XANADU MINES

ASX/TSX ANNOUNCEMENT

By electronic lodgement | Page 1 of 1

Investor Presentation – February 2024

12 February 2024

ASX Markets Announcement Office Exchange Centre 20 Bridge Street Sydney NSW 2000

Investor Presentation - February 2024

Please find attached for release to the market, Xanadu Mines Ltd's Investor Presentation – February 2024.

-ENDS-

For further information, please contact:

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W: www.xanadumines.com

Spencer Cole Chief Financial Officer P: +61 2 8280 7497

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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 information on Xanadu visit: www.xanadumines.com.

This Announcement was authorised for release by Xanadu's Executive Chairman and Managing Director.

XANADU MINES

Discovering & Defining World Class Mineral Deposits in Mongolia

Investor Presentation

February 2024

ASX:XAM | TSX:XAM



Disclaimer

Cautionary Statements

The Study has been undertaken to assess viability of developing the Kharmagtai Copper-Gold Project by constructing an open cut mine and processing facility to produce copper concentrate for export. It is a preliminary technical and economic Study of the potential viability of the Kharmagtai Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further exploration and evaluation work and appropriate studies are required before Xanadu will be in a position to estimate any ore reserves or to provide any assurance of an economic development case. The Study is based on the material assumptions in this document. These include assumptions about the availability of funding. While Xanadu considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved. To achieve the range of outcomes indicated in the Study, funding of in the order of US\$700 million will likely be required. Investors should note that there is no certainty that Xanadu will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Xanadu's existing shares. It is also possible that Xanadu could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Xanadu proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Study. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The Study is based on the December 2021 Mineral Resource Estimate, is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised. The Study has been completed to a level of accuracy of +/-35% in line with industry standard accuracy for this stage of development. The Company has reasonable grounds for disclosing a Production Target, given that in the first seven years of production, 100% of the mill feed is scheduled from the Indicated Resource category, which exceeds the economic payback period for the project by 3 years. Approximately 55% of the Life of Mine Production Target is in the Indicated Mineral Resource category, and 45% is in the Inferred Mineral Resource category. There is a lower level of geological confidence associated with Inferred Mineral Resources, and while the Company considers all the material assumptions in this Study to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated will be achieved. The Mineral Resources underpinning the production target in the Study have been prepared by a Competent Person in accordance with the requirements of Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). The Competent Person's Statement is found in the Geology and Resources section of this Study. For full details of the Mineral Resource Estimate, please refer to Xanadu ASX/TSX Announcement dated 25 February 2022. Xanadu confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that Announcement continue to apply and have not materially changed. Note that unless otherwise stated, all currency in this Study is US dollars.

Forward Looking Statements

Certain statements contained in this Study, 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 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 Study 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', 'fraget', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and similar expressions identify forward-looking statements. All 'forward-looking statements' made in this Study are qualified by the foregoing cautionary statements. Investors are cautioned that 'forward-looking statements' are not a guarantee of future performance and accordingly investors are cautioned not to put undue reliance on 'forward-looking statements' due to the inherent uncertainty therein. Xanadu has concluded that it has a reasonable basis for providing these forward-looking statements' due to the inherent uncertainty therein. looking statements and the forecast financial information included in this Study. To achieve the range of Kharmagtai Copper-Gold Project outcomes indicated in the 2022 Study, funding of in the order of an approximately US\$700 million will likely be required by the Company. Based on current market conditions and the results of studies undertaken, there are reasonable grounds to believe the Project can be financed via a combination of equity and debt, as has been done for numerous comparable projects in Mongolia and other jurisdictions in Asia in recent years. Debt may be secured from several sources including Australian banks, international banks, the high yield bond market, resource credit funds, and in conjunction with product sales of offtake agreements. It is also possible the Company may pursue alternative funding undertaking a corporate transaction, seeking a joint venture partner or partial asset sale. There is, however, no certainty that Xanadu will be able to source funding as and when required. Whilst no formal funding discussions have concluded, the Company has engaged with several potential financiers of the Kharmagtai Copper-Gold Project and these financial institutions and corporations have expressed an interest in being involved in funding of the Project, This ASX Study has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules, All material assumptions. including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in this ASX Study.

