XANADU MINES



30 January 2024

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

Highlights

- Latest extensional and exploration drilling results expand upon the recently identified higher-grade zone (core) at White Hill¹, located below the previous Scoping Study pit designs² and outside the 2023 Mineral Resource Estimate (**MRE**) ³. Best drilling results include:
 - KHDDH808 64.45m @ 0.74% CuEq (0.61% Cu & 0.26/t Au) from 516, Including 24.45m @ 1.41% CuEq (1.14% Cu & 0.53g/t Au) from 634m Including 13.8m @ 1.99% CuEq (1.64% Cu & 0.70g/t Au) from 558m
 - KHDDH806 50m @ 0.73% CuEq (0.25% Cu & 0.94g/t Au) from 545m 0 Including 22m @ 1.34% CuEq (0.26% Cu & 2.10g/t Au) from 549
- Expanding higher-grade core (>1% CuEq) at White Hill is expected to enhance & enlarge the 2023 MRE and to increase scale & deepen 2022 Scoping Study² pit shells, capturing additional higher-grade over longer period.

¹ ASX/TSX Announcement 7 June 2023 – New Higher-Grade Zones Found in Kharmagtai Infill Drilling

ASX/TSX Announcement 7 Julie 2023 – New Figher-Grade 20163 Found in Maintagad Initial States
 ASX/TSX Announcement 6 April 2022 – Scoping Study – Kharmagtai Copper-Gold Project
 ASX/TSX Announcement 8 December 2023 – Kharmagtai Mineral Resource Grows by 13% CuEq; including >25% increase in higher-grade core

- Step-out drilling at Golden Eagle returns grades more than double the MRE grade and extends mineralisation.
 Best results include:
 - KHDDH805 153.4m @ 0.68g/t AuEq (0.43g/t Au and 0.13% Cu) from 41.6m Including 67m @ 0.97g/t AuEq (0.67g/t Au and 0.15% Cu) from 44m Including 8m @ 1.7g/t AuEq (1.34g/t Au and 0.18% Cu) from 54m And 14m @ 1.22g/t AuEq (0.81g/t Au and 0.21% Cu) from 77m
- Deep drilling hole KHDDH779 encounters two broad zones of porphyry and tourmaline breccia style mineralisation between Stockwork Hill and Zaraa, potentially indicating the edges of a very large-scale Cu-Au System.
- Growth-focused discovery exploration drilling at Kharmagtai continues to discover new, shallow mineralisation with potential to enhance open pit mining and deep mineralisation with potential for future underground mining.
- Further assays from deep exploration drilling are pending; we look forward to sharing over the coming months.
- Kharmagtai JV is funding US\$35M⁴ 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 "Latest drilling results provide more evidence for continued growth and improvement at the Kharmagtai deposit. Importantly, we are expanding the +1% CuEq zone at White Hill and expending higher-grade mineralisation closer to surface. Our current geological interpretation suggests that mineralisation is faulted upwards, towards surface as we expand the deposit southwards.

"Bulking up the White Hill higher-grade core will improve the new open pit designs and yield additional copper within range of open pit mining."

⁴ ASX/TSX Announcement 13 March 2023 – Zijin & Xanadu Transaction Completed & Kharmagtai PFS Underway

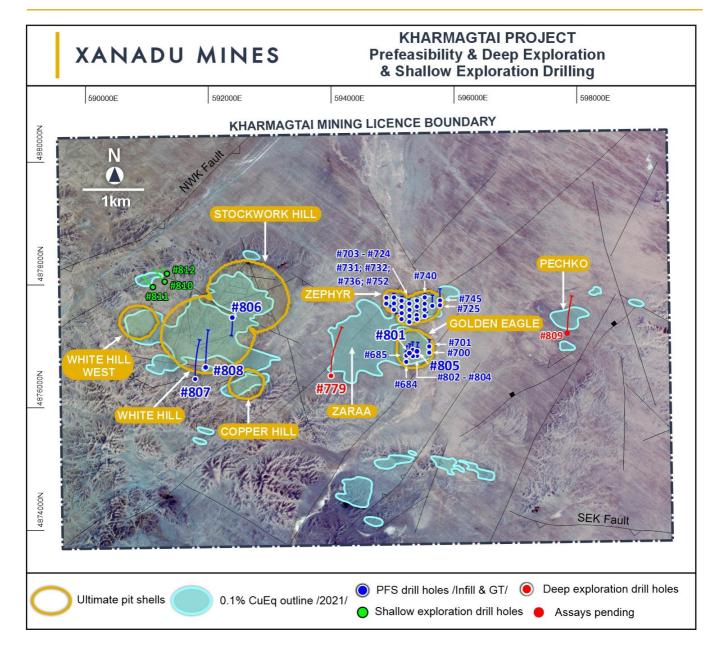


Figure 1: Kharmagtai copper-gold district showing defined mineral deposits and completed infill drill holes, deep exploration drill holes, and shallow exploration drill holes since the last announced drilling results⁵.

Since the last Drilling Market Release (included in 2023 MRE Update), a total of 5,307m infill diamond drilling has been completed at Golden Eagle and Zephyr, and 9,320m extensional and exploration drilling, with both drill core collars and assay results for each, provided in **Tables 1 and 2** (see **Appendix 1**).

