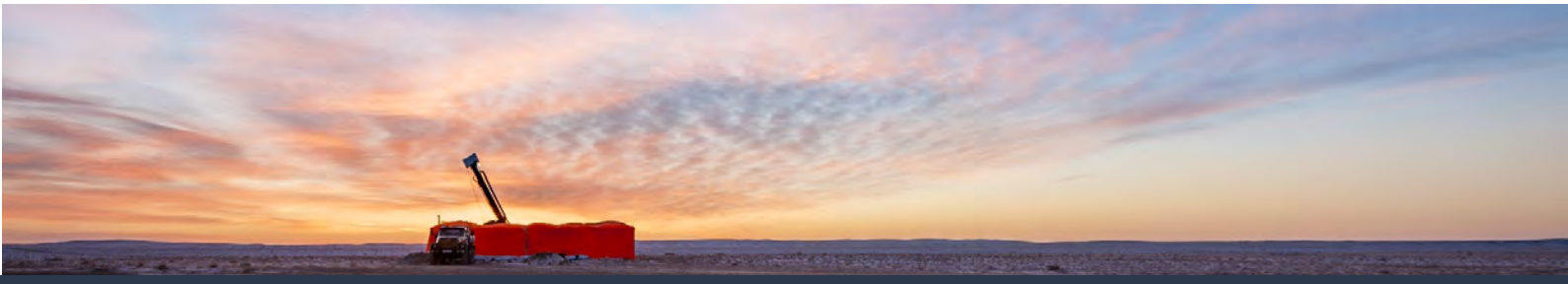
XANADU MINES



NEW GOLD ZONE DISCOVERED AT THE GOLDEN EAGLE

26 October 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 undertaken with the Company's joint venture partner **Zijin Mining Group Co., Ltd. (Zijin).** Drilling has intersected a significant new zone of shallow hypogene gold mineralisation below previously recognised oxide mineralisation at the Golden Eagle Deposit[1].

Highlights

- Significant new zone of shallow, high-grade gold discovered at the Golden Eagle Deposit.
- Shallow gold-rich quartz mineralisation is hosted in the upper part of an untested mineralised porphyry.
- Diamond drill hole **KHDDH691** intersected **205.3m @ 0.44g/t Au and 0.14% Cu (0.71g/t eAu) from 37.7m**

  Including **31m @ 1.21g/t Au and 0.24% Cu (1.68g/t eAu) from 96m**

  Including **4m @ 2.58g/t Au and 0.52% Cu (3.60g/t eAu) from 100m**

  And **6m @ 2.58g/t Au and 0.49% Cu (3.55g/t eAu) from 119m**
- Follow-up drill program underway to test newly identified gold zone at Golden Eagle.

Xanadu's Executive Chairman and Managing Director, Mr Colin Moorhead, said *"We are very excited about the latest results that have been returned from the Golden Eagle deposit. The discovery of a significant zone of shallow gold mineralisation hosted in the cupola of a porphyry intrusion below previously recognised oxide gold mineralisation is a significant step that not only adds to previously known gold resources, but it also should improve the economics of the planned Golden Eagle open pit. This form of mineralisation generally indicates of a larger porphyry intrusion of metals below, and we are adapting the Golden Eagle exploration program to target that model. Additional infill drilling is currently underway to expand this new zone of and understand its size and shape."*

[1] ASX/TSX Announcement 16 January 2017 – New Gold Rich Porphyry Centre Identified Under Shallow Cover

AUSTRALIA
c/o Company Matters Pty Limited
Level 12, 680 George Street
Sydney NSW 2000
T: +612 8280 7497

MONGOLIA
Suite 23, Building 9B
Olympic St, Sukhbaatar District
Ulaanbaatar, Mongolia
T: +967 7012 0211

Xanadu Mines Ltd ACN 114 249 026

www.xanadumines.com

Infill Drilling Identifies High-Grade Gold Core at Golden Eagle

Assay results have been returned for 20 infill drill holes at Golden Eagle, with grades generally better than or in line with the 2021 Golden Eagle MRE[2] (**Figures 1 to 6; Appendix 1)**.

