

20 April 2021

Xanadu Mines Ltd (**ASX: XAM, TSX: XAM**) ("Xanadu" or "the Company") is pleased to provide an update of on-going drilling at the Stockwork Hill deposit on the Company's Kharmagtai porphyry copper and gold project in the South Gobi region of Mongolia.

Highlights

- Partial results and visual logs reported from two diamond drill holes (KHDDH564 & KHDDH565) due to delays in Ulaanbaatar assay lab related to COVID-19 restrictions.
- Visual logs of copper in two drill holes highlight the potential for significant strike and depth extension to high-grade bornite zone at Stockwork Hill.
- KHDDH565 expands the strike length of recently reported high-grade bornite zones, intersecting a >680 metre interval of mineralised diorite and intrusive breccia, demonstrating significant potential growth in the mineralised volume under Stockwork Hill.
- KHDDH564 intersects a new zone of mineralisation representing a repeat (offset block) of the high-grade bornite zone
- Drilling continues uninterrupted at Xanadu's Kharmagtai project with two diamond drill rigs.

Xanadu's Chief Executive Officer, Dr Andrew Stewart, said "While our drilling continues uninterrupted, following a temporary assay lab slowdown, we've decided to share some encouraging partial assays and visual copper sulphide results from Stockwork Hill. These two holes expand the recently discovered high-grade bornite zone, intersecting significant zones of visual copper sulphide mineralisation. KHDDH565, still in progress, is very significant, having intersected over 680 metres of visual copper mineralisation so far and still within mineralisation. KHDDH564 looks to have intersected the upper zone in new down

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thrown block of mineralisation. These show that Xanadu continues to move toward our high grade target of a >100Mt, 0.8%CuEq block, which would underpin future development at Kharmagtai.

We support the Government of Mongolia in its actions to manage COVID-19 as it completes its well progressed vaccination program."

KHDDH565 In Progress

Drill hole KHDDH565 was designed as a long-strike or long section drill hole to provide the following:

- Target offsets information about the faults at the eastern and western ends of the high-grade bornite zone.
- Grade continuity detailed information along the strike of the high-grade bornite zone.
- Maximise data reduce the amount of drilling required to incorporate the high-grade bornite zone into the next mineral resource estimate update.
- Extend west assist in understanding the western extensions of the high-grade bornite zone where little drilling has occurred.
- Evaluate shallow, eastern targets test tourmaline breccia targets suggested by broad spaced drilling to the east of Stockwork Hill.

Assays have been returned to 604m, just above where the hole entered the high-grade bornite zone. Interim assay results show that a new tourmaline breccia zone has been discovered along strike from the existing tourmaline breccia at Stockwork Hill (**Figures 3, 4, 5 and 6**).

This new tourmaline breccia zone has returned: 159m @ 0.31% Cu and 0.21 g/t Au (0.41% eCu) from 323m

Including 66m @ 0.52% Cu and 0.37g/t Au (0.7% eCu) from 361m

Including 26m @ 0.77% Cu and 0.56g/t Au (1.06% eCu) from 369m

Including 8m @ 1.18% Cu and 0.64g/t Au (1.51% eCu) from 369m

Including 6m @ 0.83% Cu and 0.83g/t Au (1.26% eCu) from 389m

Including 16m @ 0.48% Cu and 0.40g/t Au (0.68% eCu) from 409m

Including 8m @ 0.83% Cu and 0.37g/t Au (1.02% eCu) from 445m

KHDDH565 remains in progress at a depth of 1,300m. Final assays for the remainder of the drill hole are expected in mid-May.

KHDDH564 Partial Results

Drill hole KHDDH564 was 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**). The hole has been completed and assays have been returned to 1,305m (**Figure 1 and 2**).

The visual mineralisation reported in March (please see ASX/TSX Announcement dated 23 March 2021) has returned assays showing that KHDDH564 has tagged the top of the next major discovery at Kharmagtai.

KHDDH564 intersects 31m @ 0.53% Cu and 0.12 g/t Au (0.59% eCu) from 1176m

Including 18m @ 0.79% Cu and 0.15g/t Au (0.86% eCu) from 1183m

Including 4m @ 1.22% Cu and 0.24g/t Au (1.35% eCu) from 1183m

And 3m @ 1.14g/t Au from 1052m

Final assays from KHDDH564 are expected in mid-May 2021. Additional drill holes are being planned to target this new zone of mineralisation.

KHDDH566 New Drilling

Xanadu has recently commended drill hole KHDDH566, which has been designed as a scissor hole, like KHDDH563 (see ASX/TSX Announcement dated 23 March 2021). KHDDH566 will intersect the high-grade bornite zone 70-100m along strike from KHDDH563 and is currently at 450m (**Figure 1**). The high-grade bornite zone is expected around 600m. Assays for KHDDH566 are expected late-May.

Zaraa Drilling

Three diamond drill holes were completed at Zaraa in March, but assays were delayed as Stockwork Hill drill holes took priority at the laboratory. These holes (KHDDH560, 561, 562) were designed to fill gaps in the drill pattern at Zaraa to allow it to be added to the next Mineral Resource Upgrade. All holes returned low to medium grade porphyry mineralisation indicative of the edges of the Zaraa system. Hole details can be found in **Table 1**.