 $^{^{\}rm 5}$ ASX/TSX Announcement 16 November 2023 – Kharmagtai Drilling Achievements Update

Step-out Drilling Expands Higher-Grade Core at White Hill

Three drill holes were collared at White Hill, and designed to extend the recently discovered higher-grade core, beneath the 2022 Scoping Study open pits.

Drill hole **KHDDH808** was designed as a 150 to 200m step back from previous drilling **(Figure 2)**. KHDDH808 intercepted a moderate grade halo (+0.3% CuEq) **over 350m shallower** than expected, and encountered **two zones of higher-grade** (+1% CuEq) mineralisation.

Hole ID	Interval (m)	Cu (%)	Au (g/t)	CuEq (%)	From (m)
KHDDH808	64.45	0.61	0.26	0.74	516
including	24.45	1.14	0.53	1.41	634
including	13.8	1.64	0.70	1.99	558

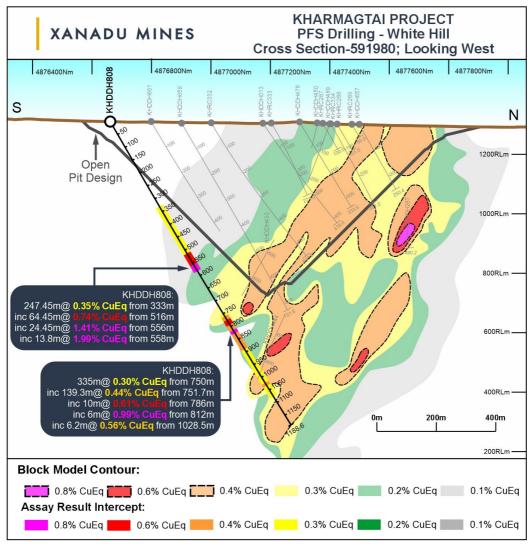


Figure 2: Cross section 591980mE through the White Hill deposit.

Drill hole **KHDDH806** was designed to test for higher-grade extensions beneath eastern end of the White Hill open pit (Figure 3). KHDDH806 extended moderate grade mineralisation for 150m beneath deepest portion of the previously planned pit, encountering a narrow zone of higher-grade mineral at the expected depth.

Hole ID	Interval (m)	Cu (%)	Au (g/t)	CuEq (%)	From (m)
KHDDH806	287.4	0.18	0.07	0.21	156
and	50	0.25	0.94	0.73	545
including	22	0.26	2.10	1.34	549

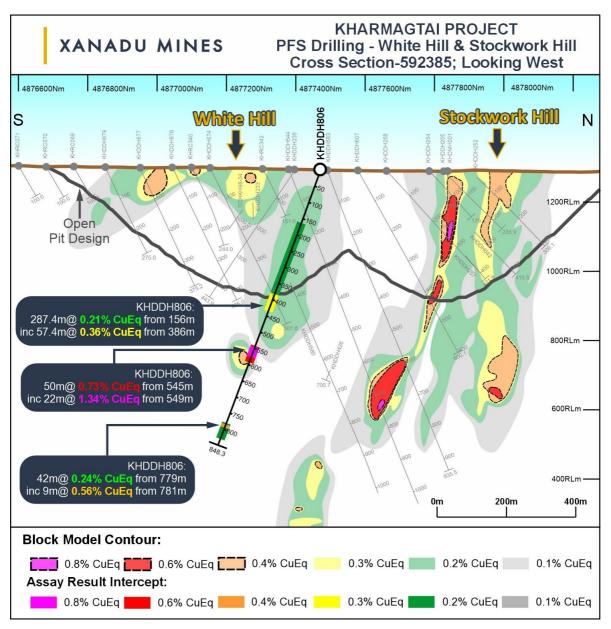


Figure 3: Cross section 592385mE through the White Hill and Stockwork Hill deposits

Drill hole **KHDDH807** was designed as a 150m step back from previous drilling **(Figure 4)** and intercepted low to moderate grade halo (+0.2% CuEq) **over 270m shallower** than expected. KHDDH807 returned **very broad intercept** of 559.7m @ 0.27% CuEq from 435m, including 222m @ 0.36% CuEq from 761m.

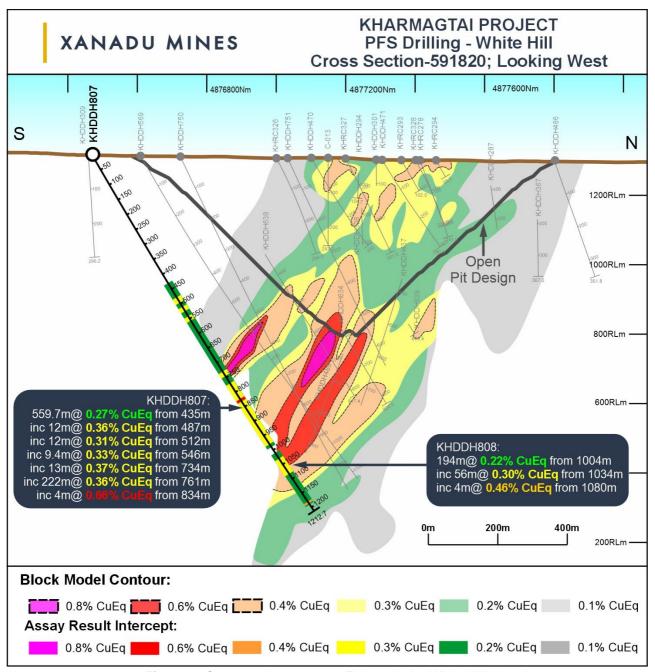


Figure 4: Cross section 591820mE through the White Hill deposit

Infill Drilling Expands Higher-Grade Gold at Golden Eagle

Five drill holes were collared at Golden Eagle and designed to extend the new higher-grade gold zone (+1g/t Au) at Golden Eagle⁶.