Of note, drill hole **KHDDH691** has returned an intercept of significantly higher grade than the 2021 MRE. This high-grade intercept is related to a zone of unidirectional solidification textures "UST's", found at the top of an intrusion, where gold and copper rich fluids can accumulate. Importantly, this UST zone should have a predictable shape and additional drilling is currently underway to map the geometry of this zone in three dimensions. Once this geometry is defined expansion of a higher-grade core is possible. Five additional infill drill holes are currently underway expanding this zone.

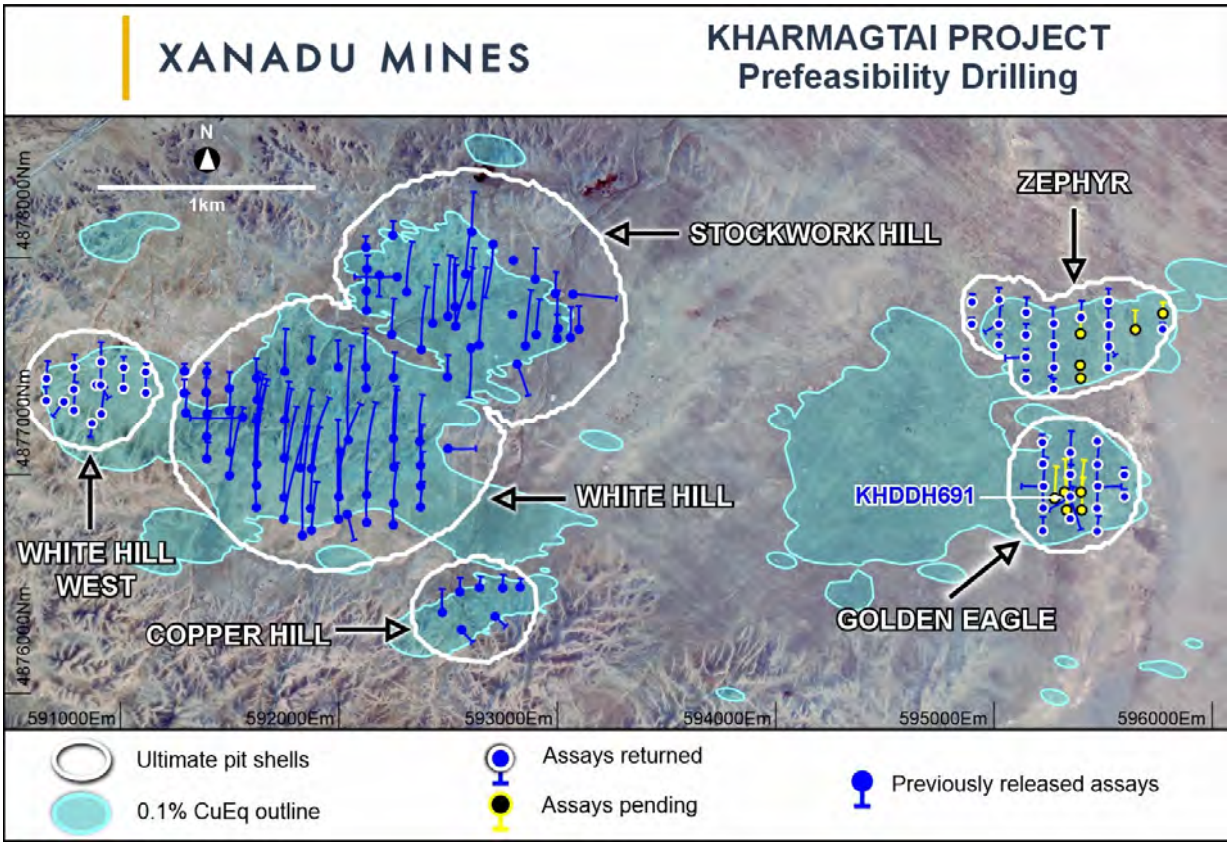


Figure 1: Kharmagtai Project PFS Infill drilling.

