High-Grade Core Shaping up at White Hill

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TORONTO, Oct. 04, 2023 - Xanadu Mines Ltd. (ASX: XAM, TSX: XAM) (Xanadu, XAM or the Company) is pleased to provide an update on infill drilling at the Kharmagtai Project in Mongolia, being developed with the Company's joint venture partner Zijin Mining Group Co. Ltd.. (Zijin). Infill drilling continues to expand upon the new zone (core) of high-grade copper and gold mineralisation at the White Hill deposit, demonstrating progressive growth in high-grade material at the base of the previously optimised open pits.

Highlights

- Extensive ~48,000m of infill diamond drilling has been completed at Kharmagtai to support the Pre-Feasibility Study (PFS).
- Latest results expand upon the recently identified high-grade zone (core) at White Hill[1], located below the previous Scoping Study pit designs[2].
- Best drilling results below, and within the pit, include:
  - KHDDH661 - 325m @ 0.38% eCu (0.33% Cu & 0.11g/t Au) from 570m

    Including 146.2m @ 0.50% eCu (0.43% Cu & 0.13g/t Au) from 700.8m

    Including 23.7m @ 0.84% eCu (0.74% Cu & 0.20g/t Au) from 792.3m

    Including 12m @ 1.00% eCu (0.87% Cu & 0.26g/t Au) from 794m

And 10m @ 0.92% Cu (0.85% Cu and 0.12g/t Au) from 830m

And 4m @ 1.28% Cu (1.2% Cu and 0.16g/t Au) from 834

- KHDDH665 - 733m @ 0.39% eCu (0.31% Cu & 0.15g/t Au) from 80m

Including 210.7m @ 0.55% eCu (0.43% Cu & 0.23g/t Au) from 411.3m

Including 56m @ 0.85% eCu (0.66% Cu & 0.37g/t Au) from 490m

Including 23m @ 1.16% eCu (0.92% Cu & 0.46g/t Au) from 521m

- Newly identified high-grade (>1% eCu) core at White Hill demonstrates potential to:
  - Enhance 2021 Mineral Resource Estimate[3] (MRE) in preparation for updated PFS MRE in 4Q CY2023.
  - Expand and deepen 2022 Scoping Study[4] pit shells to capture additional higher grade for longer period.
- Additional follow-up drilling is being planned around the newly identified high-grade (core) zone at White Hill and higher-grade extensions identified at Stockwork Hill[5].
- Growth-focused discovery exploration drilling at Kharmagtai is continuing with 4 diamond rigs investigating shallow targets and one drill rig targeting deep mineralisation.
- Kharmagtai JV is funding US$35M[6] for both PFS completion and discovery exploration, aiming towards decision to mine in Q4 CY2024.

Xanadu's Executive Chairman and Managing Director, Mr Colin Moorhead, said *"We continue to advance our understanding of the Kharmagtai copper and gold deposit through our extensive infill drilling program. The final assay results from the initial infill drill program are currently being received, and we have started the resource modelling. We look forward to delivering the results of this work in a Mineral Resource Estimate upgrade in Q4 CY2024.*

It is particularly exciting to see the continued high-grade results from White Hill deposit where we have effectively intercepted the top of a previously undefined high-grade core. Discovery of a high-grade core at White Hill is important and highlights strong potential for additional vertical extensions of high-grade mineralised zones, similar to both, the Stockwork Hill and Copper Hill deposits. This has potential to add additional high-grade mining inventory, which could translate to real value in the Kharmagtai open pit. Drilling will continue to define this high-grade core at White Hill.

Significantly, Kharmagtai still has significant new discovery potential, and we continue to explore with four diamond drill rigs testing shallow higher-grade targets and another drill rig testing potential high-grade resource extensions at depth as part of our on-going exploration discovery strategy.

Infill Drilling Expands High-Grade Core at White Hill

Assay results have been returned for 21 additional drill holes at White Hill, with grades on the most part materially better than or in line with the 2021 White Hill MRE[7] (Figures 1 to 4; Appendix 1).

Figure 1: Cross section 592050mE through the White Hill deposit.

Figure 2: Cross section 592145mE through the White Hill deposit.

Figure 3: Cross section 592250mE through the White Hill deposit.