Drill hole **KHDDH805** was designed to join two lobes of higher grade. KHDDH805 intercepted broad zone of moderate grade gold with a higher-grade zone at the expected interval **(Figure 5)**. Importantly, the **grades encountered were more than double** those defined in the new 2023 Mineral Resource.

Hole ID	Interval (m)	Au (g/t)	Cu (%)	AuEq (g/t)	From (m)
KHDDH805	153.4	0.43	0.13	0.68	41.6
including	67	0.67	0.15	0.97	44
including	8	1.34	0.18	1.7	54
and	14	0.81	0.21	1.22	77

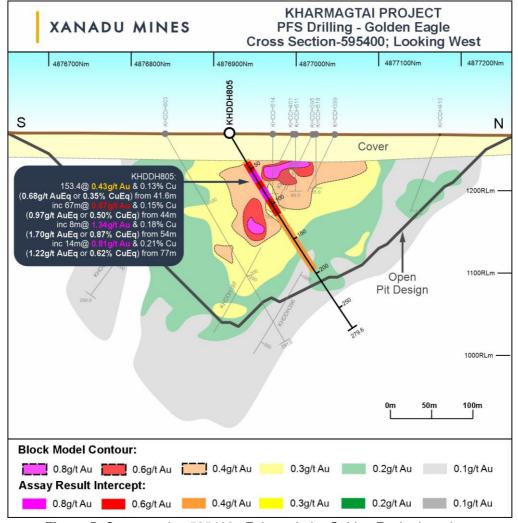


Figure 5: Cross section 595400mE through the Golden Eagle deposit.

 $^{^{\}rm 6}$ ASX/TSX Announcement – New Gold Zone Discovered at the Golden Eagle

Drill hole KHDDH801 was designed to extend the higher-grade zone and has returned a broad zone of moderate grade gold with a higher-grade zone at the expected interval (Figure 6).

Hole ID	Interval (m)	Au (g/t)	Cu (%)	AuEq (g/t)	From (m)
KHDDH801	83.4	0.59	0.11	0.8	36.6
including	29	1.14	0.14	1.42	57
including	14	1.9	0.14	2.18	60

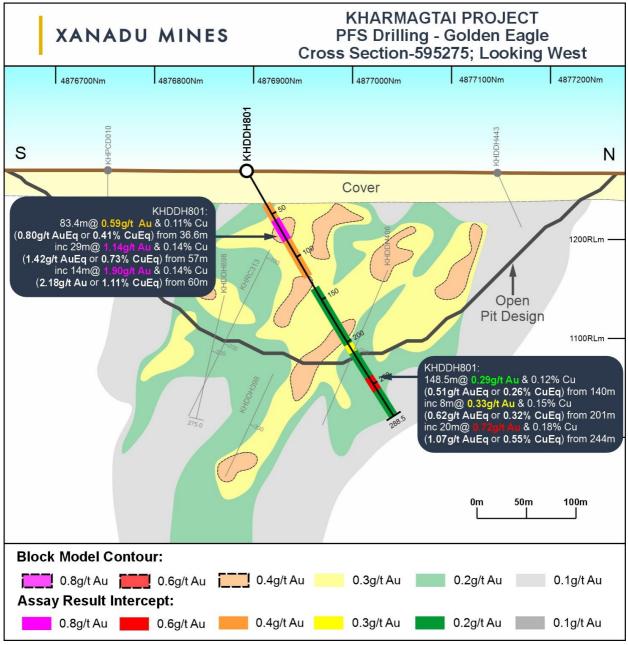


Figure 6: Cross section 595275mE through the Golden Eagle deposit.

Deep Exploration Drilling Encounters Broad Mineralised Zone

A single deep diamond drill hole was collared between Zaraa and Stockwork Hill, designed to test for a large-scale porphyry deposit. KHDDH779 encountered two broad zones of porphyry and tourmaline breccia style mineralisation between Stockwork Hill and Zaraa (**Figure 7**). This hole appears to have encountered the edges of a very large-scale Cu-Au System. Additional work is being planned once full interpretations are completed and the BoxScan dataset (vein densities, SWIR, sulphide distribution etc) are incorporated into the broader exploration model.