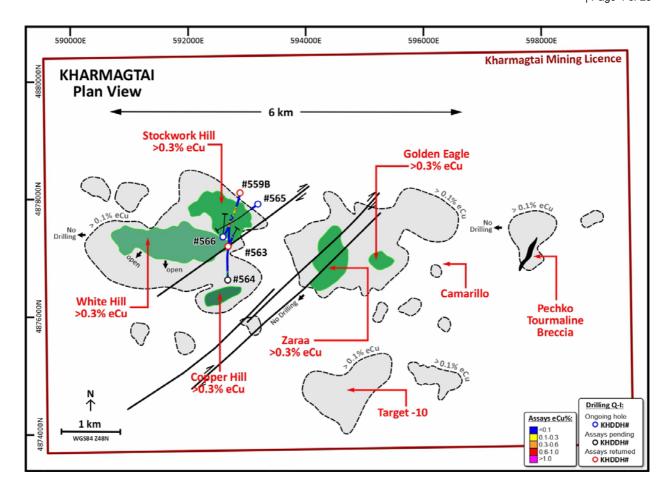


Figure 1. Location of reported drilling in plan view on Kharmagtai Mining Lease

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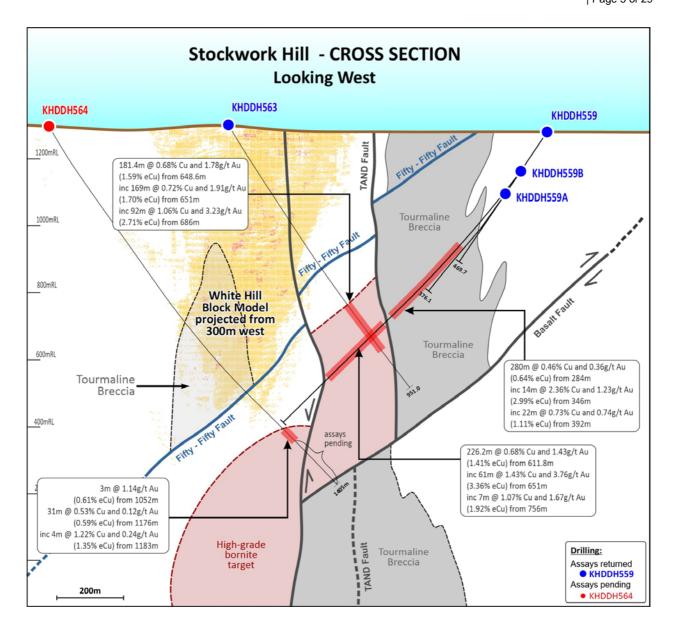


Figure 2. Cross section showing drill hole KHDDH564.

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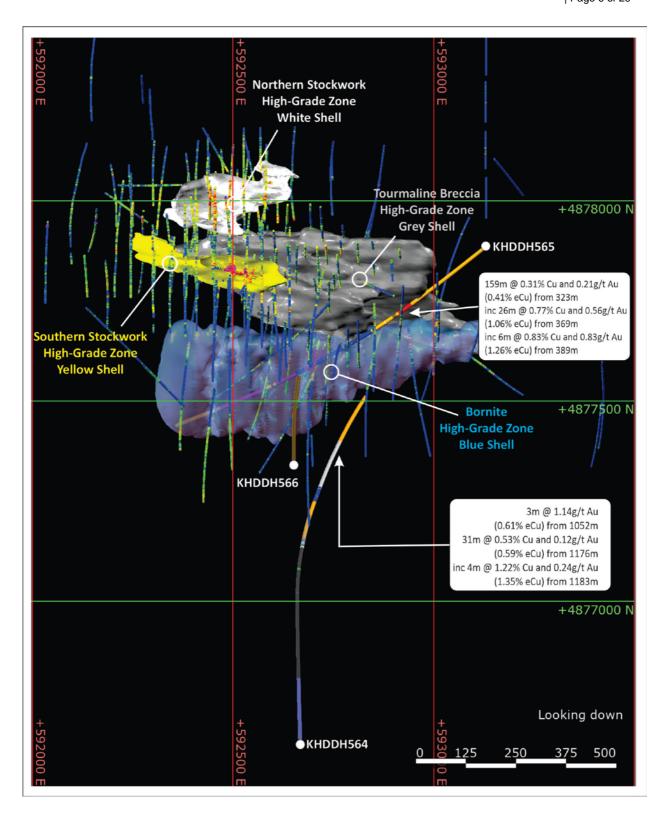


Figure 3. 3D plan view of Stockwork Hill showing the main high-grade zones and currently reported drill holes.