Drill hole KHDDH661, located on the southern margin of the White Hill deposit, intersected a significantly higher-grade zone of copper and gold mineralisation, on the margin of the current optimised pit design (Figures 1 and 2).

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH661	White Hill	143	558.2	415.2	0.10	0.22	0.27	0.52
including		478	495.2	17.2	0.30	0.57	0.73	1.43
including		482	490	8	0.41	0.70	0.91	1.78
including		554	558.2	4.2	0.18	0.63	0.72	1.41
including		576	608	32	0.22	0.55	0.66	1.29
including		757	763	6	0.28	0.65	0.79	1.55
including		792.3	816	23.7	0.20	0.74	0.84	1.65
including		794	806	12	0.26	0.87	1.00	1.96
including		830	840	10	0.12	0.85	0.92	1.79
including		834	838	4	0.16	1.20	1.28	2.50

Drill hole KHDDH665 targeted definition and expansion of White Hill mineralisation. Intersecting a new high-grade zone, it returned the following interval, including broad zones where the 2021 MRE had predicted significantly lower grades (Figure 2):

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH665	White Hill	80	813	733	0.15	0.31	0.39	0.77
including		353	361	8	0.30	0.55	0.70	1.37

including	411.3	622	210.7	0.23	0.43	0.55	1.07
including	462.8	474	11.2	0.27	0.48	0.62	1.21
including	490	546	56	0.37	0.66	0.85	1.67
including	521	544	23	0.46	0.92	1.16	2.26
including	564	572	8	0.28	0.71	0.85	1.67
including	582	604	22	0.23	0.55	0.67	1.32
including	682	696	14	0.16	0.53	0.61	1.20
including	741	746.76	5.76	0.13	0.99	1.05	2.06
including	741	745	4	0.14	1.09	1.16	2.28

Drill holes KHDDH669 and KHDDH670 targeted areas of low drill density within the eastern portion of the scoping study open pit. Both holes returned significantly higher results than the previous MRE had predicted (Figure 3):

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH669	White Hill	2.8	600.5	597.7	0.22	0.32	0.43	0.84
and		48	538	490	0.25	0.34	0.47	0.92
including		198	209	11	0.35	0.43	0.61	1.18
including		308	347.6	39.6	0.49	0.45	0.70	1.37
including		312	316	4	1.03	0.66	1.19	2.32
including		506	514	8	0.29	0.53	0.68	1.32
and		548	598	50	0.08	0.23	0.27	0.54

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH670	White Hill	0.3	763	762.7	0.21	0.32	0.42	0.83
including		71	96.6	25.6	0.38	0.44	0.63	1.23
including		511.3	523	11.7	0.33	0.53	0.70	1.38
including		564	622	58	0.33	0.55	0.72	1.41
including		608	614	6	0.41	0.70	0.91	1.78
including		672	682	10	0.18	0.76	0.85	1.66
including		672	680	8	0.19	0.76	0.86	1.68
including		713	745	32	0.62	0.45	0.76	1.49
including		731	741	10	0.12	0.70	0.76	1.49

About the Infill Drilling Program

Four diamond drill rigs are currently focussed on Kharmagtai infill drilling, with the objective to target areas with potential for future Mineral Resource to Ore Reserve conversion. Totalling ~48,000 metres, the infill drilling program is planned to specifically increase the Resource confidence category from Inferred to Indicated. As such, the planned drill holes aim to remove any mineralisation knowledge gaps around the edges of existing deposits.

Figure 4: Kharmagtai copper-gold district showing currently defined mineral deposits, and infill drill holes.

Kharmagtai currently has an Inferred and Indicated Resource of 1.1Bt at 0.3% Cu and 0.2g/t gold, containing 3Mt Cu and 8Moz Au[8]. As part of the Kharmagtai PFS, the Resource will be upgraded to at least Indicated classification, enabling a maiden, JORC compliant Ore Reserve to be reported. To achieve this, the infill

drilling program is designed to upgrade and extend strike length of the shallow open pit Resource areas and selected deeper high-grade zones (Figure 4), including investigation of near-mine, higher-grade extensions.