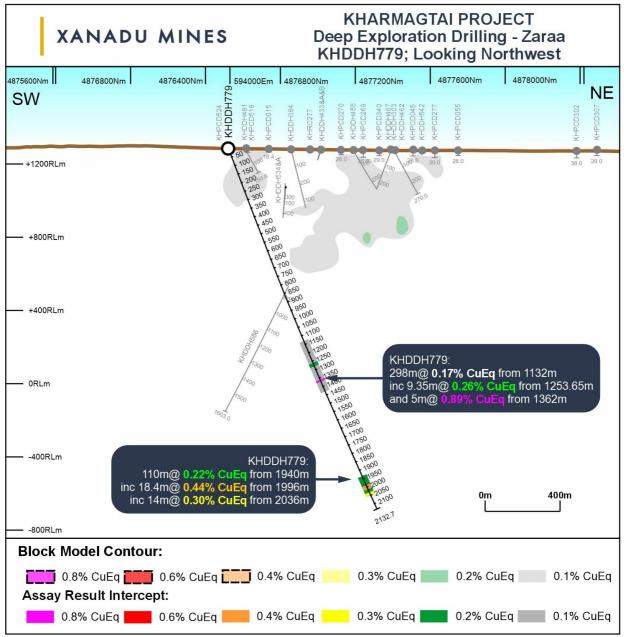


Figure 7: Cross section drill hole KHDDH779

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.

For further information on Xanadu, please visit: www.xanadumines.com or contact:

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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)
KHDDH684	Golden Eagle	595224	4876746	1270	359	-60	341.0
KHDDH685	Golden Eagle	595226	4876847	1269	360	-60	325.0
KHDDH700	Golden Eagle	595598	4876901	1269	0	-60	267.0
KHDDH701	Golden Eagle	595597	4877002	1268	0	-60	220.0
KHDDH703	Zephyr	594899	4877696	1265	0	-60	52.7
KHDDH704	Zephyr	594900	4877796	1264	0	-60	72.7
KHDDH705	Zephyr	595023	4877598	1265	0	-60	100.0
KHDDH706	Zephyr	595024	4877698	1265	0	-60	175.0
KHDDH707	Zephyr	595146	4877446	1266	0	-60	75.0
KHDDH709	Zephyr	595147	4877646	1265	0	-60	100.0
KHDDH710	Zephyr	595148	4877746	1264	0	-60	140.0
KHDDH711	Zephyr	595274	4877399	1266	0	-60	100.0
KHDDH712	Zephyr	595023	4877697	1265	240	-60	150.0
KHDDH713	Zephyr	595273	4877598	1265	0	-60	189.4
KHDDH714	Zephyr	595274	4877697	1265	0	-60	150.0
KHDDH715	Zephyr	595023	4877800	1264	0	-60	125.1
KHDDH716	Zephyr	595149	4877544	1266	0	-60	75.0
KHDDH717	Zephyr	595275	4877498	1266	0	-60	235.0
KHDDH718	Zephyr	595397	4877445	1267	0	-60	125.0
KHDDH719	Zephyr	595146	4877544	1266	270	-55	160.0
KHDDH720	Zephyr	595399	4877750	1265	0	-60	100.0
KHDDH721	Zephyr	595523	4877497	1266	0	-60	400.0
KHDDH722	Zephyr	595524	4877698	1265	0	-60	150.0
KHDDH723	Zephyr	595649	4877663	1266	0	-60	205.0
KHDDH724	Zephyr	595275	4877497	1266	190	-75	190.0
KHDDH725	Zephyr	595773	4877664	1269	0	-60	75.0
KHDDH731	Zephyr	595394	4877512	1266	170	-60	160.0
KHDDH732	Zephyr	595397	4877651	1266	0	-60	200.0
KHDDH736	Zephyr	595524	4877596	1265	0	-60	214.0
KHDDH740	Zephyr	595525	4877797	1265	0	-60	125.0
KHDDH745	Zephyr	595774	4877744	1270	0	-60	100.0
KHDDH752	Zephyr	595524	4877595	1265	140	-75	210.0
KHDDH779	Exploration	593999	4876523	1285	0	-70	2400.0
KHDDH801	Golden Eagle	595277	4876894	1269	0	-60	288.5
KHDDH802	Golden Eagle	595332	4876839	1270	0	-60	285.5

ASX/TSX ANNOUNCEMENT

By electronic lodgement | Page 12 of 26

Hole ID	Prospect	East	North	RL	Azimuth (°)	Inc (°)	Depth (m)
KHDDH803	Golden Eagle	595401	4876841	1269	0	-60	291.0
KHDDH804	Golden Eagle	595328	4876942	1269	0	-60	279.5
KHDDH805	Golden Eagle	595399	4876919	1269	0	-60	279.6
KHDDH806	White Hill	592393	4877472	1293	180	-70	848.3
KHDDH807	White Hill	591788	4876469	1317	0	-60	1212.7
KHDDH808	White Hill	591959	4876661	1310	0	-60	1200.0
KHDDH809	Exploration	597845	4877219	1265	0	-70	1200.0
KHDDH810	Altan Shand	591291	4878056	1296	318	-60	444.6
KHDDH811	White Hill	591099	4877967	1296	315	-60	450.8
KHDDH812	White Hill	591328	4878186	1291	318	-60	230.0