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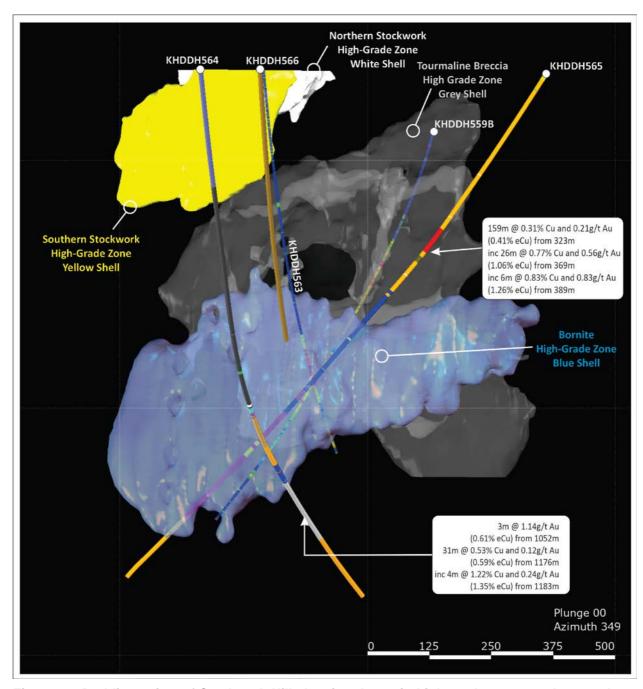


Figure 4. 3D oblique view of Stockwork Hill showing the main high-grade zones and currently reported drill holes and 2021 drilling.

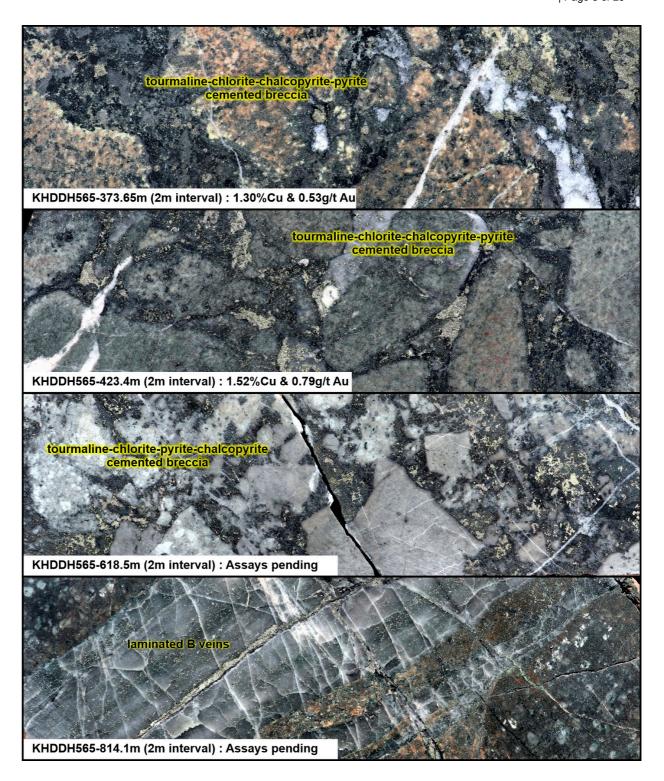


Figure 5. Slab images from KHDDH565, each slab is halved HQ core and 4.36cm tall.

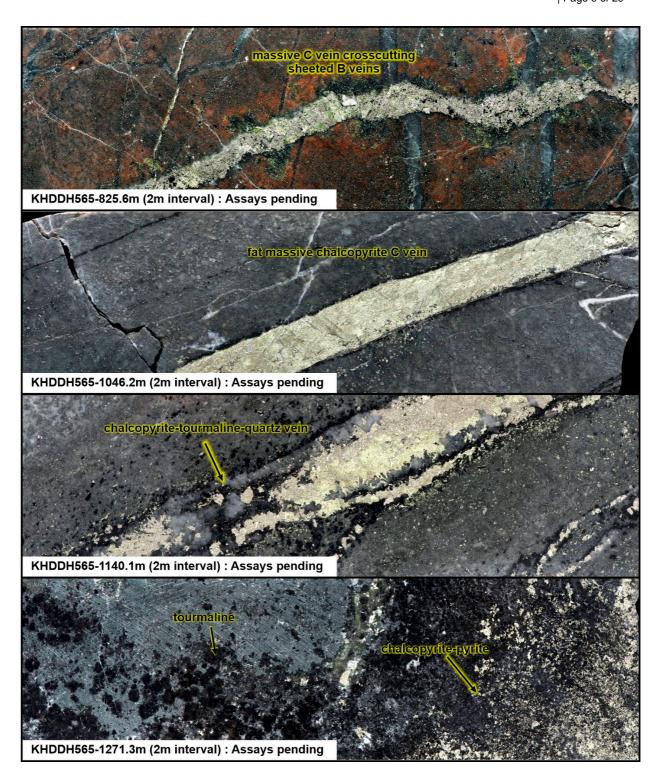


Figure 6. Slab images from KHDDH565, each slab is halved HQ core and 4.36cm tall.

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XANADU MINES

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.