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 jointly control a globally significant copper-gold deposit in our flagship Kharmagtai project. Xanadu is the Operator of a 50-50 JV with Zijin Mining Group in Khuiten Metals Pte Ltd, which controls 76.5% of the Kharmagtai project.

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

Appendix 1: Drilling Results

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

Table 1: Drill hole collar

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH642	White Hill	591877	4877030	1307	0	-60	625.0
KHDDH644	White Hill	591876	4877532	1301	0	-60	200.0
KHDDH645	White Hill	591876	4876849	1310	0	-60	715.6
KHDDH651	White Hill	592006	4877113	1304	180	-60	415.0
KHDDH656	White Hill	591876	4876747	1311	0	-60	420.6
KHDDH657	White Hill	592000	4877501	1301	0	-60	250.4
KHDDH658	White Hill	592126	4877404	1303	0	-60	550.0
KHDDH659	White Hill	592001	4876900	1305	0	-60	721.6
KHDDH661	White Hill	592001	4876800	1310	0	-60	897.1
KHDDH662	White Hill	592500	4877122	1300	90	-60	250.0
KHDDH663	White Hill	592126	4877501	1299	0	-60	305.5
KHDDH664	White Hill	592039	4876821	1307	170	-70	350.0
KHDDH665	White Hill	592126	4876908	1303	0	-60	700.0
KHDDH666	White Hill	592126	4876785	1307	0	-60	473.6
KHDDH667	White Hill	592250	4876867	1304	0	-65	450.0
KHDDH668	White Hill	591561	4877271	1309	270	-60	225.0
KHDDH669	White Hill	592250	4877166	1301	0	-65	525.0
KHDDH670	White Hill	592250	4877036	1301	0	-65	625.0
KHDDH671	White Hill	592250	4876775	1304	0	-65	250.0
KHDDH673	White Hill	592250	4877450	1296	0	-65	279.7
KHDDH674	White Hill	592375	4877155	1299	0	-65	501.6
KHDDH676	White Hill	592375	4877051	1300	0	-65	425.0
KHDDH677	White Hill	592375	4876951	1299	0	-65	375.2
KHDDH679	White Hill	592375	4876849	1301	0	-65	275.0

KHDDH743	White Hill	591398	4877077	1312	0	-60	150.0
KHDDH744	White Hill	591398	4877176	1312	0	-60	250.0
KHDDH746	White Hill	591398	4877283	1309	0	-60	185.0
KHDDH747	White Hill	591396	4877382	1307	0	-60	135.0
KHDDH748	White Hill	591398	4877478	1304	0	-60	85.0
KHDDH749	White Hill	591626	4876851	1315	0	-60	770.0

Table 2: Significant drill results

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH651	White Hill	2	316	314	0.07	0.17	0.20	0.39
including		54	74	20	0.07	0.24	0.27	0.54
including		102	106	4	0.17	0.24	0.33	0.64
including		118.15	130	11.85	0.15	0.29	0.37	0.72
including		156	160.85	4.85	0.11	0.24	0.29	0.57
and		326	416	90	0.06	0.17	0.20	0.39
including		374	388	14	0.10	0.31	0.36	0.71
KHDDH656	White Hill	85.4	91.25	5.85	0.30	0.06	0.21	0.42
and		114.85	122.18	7.33	0.07	0.07	0.11	0.21
and		224	420.6	196.6	0.07	0.16	0.20	0.38
including		280	296	16	0.11	0.28	0.34	0.66
including		346	362	16	0.08	0.19	0.24	0.46
KHDDH657	White Hill	1	233	232	0.10	0.14	0.20	0.39
including		1	19	18	0.26	0.23	0.36	0.70
including		87	103	16	0.20	0.18	0.28	0.55
KHDDH658	White Hill	2	29	27	0.17	0.23	0.32	0.62
including		2	21	19	0.20	0.27	0.38	0.73
and		41	300	259	0.17	0.22	0.31	0.61
including		48.13	88	39.87	0.26	0.37	0.50	0.98
including		64.05	78	13.95	0.48	0.50	0.74	1.46
including		98	203	105	0.26	0.28	0.41	0.81
including		106.55	115	8.45	0.70	0.75	1.10	2.16
including		108	114	6	0.89	0.82	1.27	2.49
including		156	170	14	0.32	0.29	0.46	0.89
and		314	322	8	0.08	0.08	0.12	0.23
and		335	345	10	0.19	0.05	0.14	0.28
and		379	481	102	0.05	0.12	0.14	0.27
KHDDH659	White Hill	40	56	16	0.04	0.09	0.11	0.21
and		77	721.6	644.6	0.09	0.21	0.25	0.49
including		105	109	4	0.09	0.28	0.33	0.64
including		277	289.4	12.4	0.16	0.22	0.30	0.60
including		343	449	106	0.17	0.29	0.37	0.73
including		398.1	408	9.9	0.29	0.31	0.46	0.90
including		459	467	8	0.07	0.13	0.16	0.32
including		507	517	10	0.09	0.25	0.29	0.57
including		526.4	546.5	20.1	0.14	0.35	0.43	0.84
including		556	586	30	0.07	0.35	0.38	0.75
including		644	658	14	0.05	0.25	0.28	0.54
including		678	701	23	0.09	0.30	0.34	0.67
including		713.4	721.6	8.2	0.09	0.30	0.35	0.68
KHDDH661	White Hill	69.6	82	12.4	0.08	0.06	0.09	0.18