ASX:XAM | TSX:XAM 2

Executing our Strategy

December 2023 Quarter Highlights¹

Horizon 1 – Kharmagtai JV (\$35M USD)

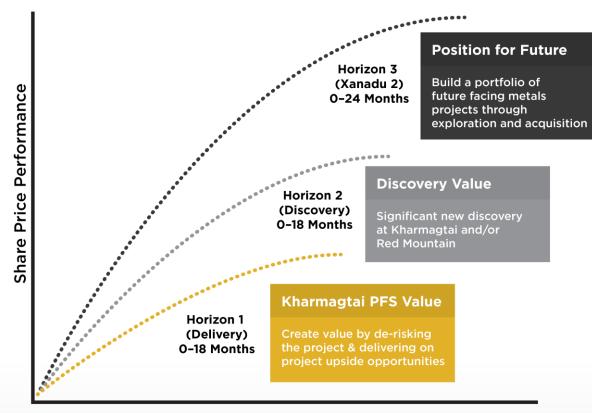
- Delivered a bigger & better Mineral Resource
- Progressed PFS to plan on track for Q3 2024
- Commenced drilling for water reserves
- First class consultants secured for key work packages

Horizon 2 - Exploration

- High grade zones identified at White Hill & Golden Eagle
- Significant result returned from deep drilling well below White Hill

Horizon 3 – Business Development

- Completed a \$4.3M equity placement to fund activities outside Kharmagtai
- Signed a binding term sheet for Sant Tolgoi, a new magmatic Cu-Ni project in Western Mongolia



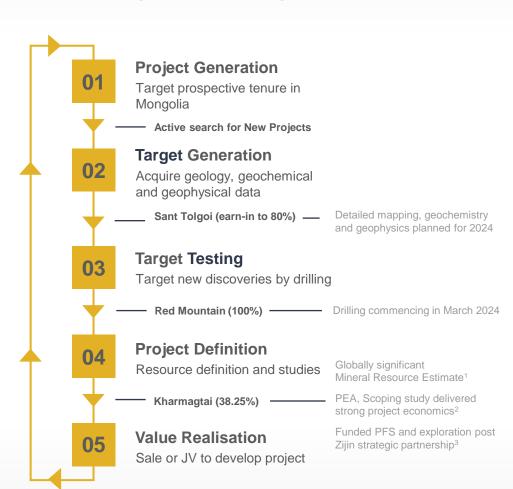
Expected Window of Return

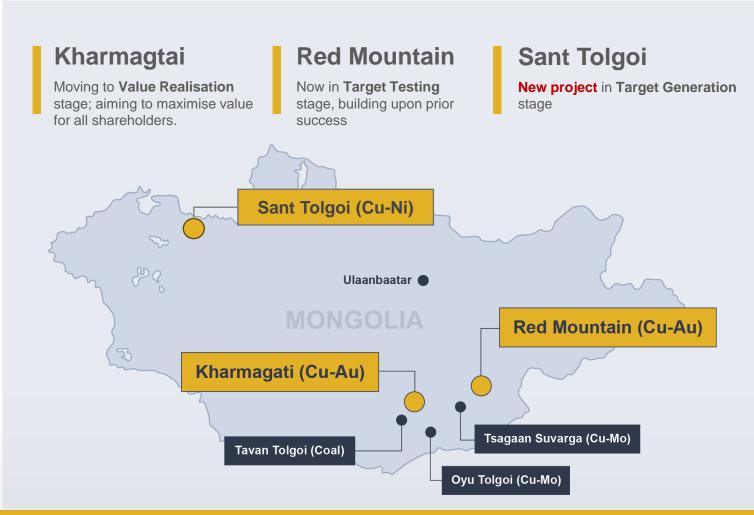
Company Overview About Xanadu Mines



Exploration Company - listed on ASX/TSX

Creating Value through Exploration and Development in Mongolia





VTSX Announcement 6 April 2022 – Scoping Study – Kharmagtai Copper-Gold Projec

³ ASX/TSX Announcement 13 March 2023 – Zijin and Xanadu Transaction Completed and Kharmagtai PFS Underway

Proven Board & Management Team

Board



Colin Moorhead Executive Chairman & Managing Director



Ganbayar Lkhagvasuren Country Manager & Executive Director



Michele Muscillo
Non-executive Director



Tony Pearson
Non-executive Director



Shaoyang Shen Non-executive Director (Nominated by Zijin)

Management



Munkhsaikhan Dambiinyam Chief Operating Officer



Andrew Stewart Vice President Exploration



Mat Brown Chief Geologist



Spencer Cole
Chief Development Officer
Chief Financial Officer



Guodong Yu
Deputy General Manager,
Kharmagtai Project
(On secondment from Zijin)