[2] ASX/TSX Announcement 08 December 2021 - Kharmagtai resource grows to 1.1 billion tonnes, containing 3Mt Cu and 8Moz Au.

Figure 2: Drill core photos from KHDDH691. Higher grade gold mineralisation appears to occur associated with unidirectional solidification textures “UST” which typically form in the carapace of a crystallising porphyry intrusion.

Table 1: Significant intercepts for drill hole KHDDH691

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	eCu (%)	eAu (g/t)
KHDDH691	Golden Eagle	37.7	243	205.3	0.44	0.14	0.36	0.71
including		48.3	80	31.7	0.49	0.12	0.37	0.73
including		96	127	**31**	1.21	0.24	0.86	**1.68**
including		96	175	79	0.71	0.20	0.56	**1.09**
including		100	104	**4**	**2.58**	0.52	**1.84**	**3.60**
including		119	125	**6**	**2.58**	0.49	**1.81**	**3.55**
including		185	189	4	0.32	0.14	0.31	0.60
including		221	231	10	0.34	0.12	0.30	0.58

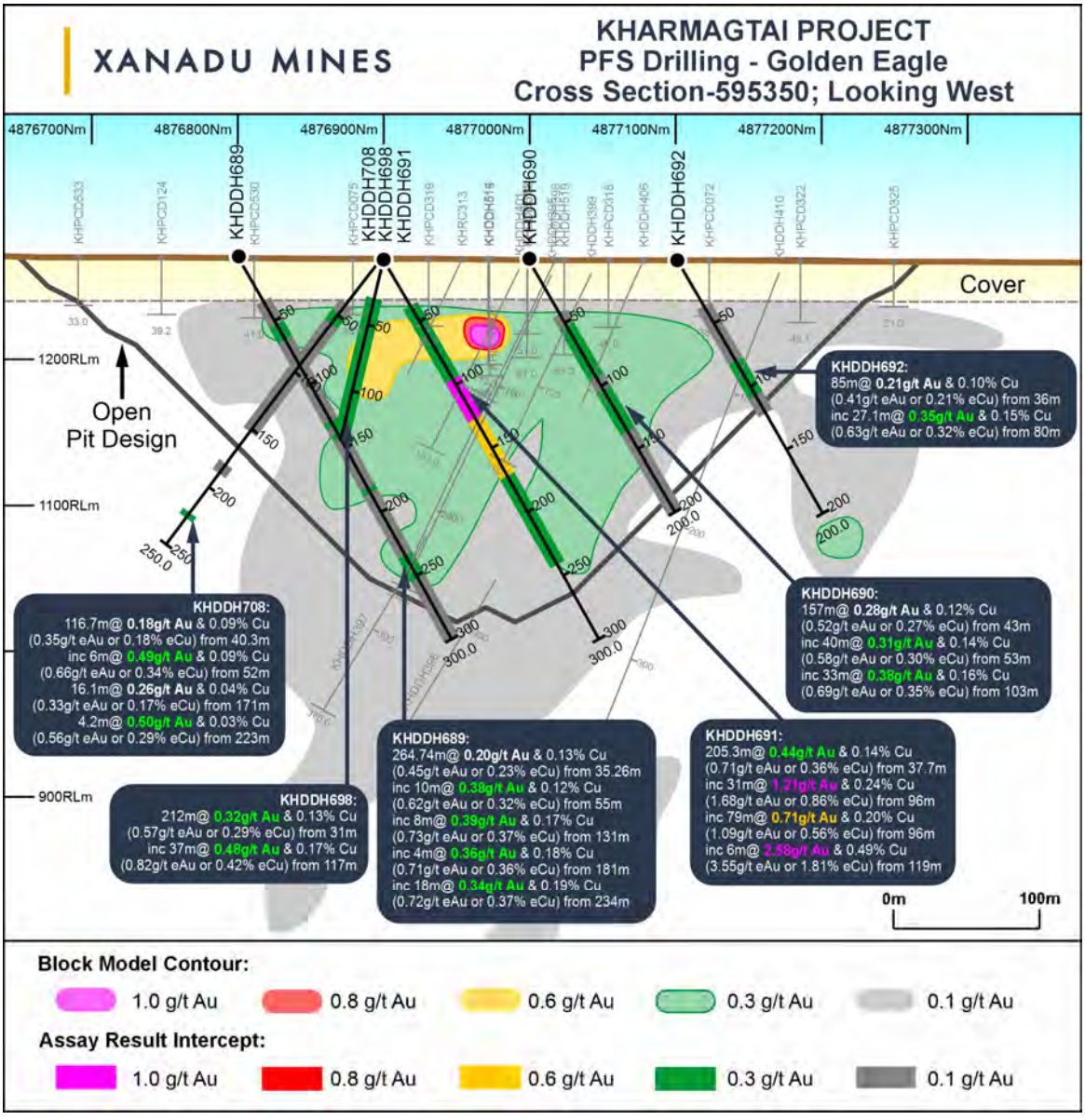


Figure 3: Cross section 595350mE through the Golden Eagle deposit.

About Golden Eagle

Golden Eagle was discovered in early 2017 when drilling the first geochemical target generated from the top of basement drilling program returned a significant intercept of high-grade gold (Xanadu's ASX announcement – 16 January 2017). Gold and copper mineralisation at Golden Eagle is hosted by a series of monzodiorite stocks. Mineralisation occurs as free gold and electrum grains, within and on the margins of pyrite and chalcopyrite grains disseminated throughout the rock mass. Higher grade mineralisation appears to occur associated with unidirectional solidification textures "UST" which typically form in the carapace of a crystallising porphyry intrusion.

About the Current Exploration Drilling Program

Three diamond drill rigs are currently focussed on Kharmagtai shallow and deep exploration drilling, with the objective to target areas with potential for future Mineral Resource to Ore Reserve conversion. Exploration drilling at Kharmagtai is targeting additional porphyry copper-gold deposits outside the currently defined MRE volume. This programme also serves to inform future infrastructure location decisions associated with the potential development of the Kharmagtai Project into a large-scale mining operation.

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[3]. 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 1**), 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.

[3] ASX/TSX Announcement 08 December 2021 - Kharmagtai resource grows to 1.1 billion tonnes, containing 3Mt Cu and 8Moz Au