and	143	558.2	415.2	0.10	0.22	0.27	0.52
including	159	166	7	0.08	0.27	0.31	0.60
including	302	308	6	0.12	0.25	0.31	0.61
including	373	451	78	0.15	0.28	0.36	0.70
including	465	524	59	0.22	0.37	0.49	0.95
including	478	495.2	17.2	0.30	0.57	0.73	1.43
including	482	490	8	0.41	0.70	0.91	1.78
including	540	558.2	18.2	0.12	0.42	0.49	0.95
including	554	558.2	4.2	0.18	0.63	0.72	1.41
and	570	895	325	0.11	0.33	0.38	0.74
including	574.1	616	41.9	0.19	0.49	0.59	1.16
including	576	608	32	0.22	0.55	0.66	1.29
including	631.5	640	8.5	0.12	0.33	0.39	0.76
including	654	658	4	0.10	0.31	0.36	0.71
including	700.8	847	146.2	0.13	0.43	0.50	0.97
including	757	763	6	0.28	0.65	0.79	1.55
including	792.3	816	23.7	0.20	0.74	0.84	1.65
including	794	806	12	0.26	0.87	1.00	1.96
including	830	840	10	0.12	0.85	0.92	1.79
including	834	838	4	0.16	1.20	1.28	2.50
KHDDH662 White Hill	196	206	10	0.06	0.06	0.10	0.19
KHDDH663 White Hill	0	171	171	0.13	0.21	0.27	0.53
including	0	30	30	0.35	0.38	0.56	1.09
including	1	9	8	0.68	0.60	0.95	1.85
including	1	5.8	4.8	0.91	0.64	1.10	2.16
including	40	60	20	0.12	0.24	0.30	0.58
including	96	102	6	0.10	0.28	0.34	0.66
and	183	187	4	0.05	0.10	0.12	0.24
and	199	241	42	0.05	0.10	0.13	0.25
and	284	292	8	0.08	0.06	0.10	0.20
KHDDH664 White Hill	167	182.7	15.7	0.03	0.07	0.09	0.17
and	243	305	62	0.04	0.11	0.13	0.26
and	315	350	35	0.05	0.13	0.16	0.31
KHDDH665 White Hill	48	52	4	0.04	0.10	0.12	0.23
and	66	70	4	0.05	0.14	0.16	0.32
and	80	813	733	0.15	0.31	0.39	0.77
including	114	120	6	0.11	0.33	0.38	0.75
including	218	228	10	0.12	0.22	0.28	0.54
including	240.5	400.5	160	0.22	0.30	0.41	0.80
including	353	361	8	0.30	0.55	0.70	1.37
including	411.3	622	210.7	0.23	0.43	0.55	1.07
including	462.8	474	11.2	0.27	0.48	0.62	1.21
including	490	546	56	0.37	0.66	0.85	1.67
including	521	544	23	0.46	0.92	1.16	2.26
including	564	572	8	0.28	0.71	0.85	1.67
including	582	604	22	0.23	0.55	0.67	1.32
including	632	646.2	14.2	0.09	0.31	0.35	0.69
including	662.95	797	134.05	0.09	0.40	0.44	0.87
including	682	696	14	0.16	0.53	0.61	1.20
including	741	746.76	5.76	0.13	0.99	1.05	2.06
including	741	745	4	0.14	1.09	1.16	2.28
KHDDH666 White Hill	87.35	98.1	10.75	0.03	0.08	0.09	0.18