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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)
KHDDH559B	Stockwork Hill	592867	4878060	1163	211	-35	1120.1
KHDDH560	Zaraa	594600	4876067	1289	315	-65	1296.5
KHDDH561	Zaraa	594547	4877457	1270	135	-70	1330.7
KHDDH562	Zaraa	594530	4877299	1271	135	-70	1045.5
KHDDH563	Stockwork Hill	592690	4877190	1296	0	-60	951.0
KHDDH564	Stockwork Hill	592668	4876649	1299	0	-60	1405.0
KHDDH565	Stockwork Hill	593133	4877888	1280	233	-55	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
including		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
KHDDH560	Zaraa	239	243	4	0.06	0.18	0.21	0.40
and		255	259	4	0.06	0.29	0.32	0.63
and		1003.2	1017	13.8	0.09	0.05	0.10	0.19
and		1105	1109	4	0.03	0.17	0.19	0.37

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
and		1282.6	1296.5	13.9	0.03	0.12	0.13	0.26
KHDDH561	Zaraa	21	35	14	0.18	0.03	0.12	0.24
and		45	55	10	0.20	0.04	0.14	0.28
and		67	137	70	0.07	0.07	0.10	0.20
and		147	177	30	0.20	0.12	0.22	0.43
including		159	163	4	0.47	0.36	0.60	1.18
and		189	259	70	0.15	0.12	0.19	0.38
and		269	512	243	0.21	0.19	0.30	0.59
including		297	299	2	0.12	0.28	0.34	0.67
including		315	358	43	0.24	0.25	0.37	0.72
including		371	401	30	0.36	0.23	0.41	0.81
including		411	421	10	0.27	0.20	0.33	0.65
including		453.5	504.2	50.7	0.32	0.29	0.45	0.88
including		463	475	12	0.39	0.33	0.53	1.04
and		532	1256	724	0.07	0.15	0.19	0.37
including		532	548	16	0.19	0.14	0.24	0.46
including		562	572	10	0.35	0.17	0.35	0.69
including		582	594	12	0.14	0.23	0.30	0.58
including		680	686	6	0.14	0.23	0.30	0.59
including		778	795	17	0.13	0.22	0.29	0.56
including		934	952	18	0.09	0.24	0.29	0.57
including		1028	1045	17	0.11	0.31	0.37	0.72
including		1057	1079	22	0.11	0.23	0.28	0.55
including		1185	1195	10	0.10	0.31	0.36	0.71
and		1281	1325	44	0.10	0.11	0.16	0.32
including		1289	1297	8	0.30	0.16	0.31	0.61
KHDDH562	Zaraa	32	54	22	0.18	0.04	0.13	0.26
and		72	86	14	0.12	0.04	0.10	0.20
and		120	138	18	1.21	0.05	0.67	1.31
including		120	124	4	1.42	0.05	0.78	1.52
including		134	138	4	3.55	0.12	1.93	3.78
and		148	204	56	0.17	0.05	0.13	0.26
and		219	772.4	553.4	0.19	0.22	0.32	0.62
including		441	447	6	0.26	0.24	0.37	0.73
including		467	491	24	0.16	0.20	0.28	0.55
including		507	550	43	0.24	0.24	0.36	0.70
including		566	772.4	206.4	0.31	0.36	0.52	1.02
including		572.7	623	50.3	0.50	0.45	0.70	1.37
including		659	663	4	0.34	0.57	0.74	1.45
including		720	755	35	0.37	0.42	0.61	1.18
and		782	1045.5	263.5	0.17	0.22	0.31	0.60
including		784	842	58	0.24	0.34	0.46	0.90

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
including		784	810.6	26.6	0.33	0.41	0.58	1.13
including		865	869	4	0.32	0.49	0.66	1.28
including		888	922	34	0.32	0.38	0.54	1.06
including		888	902	14	0.47	0.53	0.77	1.51
including		969	982.4	13.4	0.10	0.20	0.25	0.48
including		1002	1006	4	0.75	0.18	0.57	1.11
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
KHDDH564	Stockwork Hill	45	95	50	0.05	0.13	0.16	0.31
and		129	286.2	157.2	0.05	0.17	0.20	0.39
including		129	136	7	0.06	0.26	0.29	0.57
including		242	246	4	0.09	0.31	0.35	0.69
including		257	265	8	0.08	0.26	0.30	0.59
and		965	971	6	0.04	0.14	0.16	0.32
and		1052	1055	3	1.14	0.03	0.61	1.19
and		1176	1207	31	0.12	0.53	0.59	1.15
including		1183	1201	18	0.15	0.79	0.86	1.68
including		1183	1187	4	0.24	1.22	1.35	2.63
			Assays p	ending				
KHDDH565	Stockwork Hill	69	79	10	0.12	0.05	0.12	0.23
and		183	215	32	0.19	0.12	0.22	0.43
including		197	211	14	0.32	0.17	0.33	0.65
and		247	263	16	0.05	0.07	0.10	0.19
and		323	482	159	0.21	0.31	0.41	0.81
including		361	427	66	0.37	0.52	0.70	1.38
including		369	395	26	0.56	0.77	1.06	2.07
including		369	377	8	0.64	1.18	1.51	2.94
including		389	395	6	0.83	0.83	1.26	2.46
including		409	425	16	0.40	0.48	0.68	1.33
including		445	453	8	0.37	0.83	1.02	2.00
including		445	451	6	0.40	0.97	1.17	2.30
and		522	538	16	0.33	0.23	0.40	0.78
including		526	538	12	0.41	0.29	0.50	0.99

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Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
and		558	604	46	0.03	0.10	0.11	0.22
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.