Table 2: Significant drill results

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
KHDDH684	Golden Eagle	49	248	199	0.15	0.09	0.17	0.34
including		186	220	34	0.33	0.17	0.34	0.67
and		282.5	341	58.5	0.09	0.16	0.20	0.39
KHDDH685	Golden Eagle	34	325	291	0.22	0.14	0.25	0.49
including		70	74	4	1.26	0.14	0.78	1.53
including		124	133.6	9.6	0.18	0.16	0.25	0.50
including		144.95	240	95.05	0.35	0.16	0.34	0.66
KHDDH700	Golden Eagle	43.5	196	152.5	0.22	0.09	0.20	0.39
including		96	106	10	0.35	0.14	0.32	0.63
including		168	182	14	0.59	0.15	0.46	0.89
including		172	176	4	1.10	0.24	0.80	1.56
KHDDH701	Golden Eagle	40.25	123	82.75	0.16	0.09	0.18	0.34
including		42	46	4	0.46	0.16	0.39	0.76
KHDDH703	Zephyr	14.75	18.8	4.05	0.33	0.00	0.17	0.34
KHDDH704	Zephyr			No s	ignificant inte	ercepts		
KHDDH705	Zephyr	14	42	28	0.28	0.03	0.18	0.35
and		58	64	6	0.40	0.05	0.25	0.50
and		78	86	8	0.11	0.02	0.08	0.15
KHDDH706	Zephyr			No s	ignificant inte	ercepts		
KHDDH707	Zephyr	23.9	74	50.1	0.19	0.04	0.14	0.27
including		48	64	16	0.47	0.04	0.28	0.55
KHDDH708	Zephyr	40.3	157	116.7	0.18	0.09	0.18	0.35
including		52	58	6	0.49	0.09	0.34	0.66
and		171	187.1	16.1	0.26	0.04	0.17	0.33
and		223	227.2	4.2	0.50	0.03	0.29	0.56
KHDDH709	Zephyr	16	20	4	0.22	0.00	0.12	0.23
and		51	58	7	0.20	0.03	0.14	0.27
KHDDH710	Zephyr			No s	ignificant inte	ercepts		
KHDDH711	Zephyr	32	100	68	0.09	0.10	0.15	0.29
KHDDH712	Zephyr	19	28	9	0.14	0.02	0.09	0.17
and		41.9	57.6	15.7	0.42	0.02	0.24	0.46
and		121	132	11	0.05	0.05	0.07	0.14
KHDDH713	Zephyr	18.5	56	37.5	0.25	0.08	0.20	0.40
including		40	48	8	0.74	0.16	0.54	1.06
and		76	107.2	31.2	0.14	0.06	0.13	0.26
and		129	140.7	11.7	0.14	0.06	0.13	0.26
and		152	189.4	37.4	0.17	0.07	0.15	0.30
KHDDH714	Zephyr	30	38	8	0.19	0.02	0.12	0.23
and		48	52	4	0.31	0.03	0.18	0.35

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
and		113	121	8	0.27	0.01	0.15	0.29
and		135	142	7	0.22	0.01	0.12	0.24
KHDDH715	Zephyr			No s	ignificant inte	ercepts		
KHDDH716	Zephyr	15.9	75	59.1	0.09	0.10	0.14	0.28
KHDDH717	Zephyr	16.2	235	218.8	0.20	0.13	0.23	0.45
including		47	73	26	0.46	0.24	0.47	0.93
including		138	144	6	0.27	0.17	0.31	0.60
including		205	223	18	0.21	0.22	0.33	0.64
KHDDH718	Zephyr	49	67	18	0.25	0.04	0.16	0.32
and		149	153	4	0.19	0.05	0.14	0.28
and		171	356	185	0.21	0.12	0.22	0.44
including		211	215	4	0.42	0.17	0.38	0.75
including		265	276	11	0.86	0.16	0.60	1.17
including		269.5	276	6.5	1.29	0.15	0.81	1.59
including		304	338	34	0.33	0.20	0.37	0.72
KHDDH719	Zephyr	45	49	4	0.19	0.04	0.14	0.27
and		91	160	69	0.13	0.07	0.13	0.26
KHDDH720	Zephyr	38	62	24	0.16	0.09	0.17	0.33
KHDDH721	Zephyr	104	120	16	0.16	0.05	0.13	0.25
and		139.5	336.9	197.4	0.13	0.16	0.23	0.45
including		166	172	6	0.10	0.30	0.35	0.68
including		193	221	28	0.15	0.26	0.34	0.66
including		273	311	38	0.19	0.21	0.31	0.60
including		327	336	9	0.24	0.17	0.29	0.57
and		347	395	48	0.11	0.14	0.19	0.38
including		369	389	20	0.11	0.21	0.27	0.52
KHDDH722	Zephyr	23.2	144	120.8	0.26	0.18	0.32	0.62
including		23.2	87	63.8	0.44	0.25	0.47	0.93
including		25	45	20	0.89	0.25	0.70	1.37
including		65	76.8	11.8	0.36	0.42	0.60	1.18
KHDDH723	Zephyr	43	246	203	0.18	0.16	0.25	0.50
including		83	103	20	0.13	0.33	0.39	0.77
including		121	129	8	0.14	0.22	0.29	0.57
including		141	149	8	0.31	0.30	0.45	0.89
including		163	189	26	0.23	0.18	0.30	0.59
including		199	219	20	0.55	0.16	0.44	0.85
including		201	211	10	0.89	0.16	0.62	1.21
including		232.7	242.3	9.6	0.23	0.09	0.20	0.40
and		268	272	4	0.10	0.07	0.12	0.24
and		312	316	4	0.16	0.05	0.13	0.25
KHDDH724	Zephyr	13.6	118.5	104.9	0.21	0.16	0.27	0.52