and	166	323.2	157.2	0.09	0.19	0.23	0.45
including	233	239	6	0.12	0.33	0.39	0.76
including	252	258	6	0.12	0.31	0.37	0.72
including	268	318.05	50.05	0.16	0.27	0.36	0.70
including	283.15	301	17.85	0.20	0.34	0.45	0.87
and	332.25	444.3	112.05	0.15	0.30	0.38	0.74
including	336	366.6	30.6	0.17	0.36	0.45	0.87
including	378	416.5	38.5	0.21	0.37	0.48	0.94
including	430	443	13	0.12	0.32	0.38	0.74
KHDDH667 White Hill	12	218.7	206.7	0.09	0.23	0.27	0.53
including	30	34	4	0.21	0.22	0.33	0.65
including	72	94	22	0.20	0.71	0.81	1.58
including	82	94	12	0.32	1.12	1.29	2.52
including	82	92	10	0.35	1.23	1.41	2.75
including	104	121	17	0.09	0.22	0.27	0.52
KHDDH668 White Hill	1	494.1	493.1	0.08	0.17	0.21	0.42
including	132	144	12	0.16	0.23	0.31	0.61
including	212	219	7	0.12	0.21	0.27	0.54
including	231	241	10	0.11	0.24	0.30	0.58
including	298	328	30	0.13	0.30	0.36	0.70
including	356	360	4	0.13	0.26	0.32	0.63
including	389	460	71	0.11	0.26	0.32	0.63
KHDDH669 White Hill	2.8	600.5	597.7	0.22	0.32	0.43	0.84
and	19	38	19	0.20	0.17	0.27	0.53
and	48	538	490	0.25	0.34	0.47	0.92
including	95.6	138	42.4	0.33	0.41	0.58	1.14
including	148	160	12	0.34	0.40	0.58	1.13
including	198	209	11	0.35	0.43	0.61	1.18
including	308	347.6	39.6	0.49	0.45	0.70	1.37
including	312	316	4	1.03	0.66	1.19	2.32
including	376.1	437	60.9	0.30	0.41	0.56	1.10
including	506	514	8	0.29	0.53	0.68	1.32
and	548	598	50	0.08	0.23	0.27	0.54
KHDDH670 White Hill	0.3	763	762.7	0.21	0.32	0.42	0.83
including	16	20	4	0.13	0.27	0.33	0.65
including	67	202	135	0.24	0.34	0.46	0.90
including	71	96.6	25.6	0.38	0.44	0.63	1.23
including	217	336.7	119.7	0.26	0.31	0.45	0.87
including	265	287	22	0.41	0.34	0.56	1.09
including	346	634	288	0.23	0.38	0.49	0.97
including	354	369.3	15.3	0.28	0.39	0.53	1.03
including	434	455	21	0.25	0.41	0.54	1.06
including	511.3	523	11.7	0.33	0.53	0.70	1.38
including	564	622	58	0.33	0.55	0.72	1.41
including	608	614	6	0.41	0.70	0.91	1.78
including	656	684	28	0.11	0.45	0.51	0.99
including	672	682	10	0.18	0.76	0.85	1.66
including	672	680	8	0.19	0.76	0.86	1.68
including	713	745	32	0.62	0.45	0.76	1.49
including	731	741	10	0.12	0.70	0.76	1.49
KHDDH671 White Hill	66	248	182	0.05	0.13	0.15	0.30
KHDDH673 White Hill	1	42.5	41.5	0.11	0.18	0.23	0.46