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	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	subsequently checked by geologists, and sample tags are attached (stapled) to the plastic core trays for every sample interval. RC chip samples are ¼ splits from one meter intervals using a 75%:25% riffle splitter to obtain a 3kg sample
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether	 The Mineral Resource estimation has been based upon diamond drilling of PQ, HQ and NQ diameters with both standard and triple tube core recovery configurations, RC drilling and surface trenching with channel sampling. All drill core drilled by Xanadu has been

Criteria	JORC Code explanation	Commentary
	core is oriented and if so, by what method, etc.).	oriented using the "Reflex Ace" tool.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Diamond drill core recoveries were assessed using the standard industry (best) practice which involves: removing the core from core trays; reassembling multiple core runs in a v-rail; measuring core lengths with a tape measure, assessing recovery against core block depth measurements and recording any measured core loss for each core run. Diamond core recoveries average 97% through mineralization. Overall, core quality is good, with minimal core loss. Where there is localized faulting and or fracturing core recoveries decrease, however, this is a very small percentage of the mineralized intersections. RC recoveries are measured using whole weight of each 1m intercept measured before splitting Analysis of recovery results vs grade shows no significant trends that might indicate sampling bias introduced by variable recovery in fault/fracture zones.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 All drill core is geologically logged by well-trained geologists using a modified "Anaconda-style" logging system methodology. The Anaconda method of logging and mapping is specifically designed for porphyry Cu-Au mineral systems and is entirely appropriate to support Mineral Resource Estimation, mining and metallurgical studies. Logging of lithology, alteration and mineralogy is intrinsically qualitative in nature. However, the logging is subsequently supported by 4 Acid ICP-MS (48 element) geochemistry and SWIR spectral mineralogy (facilitating semi-quantitative/calculated mineralogical, lithological and alteration classification) which is integrated with the logging to improve cross section interpretation and 3D geological model development. Drill core is also systematically logged for both geotechnical features and geological structures. Where drill core has been successfully oriented, the orientation of

Criteria	JORC Code explanation	Commentary
		 structures and geotechnical features are also routinely measured. Both wet and dry core photos are taken after core has been logged and marked-up but before drill core has been cut.
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 dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	either PQ, HQ or NQ diameter cores. A routine 2m sample interval is used, but this is varied locally to honour lithological/intrusive contacts. The minimum allowed sample length is 30cm. Core is appropriately split (onsite) using diamond core saws with the cut line routinely located relative to the core orientation line (where present) to provide consistency of sample split selection. The diamond saws are regularly flushed with water to minimize potential contamination. A field duplicate ¼ core sample is collected every 30th sample to ensure the "representivity of the in situ material"
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, 	Mongolia for gold

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assaying

Criteria **JORC Code explanation** Commentary XRF handheld finish, with a lower detection (LDL) of 0.01 spectrometers, instruments, etc., the parameters ppm. used in determining the analysis All samples were also submitted to ALS including instrument make and Mongolia for the 48 element package MEmodel, reading times, calibrations ICP61 using a four acid digest (considered factors applied and their to be an effective total digest for the derivation, etc. elements relevant to the MRE). Where Nature of quality control copper is over-range (>1% Cu), it is analysed by a second analytical technique procedures adopted (e.g. standards. blanks, duplicates, (Cu-OG62), which has a higher upper external laboratory checks) and detection limit (UDL) of 5% copper. whether acceptable levels of Quality assurance has been managed by accuracy (i.e. lack of bias) and insertion of appropriate Standards (1:30 precision have been established. samples - suitable Ore Research Pty Ltd certified standards), Blanks (1:30 samples), Duplicates (1:30 samples - 1/4 core duplicate) by XAM. Assay results outside the optimal range for methods were re-analysed by appropriate methods. Ore Research Pty Ltd certified copper and gold standards have been implemented as a part of QC procedures, as well as coarse and pulp blanks, and certified matrix matched copper-gold standards. · QC monitoring is an active and ongoing processes on batch by batch basis by which unacceptable results are re-assayed as soon as practicable. • Prior to 2014: Cu, Ag, Pb, Zn, As and Mo were routinely determined using a threeacid-digestion of a 0.3g sub-sample followed by an AAS finish (AAS21R) at SGS Mongolia. Samples were digested with nitric, hydrochloric and perchloric acids to dryness before leaching with hydrochloric acid to dissolve soluble salts and made to 15ml volume with distilled water. The LDL for copper using this technique was 2ppm. Where copper was over-range (>1% Cu), it was analysed by a second analytical technique (AAS22S), which has a higher upper detection limit (UDL) of 5% copper. Gold analysis method was essentially unchanged. Verification of verification All assay data QAQC is checked prior to The significant of sampling and intersections by either loading into XAM's Geobank data base.

alternative

The data is managed by XAM geologists.

The data base and geological interpretation

or

independent

company personnel.

sections and drill plans provided.