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
including		13.6	66	52.4	0.35	0.19	0.36	0.71
including		26	38	12	0.31	0.34	0.50	0.97
and		165	188	23	0.22	0.05	0.16	0.32
KHDDH725	Zephyr			No s	ignificant inte	ercepts		
KHDDH731	Zephyr	59	65	6	0.22	0.03	0.14	0.28
and		89	101	12	0.22	0.03	0.14	0.27
KHDDH732	Zephyr	21.6	62	40.4	0.10	0.12	0.17	0.34
and		74	200	126	0.13	0.22	0.29	0.57
including		74	88	14	0.23	0.20	0.32	0.63
including		98	108.2	10.2	0.23	0.25	0.37	0.72
including		119.4	171	51.6	0.12	0.29	0.35	0.69
KHDDH736	Zephyr	48	54	6	0.07	0.08	0.12	0.23
and		68	264	196	0.25	0.12	0.25	0.48
including		128	163.8	35.8	0.33	0.17	0.34	0.67
including		184.2	211	26.8	1.00	0.16	0.68	1.32
including		184.2	188.9	4.7	1.23	0.37	1.00	1.96
including		200	209	9	1.77	0.17	1.07	2.10
KHDDH740	Zephyr	31.2	59	27.8	0.04	0.10	0.12	0.23
KHDDH745	Zephyr	38.8	104.9	66.1	0.10	0.21	0.26	0.51
including		60	80	20	0.13	0.27	0.33	0.65
and		171	179.2	8.2	0.16	0.06	0.15	0.29
and		242	256	14	0.25	0.03	0.16	0.31
including		242	252	10	0.32	0.03	0.20	0.38
and		270	351	81	0.14	0.09	0.17	0.33
including		270	277.3	7.3	0.53	0.07	0.34	0.66
including		293	299	6	0.22	0.21	0.32	0.62
KHDDH752	Zephyr	27.5	40	12.5	0.08	0.03	0.07	0.15
and		111.1	118	6.9	0.07	0.07	0.10	0.20
and		142	210	68	0.08	0.19	0.23	0.45
including		156	160	4	0.29	0.24	0.39	0.76
including		202	208	6	0.08	0.28	0.32	0.62
KHDDH779	Exploration	66	78	12	0.13	0.08	0.14	0.28
and		320	326	6	0.35	0.13	0.31	0.60
and		499	505	6	0.01	0.11	0.11	0.22
and		557	577	20	0.09	0.12	0.16	0.32
and		587	595	8	0.02	0.11	0.12	0.23
and		611	621	10	0.02	0.08	0.09	0.18
and		661	673	12	0.04	0.08	0.11	0.21
and		782	788	6	0.06	0.07	0.10	0.19
and		810	820	10	0.05	0.07	0.10	0.19
and		874	1118	244	0.03	0.13	0.15	0.29

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
including		980	984	4	0.09	0.28	0.33	0.64
including		1087	1098	11	0.05	0.19	0.22	0.42
and		1132	1430	298	0.07	0.13	0.17	0.33
including		1253.65	1263	9.35	0.06	0.23	0.26	0.51
including		1362	1367	5	1.11	0.32	0.89	1.73
and		1442	1486	44	0.06	0.08	0.11	0.22
and		1496	1517	21	0.01	0.09	0.10	0.19
and		1577	1585	8	0.16	0.15	0.23	0.44
and		1649	1658	9	0.02	0.04	0.05	0.10
and		1724	1730	6	0.03	0.15	0.17	0.33
and		1756	1831	75	0.07	0.08	0.11	0.22
and		1885	1930.8	45.8	0.05	0.10	0.13	0.25
including		1925	1930.8	5.8	0.08	0.24	0.28	0.55
and		1940	2050	110	0.08	0.18	0.22	0.44
including		1996	2014.4	18.4	0.13	0.37	0.44	0.85
including		2036	2050	14	0.16	0.22	0.30	0.59
and		2068	2078.1	10.1	0.04	0.09	0.11	0.22
KHDDH799	Exploration			No s	ignificant inte	ercepts		
KHDDH800	Exploration			No s	ignificant inte	ercepts		
KHDDH801	Golden Eagle	36.6	120	83.4	0.59	0.11	0.41	0.80
including		57	86	29	1.14	0.14	0.73	1.42
including		60	74	14	1.90	0.14	1.11	2.18
including		106	114.2	8.2	0.46	0.12	0.35	0.69
and		140	288.5	148.5	0.29	0.12	0.26	0.51
including		201	209	8	0.33	0.15	0.32	0.62
including		244	264	20	0.72	0.18	0.55	1.07
KHDDH802	Golden Eagle	35.5	285.5	250	0.37	0.12	0.31	0.60
including		84	180	96	0.55	0.14	0.41	0.81
including		206	212	6	0.41	0.11	0.32	0.63
including		232	252	20	0.39	0.15	0.35	0.68
KHDDH803	Golden Eagle	36.8	244	207.2	0.20	0.11	0.21	0.42
including		88	98	10	0.29	0.16	0.30	0.59
including		170	200	30	0.34	0.12	0.30	0.58
and		254	270.2	16.2	0.07	0.06	0.10	0.19
KHDDH804	Golden Eagle	38.1	88	49.9	0.40	0.10	0.30	0.59
including		38.9	58.8	19.9	0.61	0.16	0.47	0.92
and		99.25	277	177.75	0.23	0.11	0.23	0.44
including		113.8	178	64.2	0.42	0.14	0.35	0.69
including		236	244.6	8.6	0.25	0.15	0.27	0.54
KHDDH805	Golden Eagle	41.6	195	153.4	0.43	0.13	0.35	0.68
including		44	111	67	0.67	0.15	0.50	0.97