Appendix 1: Additional Sections

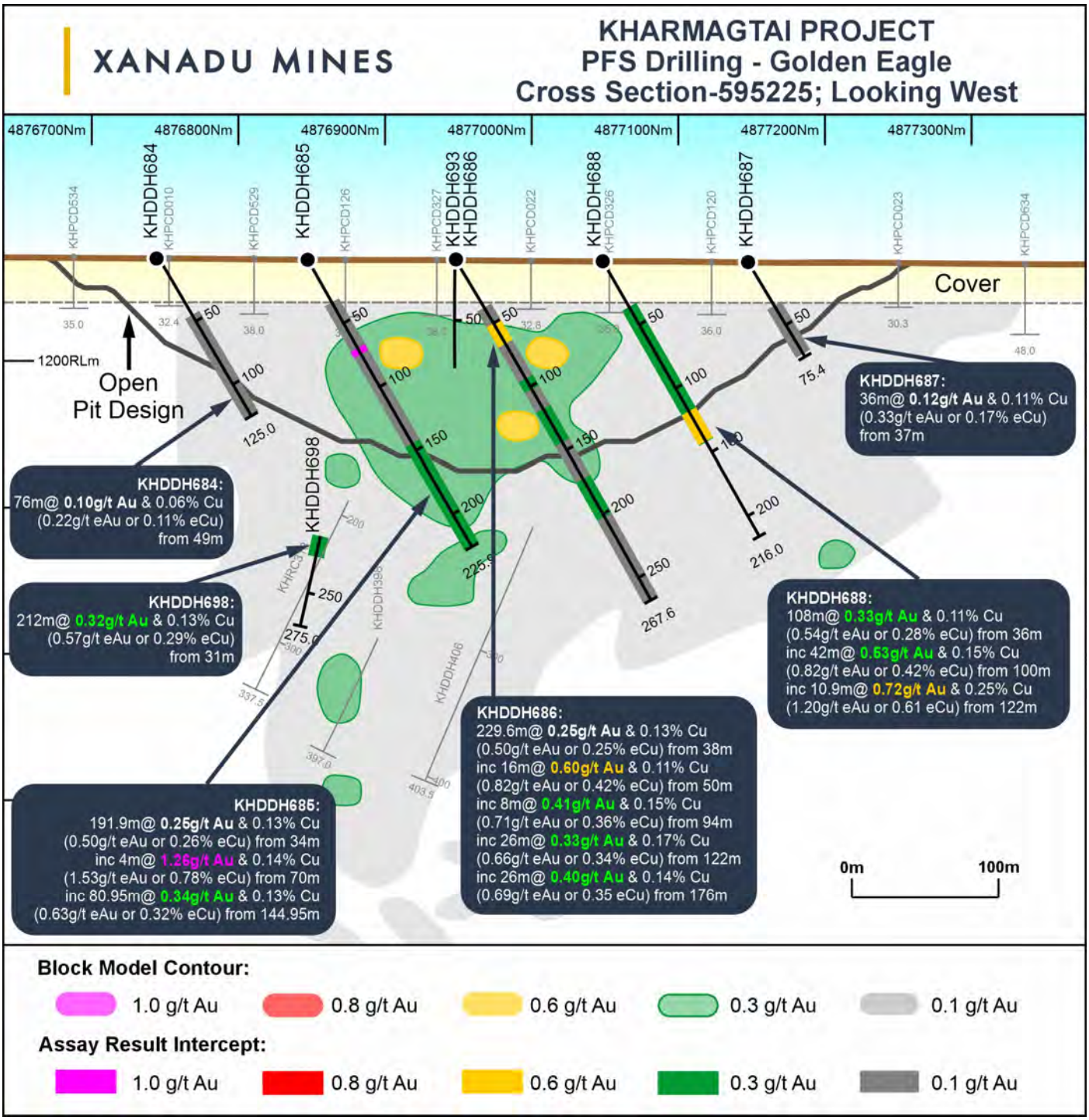


Figure 4: Cross section 595225mE; looking west through the Golden Eagle deposit.