HIGHLY EXPERIENCED, WITH A TRACK RECORD OF DISCOVERING & DEVELOPING SUCCESSFUL PORPHYRY COPPER-GOLD MINES

- ✓ Mongolia Expertise
- ✓ Deep Exploration Skills
- Experienced Developers of Porphyry Deposits
- Significant Commercial and Deal Making Capability

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Share Price and Enterprise Value

Kharmagtai JV with Zijin Funding PFS & Discovery Exploration

1,716M⁵ Shares on issue

\$0.051

Share Price (7/02/2024)

\$88M

Market Capitalisation

A\$8.1M XAM + US\$12M Khuiten

Xanadu Cash Balance plus Khuiten Metals JV Cash reported @ 31/12/2023 1,5

61% TOP 20 SHAREHOLDERS

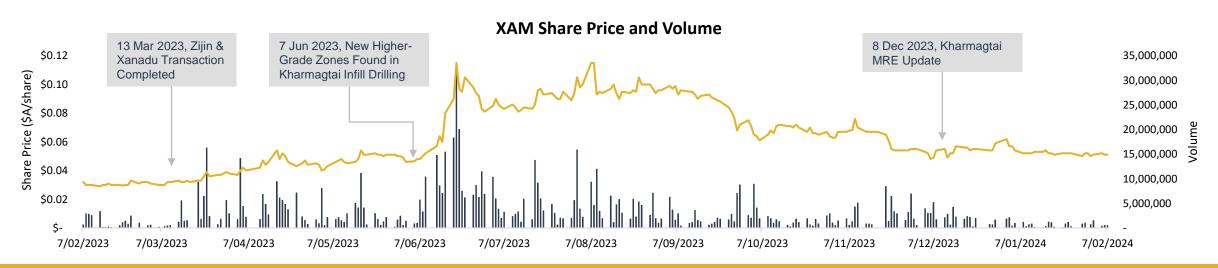
Research **Coverage:**

MST Financial

46% INSTITUTIONAL & CORPORATE

Zijin 19%⁵ ACA 14% Others 13% 9.2% BOARD & **MANAGEMENT**

on a fully diluted basis4 (48m shares & 112m performance options)



Sustainability is Core to Our Business

Supporting Mongolia to Develop Mining in South Gobi Region















Strategic Horizon 1 Kharmagtai Joint Venture





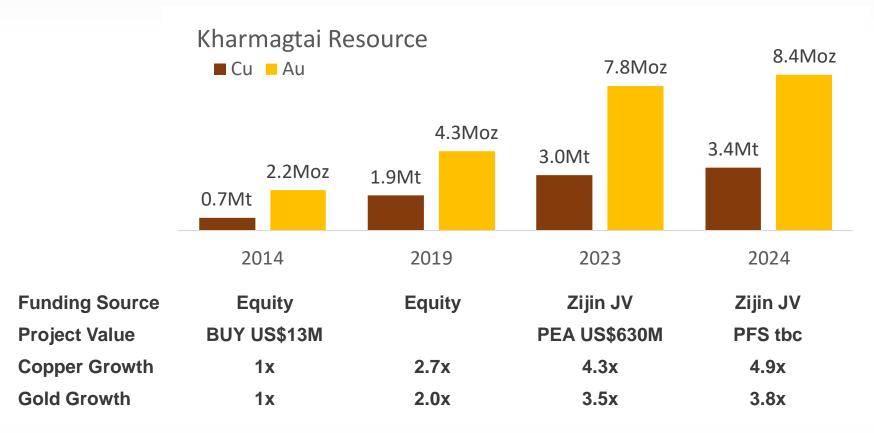




Kharmagtai Journey

2014 to Zijin Deal

Well-structured approach creates long-term shareholder value



Kharmagtai Project

Mongolia's Next Large-Scale Copper Mine

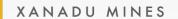
Globally Significant Resource

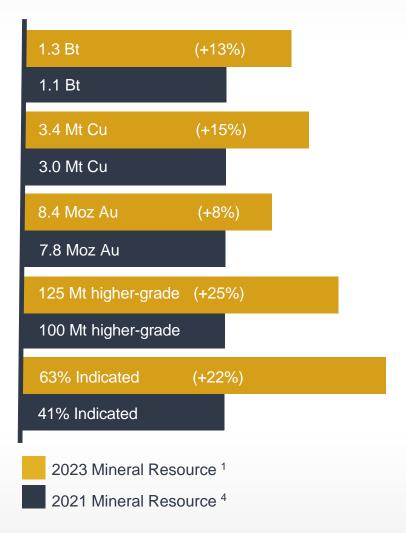
- 1.3Bt grading 0.3% Cu & 0.2g/t Au containing approximately 3.4Mt Cu and 8.4Moz Au¹ so far...
- Greater than 60% classified as Indicated (>90% within pit volumes defined in Scoping Study)
- Contains 125Mt higher-grade zones @ >0.75% CuEq
- System remains open at depth & along strike

