g/t	0.41%	665m
including	4m	0.92%	1.28g/t	1.57%	752m
including	36m	0.30%	1.14g/t	0.89%	774m
including	10m	0.45%	2.65g/t	1.80%	784m

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

Assays are returned to 812m; the remaining results are expected in the coming weeks and are not expected to materially impact the findings in this Announcement.

Figure 1. Stockwork Hill plan view, drill holes KHDDH584 and KHDDH585 and interpreted grade shells is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/3320ecc0-9d63-4ec4-a355-2161ed659de1

Figure 2. Stockwork Hill long section, drill hole KHDDH584 and KHDDH585 and interpreted grade shells is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/79443c97-80b4-444e-a935-6b308c7a21b3

Figure 3. Stockwork Hill cross section, drill hole KHDDH584 and KHDDH585 and interpreted grade shells
https://www.globenewswire.com/NewsRoom/AttachmentNg/1c86f87c-f19f-4a32-a384-e8751884280b

Other Drilling

Pending assays that were discussed in the September 2021 Quarterly Report[2] have now been returned for drill holes KHDDH581, KHDDH582 and KHDDH583.

- KHDDH581 returned patchy tourmaline breccia mineralisation throughout the drill hole, without delivering any significant intercepts. Details can be found in Tables 1 and 2.
- KHDDH582 was drilled as a discovery hole between White Hill and Zaraa deposits. This hole encountered a broad zone of porphyry mineralisation, as defined by a 700m wide zone of porphyry veining, including 177m @ 0.14% CuEq. Results indicate the potential for another porphyry system in close proximity. Mineralisation has potential to extend between the White Hill and Zaraa deposits with future drill testing. Details can be found in Tables 1 and 2.
- KHDDH583 was drilled targeting the upper fault block of the high-grade bornite zone. This hole returned a broad zone of moderate grade mineralisation with several narrow zones of high-grade including 27m @ 0.57% CuEq. Drill hole details and intercepts can be found in Tables 1 and 2.

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: Drilling Results

Table 1: Drill hole collar

Hole ID	Prospect	East	North	RL	Azimuth (?)	Inc (?)	Depth (m)
KHDDH581	Stockwork Hill	592982	4877864	1281	180	-67	870.4
KHDDH582	Zaraa	593586	4876318	1293	0	-60	1,437.0
KHDDH583	Stockwork Hill	592376	4877485	1293	0	-70	935.5
KHDDH584	Stockwork Hill	592560	4877182	1298	0	-70	1,171.0
KHDDH585	Stockwork Hill	592806	4877968	1282	170	-65	1,304.2

Table 2: Significant drill results

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH581	Stockwork Hill	180	228	48	0.10	0.14	0.19	0.37
including		200	204	4	0.26	0.23	0.37	0.71
and		238	246	8	0.04	0.14	0.16	0.32
and		284	302	18	0.06	0.09	0.12	0.23
and		320	330	10	0.15	0.09	0.17	0.32
and		374	416	42	0.05	0.08	0.10	0.20
and		436	456	20	0.03	0.18	0.19	0.38
and		474	498	24	0.04	0.12	0.14	0.27
and		508	512	4	0.10	0.06	0.11	0.22