Holes range from vertical to an inclination of

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| Page 21 of 29 Criteria **JORC Code explanation** Commentary is managed by XAM. The use of twinned holes. Check assays are submitted to an umpire Documentation of primary data, lab (SGS Mongolia) for duplicate analysis. data entry procedures, verification, data storage (physical • No twinned drill holes exist. and electronic) protocols. There have been no adjustments to any of Discuss any adjustment to assay the assay data. data. Location of data Accuracy and quality of surveys Diamond drill holes have been surveyed points used to locate drill holes (collar with a differential global positioning system and down-hole surveys), trenches, (DGPS) to within 10cm accuracy. mine workings and other locations The grid system used for the project is UTM Mineral Resource used in WGS-84 Zone 48N estimation. Historically, Eastman Kodak and Flexit Specification of the grid system electronic multi-shot downhole survey tools used. have been used at Kharmagtai to collect Quality azimuth and inclination and adequacy of down hole topographic control. information for the majority of the diamond drill holes. Single shots were typically taken every 30m to 50m during the drilling process, and a multi-shot survey with readings every 3-5m are conducted at the completion of the drill hole. As these tools rely on the earth's magnetic field to measure azimuth. there is some localised interference/inaccuracy introduced by the presence of magnetite in some parts of the Kharmagtai mineral system. The extent of this interference cannot be quantified on a reading-by-reading basis. More recently (since September 2017), a north-seeking gyro has been employed by the drilling crews on site (rented and operated by the drilling contractor), providing accurate downhole orientation measurements unaffected by magnetic effects. Xanadu have permanent а calibration station setup for the gyro tool, which is routinely calibrated every 2 weeks (calibration records are maintained and were sighted) The project DTM is based on 1 m contours from satellite imagery with an accuracy of ±0.1 m. Data spacing and Data spacing for reporting Holes spacings range from <50m spacings distribution Exploration Results. within the core of mineralization to +500m Whether the data spacing and spacings for exploration drilling. Hole distribution is sufficient to establish spacings can be determined using the

the degree of geological and grade

continuity appropriate for the

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Criteria **JORC Code explanation** Commentary Resource and Ore -60 degrees depending on the attitude of the Mineral target and the drilling method. Reserve estimation procedure(s) and classifications applied. The data spacing and distribution is Whether sample compositing has sufficient to establish anomalism and targeting for porphyry Cu-Au, tourmaline been applied. breccia and epithermal target types. Holes have been drilled to a maximum of 1,300m vertical depth. • The data spacing and distribution is sufficient to establish geological and grade continuity, and to support the Mineral Resource classification. Orientation of data in Whether the orientation of Drilling is conducted in a predominantly relation to geological samplina achieves unbiased regular grid to allow unbiased interpretation structure sampling of possible structures and targeting. and the extent to which this is . Scissor drilling, as well as some vertical and known, considering the deposit oblique drilling, has been used in key type. mineralised zones to achieve unbiased If the relationship between the sampling of interpreted structures and orientation drilling and the mineralised zones, and in particular to assist orientation of key mineralised in constraining the geometry of the structures is considered to have mineralised hydrothermal tourmalineintroduced a sampling bias, this sulphide breccia domains. should be assessed and reported if material. Sample security The measures taken to ensure • Samples are delivered from the drill rig to the sample security. core shed twice daily and are never left unattended at the rig. Samples are dispatched from site in locked boxes transported on XAM company vehicles to ALS lab in Ulaanbaatar. • Sample shipment receipt is signed off at the additional Laboratory with email confirmation of receipt. Samples are then stored at the lab and returned to a locked storage site. **Audits or reviews** The results of any audits or Internal audits of sampling techniques and reviews of sampling techniques data management are undertaken on a and data. regular basis, to ensure industry best practice is employed at all times. External reviews and audits have been conducted by the following groups: • 2012: AMC Consultants Pty Ltd. was engaged to conduct an Independent Technical Report which reviewed drilling and sampling procedures. It was concluded that sampling and data record was to an appropriate standard.

Criteria	JORC Code explanation	Commentary
		 2013: Mining Associates Ltd. was engaged to conduct an Independent Technical Report to review drilling, sampling techniques and QAQC. Methods were found to conform to international best practice. 2018: CSA Global reviewed the entire drilling, logging, sampling, sample shipping and laboratory processes during the competent persons site visit for the 2018 MRe, and found the systems and adherence to protocols to be to an appropriate standard.

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-17387A Kharmagtai): Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan mining licence. The Kharmagtai mining license MV-17387A is 100% owned by Oyut Ulaan LLC. Xanadu has an 85% interest in Mongol Metals LLC, which has 90% interest in Oyut Ulaan LLC. The remaining 10% in Oyut Ulaan LLC is owned by Quincunx (BVI) Ltd ("Quincunx"). The Mongolian Minerals Law (2006) and Mongolian Land Law (2002) govern exploration, mining and land use rights for the project.
Exploration done by other parties	 Previous exploration at Kharmagtai was conducted by Quincunx Ltd, Ivanhoe Mines Ltd and Turquoise Hill Resources Ltd including extensive drilling, surface geochemistry, geophysics, mapping. Previous exploration at Red Mountain (Oyut Ulaan) was conducted by Ivanhoe Mines.
Geology	 The mineralisation is characterised as porphyry copper-gold type. Porphyry copper-gold deposits are formed from magmatic hydrothermal fluids typically associated with felsic intrusive stocks that have deposited metals as sulphides both within the intrusive and the intruded host rocks. Quartz stockwork veining is typically associated with sulphides occurring both within the quartz veinlets and disseminated thought out the wall rock. Porphyry deposits are typically large tonnage deposits ranging from low to high grade and are generally mined by large scale open pit or underground bulk mining methods. The deposits at Kharmagtai are atypical in that they are associated with intermediate intrusions of diorite to quartz diorite composition; however the deposits are in terms of contained gold significant, and similar gold-rich porphyry deposits.
Drill hole Information	Diamond drill holes are the principal source of geological and grade data for the Project.
	See figures in this ASX/TSX Announcement.