Strong Outcomes from Scoping Study²

- Conventional open pit mine feeding a standard copper concentrator.
- Two stage development starting at 15Mtpa growing to 30Mtpa yields 30-year mine life
- Average production 50ktpa copper and 110kozpa gold with 1st quartile AISC in first 5 years
- Estimated US\$690M establishment capex returns post-tax \$630M NPV; 4-yr payback & 20% IRR







Kharmagtai Project

Mongolia's Next Large-Scale Copper Mine

PFS Underway

- Funded by US\$35M Kharmagtai JV with globally significant Zijin Mining Group¹
- Targeting completion by Q3 CY2024 with single go-forward business case & Maiden Ore Reserve
- Project enhancements being considered include;
 Oxide Leaching, Coarse Particle Flotation, Electric Haulage Systems and more...
- First class industry expert consultants appointed overseen by Xanadu led Owners Team
- Permitting and approvals to be progressed in parallel with study.
- Successful completion triggers six-month negotiation period to agree structure and funding.
- Targeting first production by end of CY2027 (subject to financing and approvals)















Enthalpy



























Strategic Partnership with Zijin Mining Group – Underwrites the Value of Xanadu

Initial investment¹ totals US\$43M² (A\$58M²)

Executed in March 2023

- US\$35M cash invested in Khuiten Metals, for 50-50 JV that controls Kharmagtai
- A\$12.8M cash to earn a 19.4% stake in XAM
- February 2024 update additional A\$0.8M cash invested by Zijin into XAM to maintain 19.4% stake, subject to FIRB approval⁴

Underwrites the value of Xanadu & funds Kharmagtai to FID

- US\$35M funds Kharmagtai PFS and associated exploration Target completion
 Q3 CY2024 followed by up to 6-month negotiation period
- As a major multi-national copper producer Zijin Mining Group is best placed to construct and operate a mine of this scale, however the JV remains 50:50 until a change is agreed.
- Options include a sale at the corporate or asset level of Xanadu's interest in Kharmagtai and/or funding all or part of Xanadu's share going forward
- As a safety-net, Xanadu has a Put Option to sell 25% of Khuiten to Zijin for US\$25M with a loan-carry for Xanadu's remaining share to production
- Xanadu Company value underwritten by this put option



ASX/TSX Announcement 19 April 2022 - Strategic Partnership with Zijin Mining

Currency conversion based on AUD:USD = 0.7387 as at 19 Apr 2022 close (transaction announcement date)

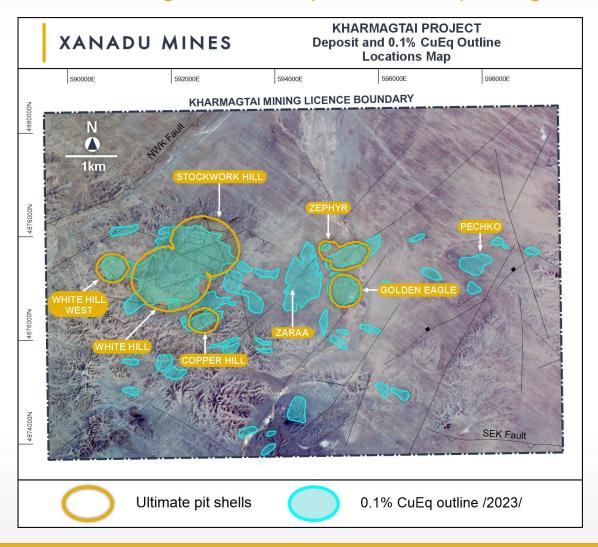
³ Effective ownership of Kharmagtai by each of Xanadu and Zijin is 38.25% (= 50% * 85% * 90%)