and	522	580	58	0.04	0.06	0.09	0.17
and	596	600	4	0.28	0.14	0.28	0.55
and	616.1	622	5.9	0.08	0.09	0.13	0.25
and	632	660	28	0.05	0.12	0.15	0.29
and	698	714	16	0.07	0.13	0.17	0.33
and	740	762	22	0.03	0.14	0.16	0.31
and	808	814	6	0.02	0.09	0.10	0.20
and	838	850	12	0.03	0.10	0.12	0.24
KHDDH582 Zaraa	521	525	4	0.07	0.10	0.13	0.26
and	539	554	15	0.03	0.09	0.11	0.22
and	566	580	14	0.04	0.10	0.12	0.23
and	592	604	12	0.03	0.09	0.11	0.21
and	628	646	18	0.05	0.14	0.16	0.32
and	656	833	177	0.05	0.12	0.14	0.28
and	1040	1044	4	0.07	0.15	0.19	0.37
and	1053.5	1062	8.5	0.05	0.10	0.12	0.24
KHDDH583 Stockwork Hill	5	35	30	0.05	0.09	0.12	0.24
and	73	77	4	0.05	0.11	0.14	0.27
and	158	164	6	0.06	0.14	0.17	0.33
and	174	194	20	0.04	0.12	0.14	0.28
and	246	250	4	0.05	0.08	0.10	0.20
and	312	322	10	0.07	0.07	0.11	0.21
and	342	365	23	0.06	0.07	0.10	0.20
and	375	411	36	0.05	0.07	0.10	0.20
and	459	480	21	0.11	0.06	0.12	0.23
and	490	614	124	0.12	0.17	0.23	0.45
including	583	610	27	0.25	0.44	0.57	1.12
including	585	591	6	0.16	0.73	0.81	1.59
including	603	608.3	5.3	0.47	0.47	0.71	1.39
and	691	703	12	0.10	0.08	0.13	0.26
and	716	747	31	0.10	0.07	0.12	0.24
including	737	743	6	0.20	0.29	0.39	0.76
and	759	806	47	0.09	0.15	0.20	0.39
including	773	781	8	0.19	0.25	0.35	0.68
and	800	804	4	0.27	0.49	0.63	1.23
and	868	924	56	0.07	0.07	0.11	0.21
KHDDH584 Stockwork Hill	123	135	12	0.11	0.09	0.14	0.28
and	375	387	12	0.06	0.13	0.16	0.31
and	516	534	18	0.11	0.82	0.87	1.71
including	516	532	16	0.12	0.90	0.96	1.88
including	520	532	12	0.14	1.10	1.17	2.29
including	522	532	10	0.15	1.18	1.26	2.46
and	747.5	977	229.5	0.45	0.34	0.57	1.11
including	754.8	767	12.2	0.31	0.20	0.35	0.69
including	779	903	124	0.61	0.48	0.79	1.55
including	813	901	88	0.77	0.57	0.96	1.87
including	819	831	12	0.86	0.64	1.07	2.10
including	853	881	28	1.26	0.71	1.35	2.65
including	916	930	14	0.36	0.23	0.41	0.80
including	950	977	27	0.45	0.20	0.43	0.85
including	950	956	6	0.90	0.32	0.78	1.53
and	991	1001	10	0.11	0.07	0.12	0.24

and	1029	1105	76	0.03	0.31	0.33	0.65
including	1029	1073	44	0.05	0.45	0.47	0.93
including	1031	1045	14	0.07	0.88	0.91	1.78
including	1033	1039	6	0.09	1.20	1.25	2.45
and	1137	1157	20	0.23	0.02	0.14	0.28
including	1145.4	1157	11.6	0.39	0.01	0.21	0.40
KHDDH585 Stockwork Hill	8	14	6	0.03	0.10	0.12	0.23
and	40	120	80	0.06	0.09	0.12	0.23
and	204	222	18	0.11	0.07	0.13	0.25
and	234	238	4	0.08	0.29	0.33	0.65
and	250	559	309	0.30	0.65	0.80	1.57
including	284	509	225	0.38	0.84	1.04	2.03
including	322	446	124	0.52	1.28	1.55	3.02
including	330	380	50	0.61	1.87	2.18	4.27
including	390	446	56	0.58	1.00	1.29	2.52
including	479	493	14	0.60	0.40	0.71	1.38
including	481	493	12	0.60	0.41	0.72	1.41
including	521	537	16	0.23	0.17	0.28	0.55
and	569	591	22	0.09	0.07	0.11	0.22
and	611	637	26	0.04	0.05	0.07	0.14
and	665	812	147	0.42	0.19	0.41	0.80
including	675	687	12	0.13	0.19	0.26	0.50
including	721	725	4	0.96	0.31	0.80	1.56
including	749.8	764	14.2	0.48	0.43	0.67	1.32
including	752	756	4	1.28	0.92	1.57	3.07
including	774	810	36	1.14	0.30	0.89	1.73
including	780	810	30	1.27	0.32	0.97	1.91
including	784	794	10	2.65	0.45	1.80	3.53
assays pending							

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.

The information in this Announcement relates to the exploration results previously reported in ASX Announcements which are available on the Xanadu website at: http://www.xanadumines.com/irm/content/announcements.aspx.

The Company is not aware of any new, material information or data that is not included in those market announcements.

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 (CuEq or 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 CuEq calculation defined by CSA Global Pty Ltd (CSA Global) in the 2018 Mineral Resource Upgrade (see ASX Announcement dated 31 October 2018).

Copper equivalent grade values were calculated using the formula CuEq = 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%).

These equivalent formulas were 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 16 August 2021.

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 appropriateness* ● *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.

	● 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 Golde ● Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0. ● Most of the reported intercepts are shown in sufficient detail, including maxi ● Informing samples have been composited to two metre lengths honouring th
Data Aggregation methods	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 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 the body of this ASX/TSX Announcement.
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.

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 31 October 2018 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.

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[1] ASX/TSX Announcement 31 October 2018 - Major increase in Kharmagtai Open Cut Resource to 1.9Mt Cu & 4.3Moz Au
[2] ASX/TSX Announcement 28 October 2021 - Quarterly Activities Report and Appendix 5B - 30 September 2021