Criteria	Commentary
Data Aggregation methods	 The CSAMT data was converted into 2D line data using the Zonge CSAMT processing software and then converted into 3D space using a UBC inversion process. Inversion fit was acceptable, and error was generally low. A nominal cut-off of 0.1% eCu is used in copper dominant systems for identification of potentially significant intercepts for reporting purposes. Higher grade cut-offs are 0.3%, 0.6% and 1% eCu. A nominal cut-off of 0.1g/t eAu is used in gold dominant systems like Golden Eagle for identification of potentially significant intercepts for reporting purposes. Higher grade cut-offs are 0.3g/t, 0.6g/t and 1g/t eAu. Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0.6% and 1% eCu. Most of the reported intercepts are shown in sufficient detail, including maxima and subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept. Informing samples have been composited to two metre lengths honouring the geological domains and adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit). 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 (CuEq or eCu) grade values were calculated using the following formula:
	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 in USD):
	 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%.

Criteria	Commentary
Relationship between mineralisation on widths and intercept lengths	 Mineralised structures are variable in orientation, and therefore drill orientations have been adjusted from place to place in order to allow intersection angles as close as possible to true widths. Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts. Tables clearly indicate that true widths will generally be narrower than those reported.
Diagrams	See figures in the body of the report.
Balanced reporting	 Resources have been reported at a range of cut-off grades, above a minimum suitable for open pit mining, and above a minimum suitable for underground mining.
Other substantive exploration data	Extensive work in this area has been done and is reported separately.
Further	The mineralisation is open at depth and along strike.
Work	 Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-300m RLI) shows widths and grades potentially suitable for underground extraction. Exploration on going.

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

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Commentary
Database	The database is a Geobank data base system.
integrity	Data is logged directly into an Excel spread sheet logging system with drop down field lists.
	 Validation checks are written into the importing program ensures all data is of high quality.
	Digital assay data is obtained from the Laboratory, QAQC checked and imported
	Geobank exported to Access and connected directly to the GemcomSurpac Software.
	Data was validated prior to resource estimation by the reporting of basic statistics
	for each of the grade fields, including examination of maximum values, and visual checks of drill traces and grades on sections and plans.
Site visits	Andrew Vigar of Mining Associates Pty Ltd visited the site from 24 and 25 October 2014.
	• The site visit included a field review of the exploration area, an inspection of core,
	sample cutting and logging procedures and discussions of geology and mineralisation with exploration geologists.
Geological	Mineralisation resulted in the formation of comprises quartz-chalcopyrite-pyrite-
interpretation	magnetite stockwork veins and minor breccias.
	• The principle ore minerals of economic interest are chalcopyrite, bornite and gold,
	which occur primarily as infill within these veins. Gold is intergrown with chalcopyrite and bornite.
	The ore mineralised zones at Stockwork Hill, White Hill and Copper Hill are associated with a core of quartz veins that were intensely developed in and the

Criteria	Commentary
	 quartz diorite intrusive stocks and/or dykes rocks. These vein arrays can be described as stockwork, but the veins have strong developed preferred orientations. Sulphide mineralisation is zoned from a bornite-rich core that zone outwards to chalcopyrite-rich and then outer pyritic haloes, with gold closely associated with bornite. Drilling indicates that the supergene profile has been oxidised to depths up to 60 metres below the surface. The oxide zone comprises fracture controlled copper and iron oxides; however there is no obvious depletion or enrichment of gold in the oxide zone.
Dimensions	 Stockwork Hill comprises two main mineralised zones, northern and southern stockwork zones (SH-N and SH-S) which are approximately 100 metres apart and hosted in diorite and quartz diorite porphyries. The SH-S is at least 550 metres long, 600 metres deep and contains strong quartz-chalcopyrite-pyrite stockwork veining and associated high grade coppergold mineralisation. The stockwork zone widens eastward from a 20 to 70 metres wide high-grade zone in the western and central sections to a 200 metres wide medium-grade zone in the eastern most sections. Mineralisation remains open at depth and along strike to the east. The SH-N consists of a broad halo of quartz that is 250 metres long, 150 metres wide long and at least 350 metres deep. WH consists of a broad halo of quartz veins that is 850 metres long, 550 metres wide long and at least 500 metres deep, and forms a pipe like geometry. CH forms a sub vertical body of stockwork approximately 350 x 100 metres by at least 200 metres and plunges to the southeast.
Estimation and	The estimate Estimation Performed using Ordinary Kriging.
modelling techniques	 Variograms are reasonable along strike. Minimum & Maximum Informing samples is 5 and 20 (1st pass), Second pass is 3 and 20. Copper and Gold Interpreted separately on NS sections and estimated as separate domains. Halo mineralisation defined as 0.12% Cu and 0.12g/t Au Grade. The mineralised domains were manually digitised on cross sections defining mineralisation. Three-dimensional grade shells (wireframes) for each of the metals to be estimated were created from the sectional interpretation. Construction of the grade shells took into account prominent lithological and structural features. For copper, grade shells were constructed for each deposit at a cut-off of 0.12% and 0.3% Cu. For gold, wireframes were constructed at a threshold of 0.12g/t and 0.3 g/t. These grade shells took into account known gross geological controls in addition to broadly adhering to the above mentioned thresholds. Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for appropriate for a large bulk mining open pit and 0.5% for bulk block caving underground. A set of plans and cross-sections that displayed colour coded drill holes were plotted and inspected to ensure the proper assignment of domains to drill holes. The faulting interpreted to have had considerable movement, for this reason, the