including	1	13.2	12.2	0.20	0.35	0.45	0.88
and	61.9	197	135.1	0.04	0.12	0.14	0.27
and	207	268	61	0.05	0.10	0.12	0.23
KHDDH674 White Hill	1.6	95.4	93.8	0.13	0.25	0.31	0.61
including	3	47	44	0.15	0.26	0.33	0.65
including	72	95.4	23.4	0.13	0.28	0.34	0.67
and	104.68	117.92	13.24	0.19	0.35	0.44	0.87
and	174	194.4	20.4	0.09	0.16	0.21	0.40
including	176.4	194.4	18	0.09	0.17	0.22	0.42
and	209.6	454	244.4	0.08	0.16	0.20	0.40
including	209.6	225	15.4	0.16	0.25	0.33	0.64
including	365	375	10	0.09	0.19	0.23	0.45
including	415	431	16	0.14	0.20	0.27	0.52
and	465.4	476	10.6	0.06	0.11	0.14	0.28
and	486	501.6	15.6	0.30	0.22	0.37	0.72
KHDDH676 White Hill	0	56.15	56.15	0.17	0.28	0.36	0.71
KHDDH677 White Hill	3.2	119	115.8	0.17	0.30	0.39	0.76
including	9.3	15.7	6.4	0.09	0.39	0.43	0.84
including	28	44	16	0.18	0.33	0.42	0.83
including	40	44	4	0.29	0.59	0.74	1.44
including	62	117	55	0.24	0.37	0.49	0.96
including	84	105	21	0.29	0.46	0.61	1.19
KHDDH679 White Hill	5	167	162	0.05	0.15	0.18	0.34
including	54.2	62.6	8.4	0.14	0.31	0.38	0.75
KHDDH739 White Hill	*Assays pending*						
KHDDH741 White Hill	*Assays pending*						
KHDDH742 White Hill	*Assays pending*						
KHDDH743 White Hill	*Assays pending*						
KHDDH744 White Hill	*Assays pending*						
KHDDH746 White Hill	*Assays pending*						
KHDDH747 White Hill	*Assays pending*						
KHDDH748 White Hill	*Assays pending*						
KHDDH749 White Hill	*Assays pending*						
KHDDH750 White Hill	*Assays pending*						
KHDDH751 White Hill	*Assays pending*						
KHDDH756 White Hill	*Assays pending*						

Appendix 2: Statements and Disclaimers

Competent Person Statement

The information in this announcement that relates to Mineral Resources is based on information compiled by Mr Robert Spiers, who is responsible for the Mineral Resource estimate. Mr Spiers is a full time Principal Geologist employed by Spiers Geological Consultants (SGC) and is a Member of the Australian Institute of Geoscientists. He 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 Qualified Person as defined in the CIM Guidelines and National Instrument 43-101 and as a Competent Person under JORC Code 2012. Mr Spiers consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

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.

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:

https://www.xanadumines.com/site/investor-centre/asx-announcements

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

Copper Equivalent Calculations

The copper equivalent (CuEq) 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.

Copper equivalent (CuEq) grade values were calculated using the formula: CuEq = Cu + Au * 0.60049 * 0.86667.

Where Cu - copper grade (%); Au - gold grade (g/t); 0.60049 - conversion factor (gold to copper); 0.86667 - relative recovery of gold to copper (86.67%).

The copper equivalent formula was based on the following parameters (prices are in USD): Copper price 3.4 $/lb; Gold price 1400 $/oz; Copper recovery 90%; Gold recovery 78%; Relative recovery of gold to copper = 78% / 90% = 86.67%.

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 8 December 2021.

JORC TABLE 1 - SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

Criteria	Commentary
Sampling techniques	● Representative ½ core samples were split from PQ, HQ & N ● The orientation of the cut line is controlled using the core ori ● Sample intervals are defined and subsequently checked by ● Reverse Circulation (RC) chip samples are ¼ splits from one ● RC samples are uniform 2m samples formed from the comb
Drilling techniques	● The Mineral Resource Estimation has been based upon dia ● All drill core drilled by Xanadu has been oriented using the "
Drill sample recovery	● Diamond drill core recoveries were assessed using the stan ● Diamond core recoveries average 97% through mineralisati ● Overall, core quality is good, with minimal core loss. Where ● RC recoveries are measured using whole weight of each 1m ● Analysis of recovery results vs grade shows no significant tr
Logging	● All drill core is geologically logged by well-trained geologists ● Logging of lithology, alteration and mineralogy is intrinsically ● Drill core is also systematically logged for both geotechnical ● Both wet and dry core photos are taken after core has been