⁴ ASX/TSX Announcement 8 Dec 2023 – Second Tranche Placement to Z



Kharmagtai Copper-Gold Project

One of the largest undeveloped Cu-Au deposits globally

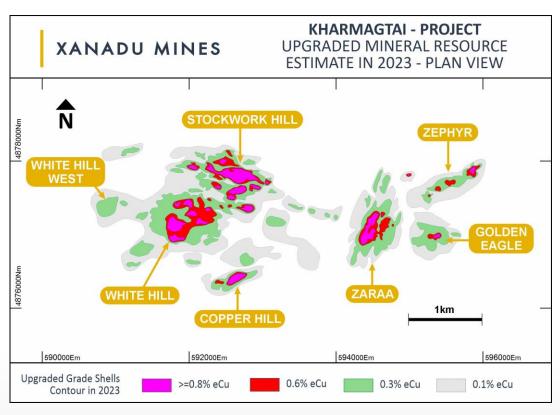


- Granted mining licence with 30 years tenure & option to extend another 40 years
- Large Resource of 1.3Bt @ 0.3% Cu & 0.2g/t Au (approx 3.4Mt / 7,500Mlb Cu and 8.4Moz Au) ¹
 - 125Mt higher-grade zone @ 0.75% CuEq
- Mineralisation outcrops at surface; minimal stripping required
- Remains open, with grades increasing at depth
- Significant upside potential
 - Limited drilling below 400m is untapped opportunity
 - Linking system at depth is future growth potential

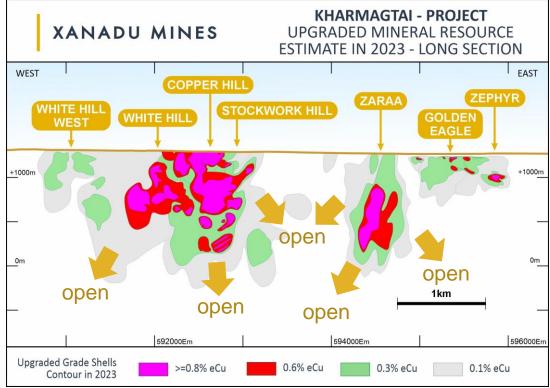
Mineralised Complex Growing

Primary Open Pit Ore Sources - Stockwork Hill and White Hill

Plan View



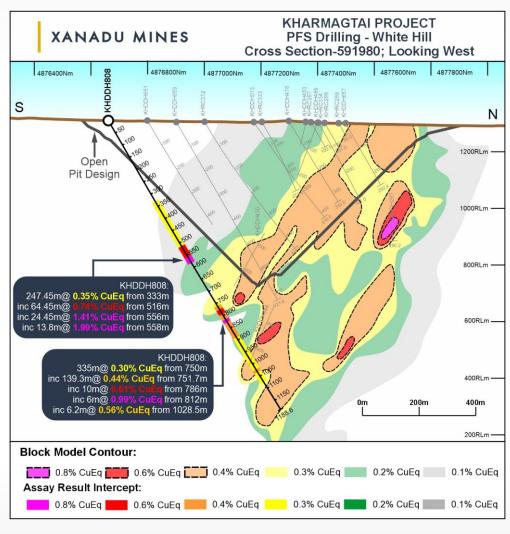
Long Section



Future Resource Extension – White Hill

Aggressive growth & discovery drill programme underway

- Drilling expands higher-grade zone (core) at White Hill¹
- Below the previous Scoping Study pit designs² and outside the 2023 Mineral Resource Estimate (MRE)³.
- Best drilling results include⁴:
 - O KHDDH808 64.45m @ 0.74% CuEq (0.61% Cu & 0.26/t Au) from 516m,
 - 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
 - O KHDDH806 50m @ 0.73% CuEq (0.25% Cu & 0.94g/t Au) from 545m
 - Including 22m @ 1.34% CuEq (0.26% Cu & 2.10g/t Au) from 549m
- Expanding higher-grade core (>1% CuEq) at White Hill could
 - o Enhance & enlarge the 2023 MRE
 - Increase scale & deepen 2022 Scoping Study pit shells, capturing additional higher-grade over longer period.