Criteria	Commentary
Criteria	 Six metre down-hole composites were chosen for statistical analysis and grade estimation of Cu and Au. Compositing was carried out downhole within the defined mineralisation halos. Composite files for individual domains were created by selecting those samples within domain wireframes, using a fix length and 50% minimum composite length. A total of 4,428 measurements for specific gravity are recorded in the database, all of which were determined by the water immersion method. The average density of all samples is 2.74 l/m3. In detail there are some differences in density between different rock types, but since the model does not include geological domains a single pass Inverse Distance (ID2) interpolation was applied. Primary grade interpolation for the two metals was by ordinary kriging of capped 6m composites. A two-pass search approach was used, whereby a cell failing to receive a grade estimate in a previous pass would be resubmitted in a subsequent and larger search pass. The Mineral Resource Estimate meets the requirements of JORC 2012 and has been reported considering geological characteristics, grade and quantity, prospects for eventual economic extraction and location and extents. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories using relevant copper-equivalent cut-off values. 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 (CuEq or eCu) grade values were calculated using the following formula: 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.
	The copper equivalent formula was based on the following parameters (prices are in USD): Copper price - 3.1 \$/lb (or 6834 \$/t) Gold price - 1320 \$/oz Copper recovery - 85% Gold recovery - 70%
Moisture	Relative recovery of gold to copper = 70% / 85% = 82.35%. • All tonnages are reported on a dry basis.
Cut-off	Cut off grades applied are copper-equivalent (CuEq) cut off values of 0.3% for
parameters	possible open pit and 0.5% for underground.
Mining	No mining factors have been applied to the in-situ grade estimates for mining
factors or	dilution or loss due to the grade control or mining process.
assumptions	The deposit is amenable to large scale bulk mining.
	- The deposit is afficiable to large scale bulk filling.

Criteria	Commentary
	The Mineral Resource is reported above an optimised pit shell. (Lerch Grossman algorithm), mineralisation below the pit shell is reported at a higher cut-off to reflect the increased costs associated with block cave underground mining
Metallurgical factors or	No metallurgical factors have been applied to the in-situ grade estimates.
assumptions	
Environmental	An environmental baseline study was completed in 2003 by Eco Trade Co. Ltd.
factors or	of Mongolia in cooperation with Sustainability Pty Ltd of Australia. The baseline
assumptions	study report was produced to meet the requirements for screening under the Mongolian Environmental Impact Assessment (EIA) Procedures administered by the Mongolian Ministry for Nature and Environment (MNE).
Bulk density	A total of 4,428 measurements for specific gravity are recorded in the database,
Built delibity	all of which were determined by the water immersion method.
	 The average density of all samples is approximately 2.74 t/m3. In detail there are some differences in density between different rock types, but since the model does not include geological domain, an ID2 was applied to a density attribute. There is no material impact on global tonnages, but it should be noted that density is a function of both lithology and alteration (where intense magnetite/sulphide is present).
Classification	The Mineral Resource classification protocols, for drilling and sampling, sample
	 preparation and analysis, geological logging, database construction, interpolation, and estimation parameters are described in the ASX/TSX Announcement above have been used to classify the 2015 resource. The Mineral Resource statement relates to global estimates of in situ tonnes and grade The Mineral Resource Estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. The classifications reflect the
APr.	competent person's view of the Kharmagtai Copper Gold Project.
Audits or reviews	 Xanadu's internal review and audit of the Mineral Resource Estimate consisted of data analysis and geological interpretation of individual cross-sections, comparing drill-hole data with the resource estimate block model.
	Good correlation of geological and grade boundaries was observed
	 2013 - Mining Associates Ltd. was engaged to conduct an Independent Technical Report to review drilling, sampling techniques, QA/QC and previous Resource estimates. Methods were found to conform to international best practice.
Discussion of	An approach to the resource classification was used which combined both
relative	confidence in geological continuity (domain wireframes) and statistical analysis.
accuracy/	The level of accuracy and risk is therefore reflected in the allocation of the
confidence	measured, indicated, and inferred resource categories.
	 Resource categories were constrained by geological understanding, data density and quality, and estimation parameters. It is expected that further work will extend this considerably.
	• Resources estimates have been made on a global basis and relates to in situ grades.
	Confidence in the Indicated Mineral Resources is sufficient to allow application of Modifying Factors within a technical and economic study. The confidence in Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters.
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Criteria	Commentary
	The deposits are not currently being mined.
	There is surface evidence of historic artisanal workings.
	No production data is available.

JORC TABLE 1 - SECTION 4 - ESTIMATION AND REPORTING OF ORE RESERVES

Ore Reserves are not reported so this is not applicable to this announcement.