Sub-sampling techniques and sample preparation	● All drill core samples are ½ core splits from either PQ, HQ o ● Core is appropriately split (onsite) using diamond core saws ● The diamond saws are regularly flushed with water to minim ● A field duplicate ¼ core sample is collected every 30th samp ● Routine sample preparation and analyses of DDH samples w ● All samples were prepared to meet standard quality control p ● ALS Mongolia Geochemistry labs quality management syste ● The sample support (sub-sample mass and comminution) is
Quality of assay data and laboratory tests	● All samples were routinely assayed by ALS Mongolia for gol ● Au is determined using a 25g fire assay fusion, cupelled to d ● All samples were also submitted to ALS Mongolia for the 48 ● Quality assurance has been managed by insertion of approp ● Assay results outside the optimal range for methods were re ● Ore Research Pty Ltd certified copper and gold standards ha ● QC monitoring is an active and ongoing processes on batch ● Prior to 2014: Cu, Ag, Pb, Zn, As and Mo were routinely dete
Verification of sampling and assaying	● All assay data QA/QC is checked prior to loading into XAM's ● The data is managed by XAM geologists. ● The data base and geological interpretation is managed by X ● Check assays are submitted to an umpire lab (SGS Mongoli ● No twinned drill holes exist. ● There have been no adjustments to any of the assay data.
Location of data points	● Diamond drill holes have been surveyed with a differential gl ● The grid system used for the project is UTM WGS-84 Zone 4 ● Historically, Eastman Kodak and Flexit electronic multi-shot ● More recently (since September 2017), a north-seeking gyro ● The project Digital Terrain Model (DTM) is based on 1m con
Data spacing and distribution	● Holes spacings range from <50m spacings within the core o ● Holes range from vertical to an inclination of -60 degrees de ● The data spacing and distribution is sufficient to establish an ● Holes have been drilled to a maximum of 1,304m vertical de ● The data spacing and distribution is sufficient to establish ge
Orientation of data in relation to geological structure	● Drilling is conducted in a predominantly regular grid to allow ● Scissor drilling, as well as some vertical and oblique drilling,
Sample security	● Samples are delivered from the drill rig to the core shed twic ● Samples are dispatched from site in locked boxes transporte ● Sample shipment receipt is signed off at the Laboratory with ● Samples are then stored at the lab and returned to a locked
Audits or reviews	● Internal audits of sampling techniques and data managemen ● External reviews and audits have been conducted by the fol ● 2012: AMC Consultants Pty Ltd. was engaged to conduct an ● 2013: Mining Associates Ltd. was engaged to conduct an In ● 2018: CSA Global reviewed the entire drilling, logging, samp

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 flui
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% CuEq is used in copper dominant systems for iden ● 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 (CuEq) calculation represents the total metal value for eac Copper equivalent (CuEq) grade values were calculated using the following formu 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 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 8 December 2021 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 7 June 2023 - New Higher-Grade Zones Found in Kharmagtai Infill Drilling
[2] ASX/TSX Announcement 6 April 2022 - Scoping Study - Kharmagtai Copper-Gold Project
[3] ASX/TSX Announcement 8 December 2021 - Kharmagtai Resource Grows to 1.1 billion Tonnes
[4] ASX/TSX Announcement 6 April 2022 - Scoping Study - Kharmagtai Copper-Gold Project
[5] ASX/TSX Announcement 9 August 2023 - Further Higher-Grade Infill Drilling Results at Stockwork Hill
[6] ASX/TSX Announcement 13 March 2023 - Zijin & Xanadu Transaction Completed & Kharmagtai PFS underway
[7] ASX/TSX Announcement 8 December 2021 - Kharmagtai Resource Grows to 1.1 billion Tonnes
[8] ASX/TSX Announcement 08 December 2021 - Kharmagtai resource grows to 1.1 billion tonnes, containing 3Mt Cu and 8Moz Au

Photos accompanying this announcement are available at

https://www.globenewswire.com/NewsRoom/AttachmentNg/13963781-e5b0-4956-b483-39fd86f0b20a

https://www.globenewswire.com/NewsRoom/AttachmentNg/66598f3c-2796-4008-849b-dae930011e75

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