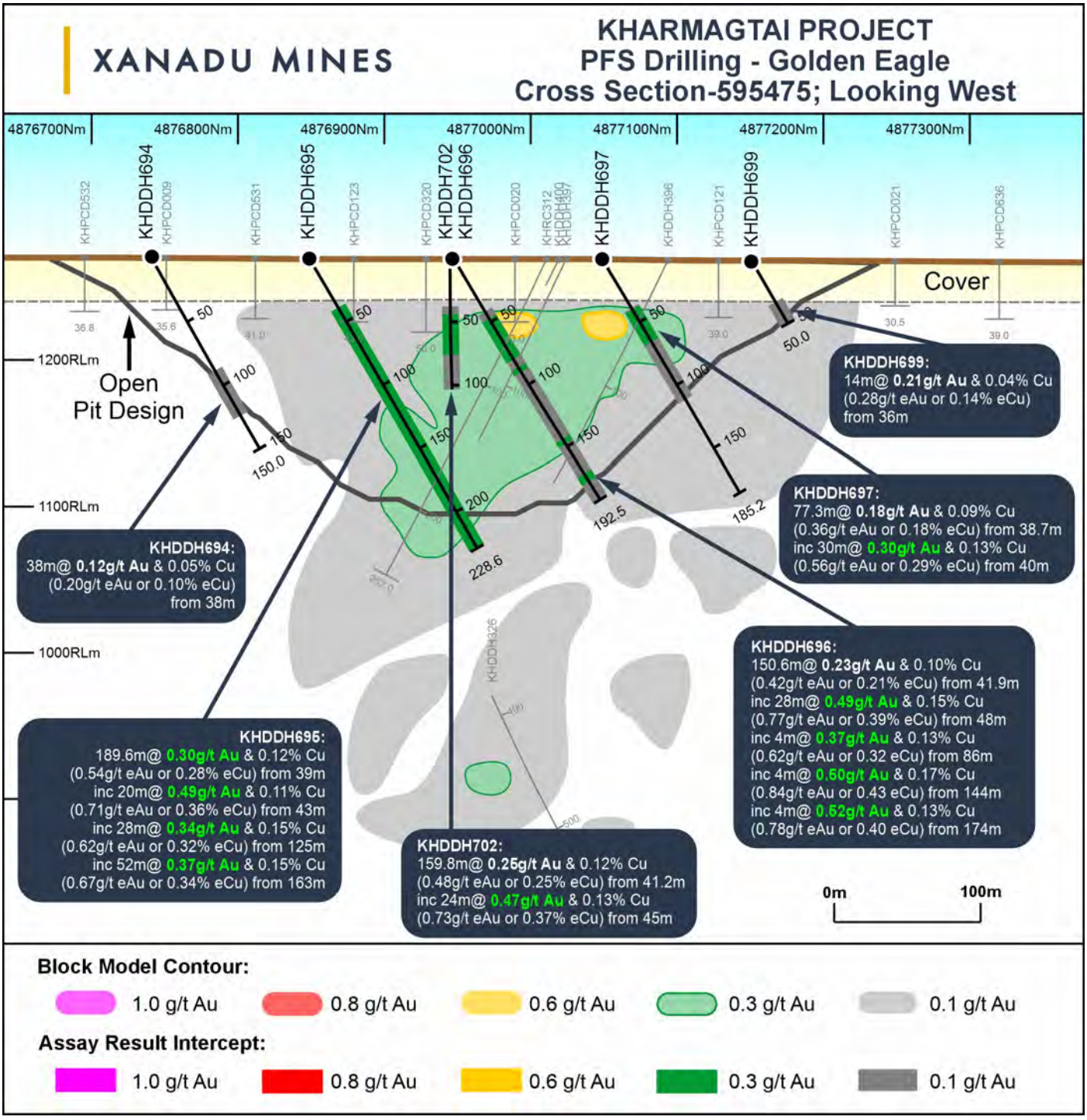


Figure 5: Cross section 595475mE, looking west through the Golden Eagle deposit.