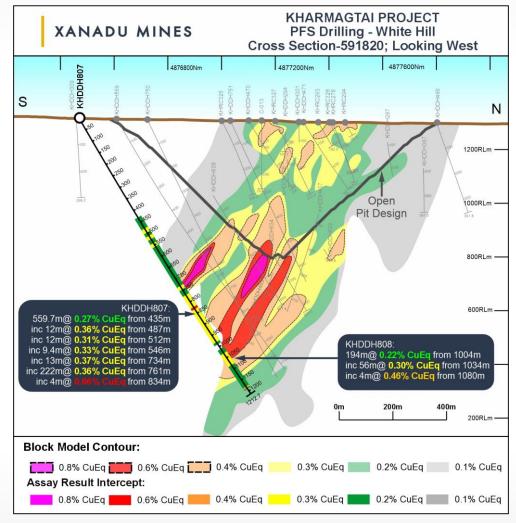


White Hill – Cross Section, Looking West

Future Resource Extension – White Hill

Highlights continued growth potential

- Drill hole KHDDH807 was designed as a 150m step back from previous drilling and intercepted low to moderate grade halo at shallower depth than expected.
 - +0.2% CuEq over 270m
- KHDDH807 returned very broad intercept
 - 559.7m @ 0.27% CuEq from 435m
 - o including 222m @ 0.36% CuEq from 761m

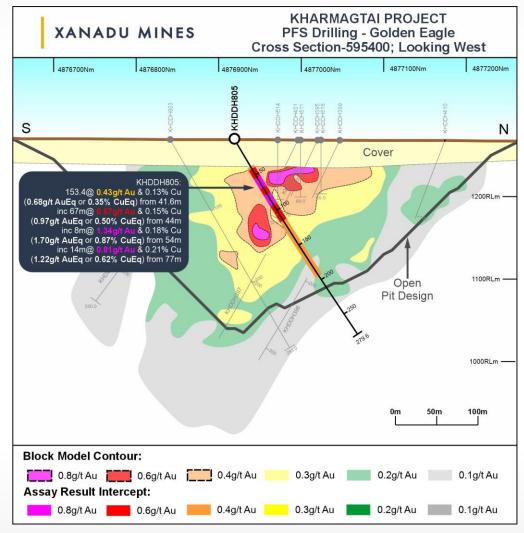


White Hill – Cross Section, Looking West

Future Resource Extension – Golden Eagle

Drilling Post-MRE increases grade of Golden Eagle

- Infill drilling at Golden Eagle returns grades more than double the MRE grade¹ 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

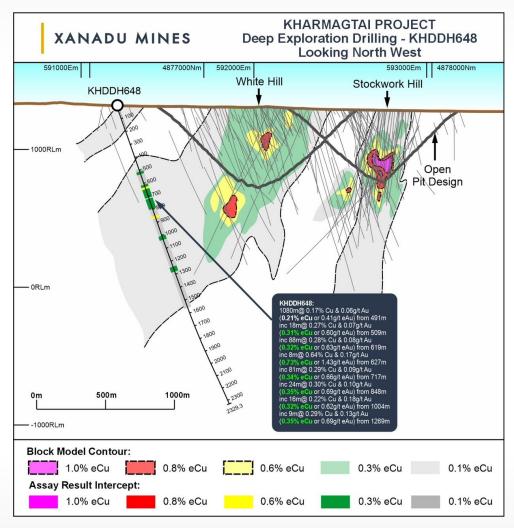


Golden Eagle – Cross Section, Looking West

Growth-Focused Exploration Continues at Kharmagtai

Deep Exploration Drilling Encounters Broad Mineralisation

- Existing geochemical, geological, and geophysical data indicates
 Kharmagtai represents a shallow surface expression of a much
 larger porphyry system at depth
- Deep drill holes have been designed to ensure that a potential high-grade, large-scale and deeper "Oyu Tolgoi" style deposit is discovered early in the PFS process,
- Drill hole KHDDH648 was designed to test for a large-scale highgrade extension beneath White Hill.
 - KHDDH648 1080m at 0.21% eCu from 491m.
- This hole has provided the vectors required to target highergrade mineralisation at depth.