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
including		54	62	8	1.34	0.18	0.87	1.70
including		54	60	6	1.43	0.18	0.91	1.78
including		77	91	14	0.81	0.21	0.62	1.22
including		127	133	6	0.37	0.15	0.34	0.66
and		267	278	11	0.06	0.05	0.08	0.15
KHDDH806	White Hill	2	146	144	0.06	0.13	0.16	0.32
and		156	443.4	287.4	0.07	0.18	0.21	0.41
including		386	443.4	57.4	0.15	0.29	0.36	0.71
and		545	595	50	0.94	0.25	0.73	1.42
including		549	571	22	2.10	0.26	1.34	2.62
and		779	821	42	0.03	0.22	0.24	0.46
including		781	790	9	0.05	0.53	0.56	1.09
KHDDH807	White Hill	295	353	58	0.04	0.09	0.11	0.22
and		367	425	58	0.04	0.12	0.14	0.27
including		381	385	4	0.09	0.36	0.40	0.79
and		435	994.7	559.7	0.07	0.23	0.27	0.53
including		457	477	20	0.09	0.19	0.23	0.46
including		487	499	12	0.11	0.31	0.36	0.71
including		512	524	12	0.10	0.26	0.31	0.61
including		546	555.4	9.4	0.13	0.26	0.33	0.65
including		685	712	27	0.05	0.26	0.28	0.55
including		734	747	13	0.08	0.33	0.37	0.72
including		761	983	222	0.10	0.31	0.36	0.70
including		834	838	4	0.22	0.55	0.66	1.28
and		1004	1198	194	0.06	0.19	0.22	0.42
including		1034	1090	56	0.10	0.25	0.30	0.59
including		1180	1184	4	0.08	0.43	0.46	0.91
KHDDH808	White Hill	238	242	4	0.05	0.18	0.20	0.39
and		282.5	319	36.5	0.07	0.15	0.18	0.36
including		305	311	6	0.09	0.32	0.36	0.70
and		333	580.45	247.45	0.11	0.29	0.35	0.68
including		341	346	5	0.07	0.24	0.27	0.53
including		465	500	35	0.09	0.31	0.36	0.70
including		516	580.45	64.45	0.26	0.61	0.74	1.44
including		556	580.45	24.45	0.53	1.14	1.41	2.75
including		558	571.8	13.8	0.70	1.64	1.99	3.90
and		608	626	18	0.19	0.05	0.14	0.28
including		620	624	4	0.50	0.05	0.31	0.60
and		644	652	8	0.19	0.03	0.12	0.24
and		664	672	8	0.10	0.15	0.20	0.39
and		750	1085	335	0.08	0.25	0.30	0.58

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	CuEq (%)	AuEq (g/t)
including		751.7	891	139.3	0.12	0.38	0.44	0.86
including		786	796	10	0.13	0.54	0.61	1.19
including		812	818	6	0.27	0.85	0.99	1.94
including		918	926	8	0.08	0.26	0.30	0.59
including		958	962	4	0.08	0.29	0.33	0.65
including		980	989	9	0.22	0.22	0.33	0.64
including		1028.8	1035	6.2	0.12	0.50	0.56	1.10
and		1115	1127	12	0.03	0.12	0.14	0.27
and		1142	1172	30	0.02	0.11	0.12	0.24
and		1182	1186	4	0.02	0.13	0.14	0.27
KHDDH809	Exploration	52.8	81	28.2	0.16	0.05	0.13	0.25
and		207	246	39	0.13	0.09	0.15	0.30
including		209	220	11	0.22	0.16	0.27	0.53
and		256	265.7	9.7	0.19	0.09	0.19	0.36
And		290	295	5	0.07	0.15	0.19	0.37
and		328	342	14	0.05	0.05	0.07	0.14
			А	ssays pending				
KHDDH810	Altan Shand	276.1	310	33.9	0.25	0.10	0.23	0.46
KHDDH811	White Hill	164	168	4	0.11	0.10	0.16	0.31
and		301.63	315	13.37	0.14	0.08	0.15	0.29
and		418	422	4	1.81	0.09	1.02	1.99
KHDDH812	White Hill			No s	ignificant inte	ercepts		

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 2023.