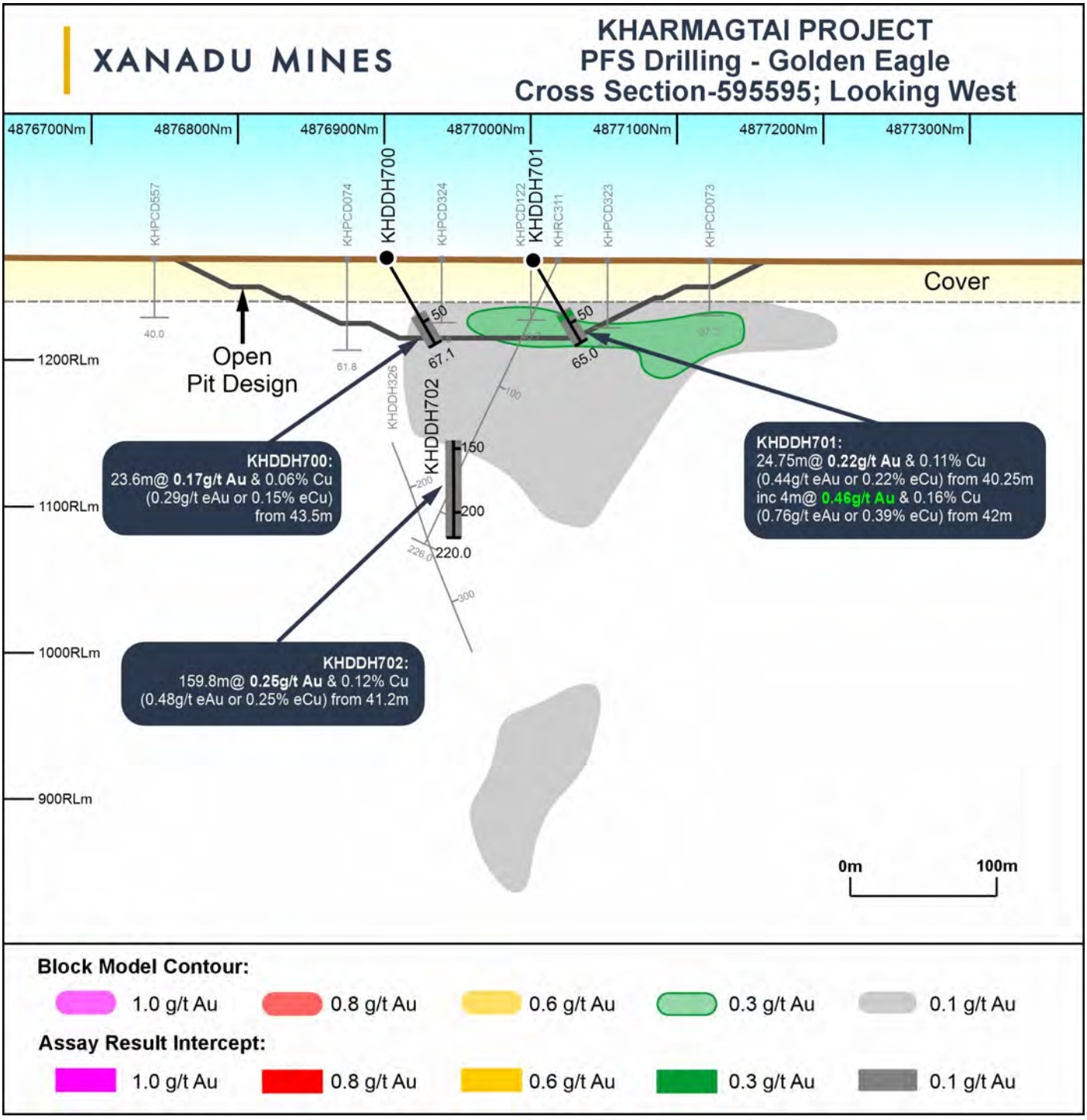


Figure 6: Cross section 595595mE, looking west through the Golden Eagle deposit.

Appendix 2: 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 (%)	eCu (%)	eAu (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 3: 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 4: 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 & 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 over-range (>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): o Xanadu now owns 90% of Vantage LLC, the 100% owner of the Oyut Ulaan mining licence. o 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 0.1g/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% 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 (**eAu**) grade values were calculated using the following formula: eAu = 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): o Copper price - 3.1 $/lb (or 6834 $/t) o Gold price - 1320 $/oz o Copper recovery - 85% o Gold recovery - 70% o Relative recovery of gold to copper = 70% / 85% = 82.35%.
Relationship between mineralisation on widths and intercept lengths	• Mineralised structures are variable in orientation, and therefore drill 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 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 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.