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 & NQ diameter diamond drill core on site using rock saws, on a routine 2m sample interval that also honours lithological/intrusive contacts. The orientation of the cut line is controlled using the core orientation line ensuring uniformity of core splitting wherever the core has been successfully oriented. Sample intervals are defined and subsequently checked by geologists, and sample tags are attached (stapled) to the plastic core trays for every sample interval. Reverse Circulation (RC) chip samples are ¼ splits from one meter (1m) intervals using a 75%:25% riffle splitter to obtain a 3kg sample RC samples are uniform 2m samples formed from the combination of two ¼ split 1m samples.
Drilling techniques	 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 oriented using the "Reflex Ace" tool.
Drill sample recovery	 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 mineralisation. Overall, core quality is good, with minimal core loss. Where there is localised faulting and or fracturing core recoveries decrease, however, this is a very small percentage of the mineralised 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	 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

Criteria	Commentary
	 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 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	 All drill core samples are ½ core splits from 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 collected". The performance of these field duplicates is routinely analysed as part of Xanadu's sample QC process. Routine sample preparation and analyses of DDH samples were carried out by ALS Mongolia LLC (ALS Mongolia), who operates an independent sample preparation and analytical laboratory in Ulaanbaatar. All samples were prepared to meet standard quality control procedures as follows: Crushed to 75% passing 2mm, split to 1kg, pulverised to 85% passing 200 mesh (75 microns) and split to 150g sample pulp. ALS Mongolia Geochemistry labs quality management system is certified to ISO 9001:2008. The sample support (sub-sample mass and comminution) is appropriate for the grainsize and Cu-Au distribution of the porphyry Cu-Au mineralization and associated host rocks.
Quality of assay data and laboratory tests	 All samples were routinely assayed by ALS Mongolia for gold Au is determined using a 25g fire assay fusion, cupelled to obtain a bead, and digested with Aqua Regia, followed by an atomic absorption spectroscopy (AAS) finish, with a lower detection (LDL) of 0.01 ppm. All samples were also submitted to ALS Mongolia for the 48-element package ME-ICP61 using a four-acid digest (considered to be an effective total digest for the elements relevant to the Mineral Resource Estimate (MRE)). Where copper is overrange (>1% Cu), it is analysed by a second analytical technique (Cu-OG62), which has a higher upper detection limit (UDL) of 5% copper. Quality assurance has been managed by insertion of appropriate Standards (1:30 samples – suitable Ore Research Pty Ltd certified standards), Blanks (1:30 samples), Duplicates (1:30 samples – ¼ 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.

Criteria	Commentary
	 Prior to 2014: Cu, Ag, Pb, Zn, As and Mo were routinely determined using a three-acid-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 sampling and assaying	 All assay data QA/QC is checked prior to loading into XAM's Geobank data base. The data is managed by XAM geologists. The data base and geological interpretation is managed by XAM. Check assays are submitted to an umpire lab (SGS Mongolia) for duplicate analysis. 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 global positioning system (DGPS) to within 10cm accuracy. The grid system used for the project is UTM WGS-84 Zone 48N Historically, Eastman Kodak and Flexit electronic multi-shot downhole survey tools have been used at Kharmagtai to collect down hole azimuth and inclination 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 a permanent calibration station setup for the gyro tool, which is routinely calibrated every 2 weeks (calibration records are maintained and were sighted) The project Digital Terrain Model (DTM) is based on 1m contours from satellite imagery with an accuracy of ±0.1 m.
Data spacing and distribution	 Holes spacings range from <50m spacings within the core of mineralization to +500m spacings for exploration drilling. Hole spacings can be determined using the sections and drill plans provided. Holes range from vertical to an inclination of -60 degrees depending on the attitude of the target and the drilling method. The data spacing and distribution is sufficient to establish anomalism and targeting for porphyry Cu-Au, tourmaline breccia and epithermal target types. Holes have been drilled to a maximum of 1,304m vertical depth. The data spacing and distribution is sufficient to establish geological and grade continuity, and to support the Mineral Resource classification.

Criteria	Commentary
Orientation of data in relation to geological structure	 Drilling is conducted in a predominantly regular grid to allow unbiased interpretation and targeting. Scissor drilling, as well as some vertical and oblique drilling, has been used in key mineralised zones to achieve unbiased sampling of interpreted structures and mineralised zones, and in particular to assist in constraining the geometry of the mineralised hydrothermal tourmaline-sulphide breccia domains.
Sample security	 Samples are delivered from the drill rig to the 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 Laboratory with additional email confirmation of receipt. Samples are then stored at the lab and returned to a locked storage site.
Audits or reviews	 Internal audits of sampling techniques and data management are undertaken on a 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. 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.

Criteria	Commentary
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.
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% CuEq 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% CuEq. A nominal cut-off of 0.19/t AuEq 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 AuEq. Maximum contiguous dilution within each intercept is 9m for 0.1%, 0.3%, 0.6% and 1% CuEq. 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 (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. The copper equivalent calculation used is based off the CuEq calculation defined by CSA Global in the 2018 Mineral Resource Upgrade. Copper equivalent (CuEq) grade values were calculated using the following formula: CuEq = Cu + Au * 0.62097 * 0.8235. Gold Equivalent (AuEq) grade values were calculated using the following formula: AuEq = Au + Cu / 0.62097 * 0.8235. Where: Cu - copper grade (%)

Criteria	Commentary
	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%.
Relationship between mineralisation	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
on widths	possible to true widths.
and intercept lengths	• 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 this ASX/TSX Announcement.
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 Work	 The mineralisation is open at depth and along strike. Current estimates are restricted to those expected to be reasonable for open pit mining. Limited drilling below this depth (-300m RL) shows widths and grades potentially suitable for underground extraction. 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 2023 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.