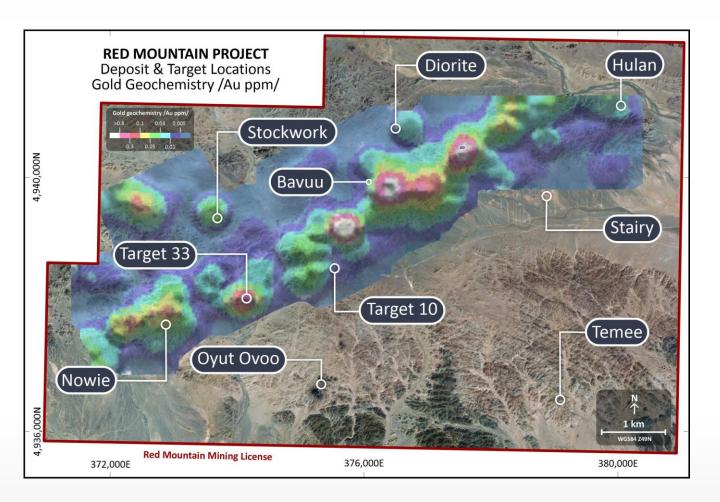


Kharmagtai Long Section, Looking West

Red Mountain - A large, under-explored, mineralised porphyry district

Drilling planned to start in The Spring

- Granted Mining Licence
- Multiple co-genetic porphyry gold and copper centres, mineralised tourmaline breccia pipes, gold and copper base metal magnetite skarns and epithermal gold veins
- Shallow, high-grade gold & copper-gold mineralisation
 - 4 mineralised Cu-Au systems
 - 2 epithermal Au-Ag systems
- New program developed targeting high-grade gold and copper
- Leverages significant data and targeting information from diamond drilling, trenching and BoxScan since 2021
- Funded by recent equity placement



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Mongolia is our Competitive Advantage

Proven & emerging mining jurisdiction with excellent infrastructure

Scale of Deposits

Multiple globally significant discoveries, still underexplored

Location

On China's doorstep (#1 global copper consumer) with lots of land and a sparse population

Infrastructure

Next door to Rio Tinto's massive Oyu Tolgoi copper mine, with established grid power, roads, rail, water

Mining Culture

Mining represents 25% of GDP, 90% of exports, with >40,000 Mongolian mining professionals in the workforce.

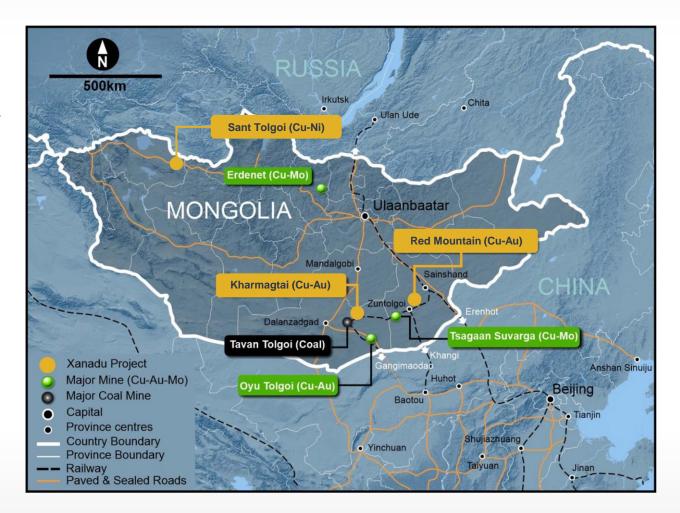
Government aims to double GDP per capita to \$10K before 2023 driven by mining investment.

Stable Democracy

30-year history of democratic elections and 98% literacy rate

Local Knowledge

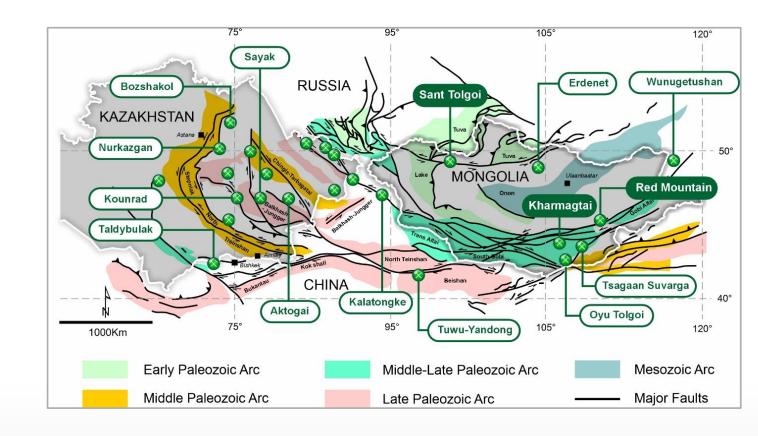
Deep knowledge of the geography and demonstrated ability to operate in Mongolia



New Project Acquisition

Central Asia Volcanic Belts under-explored for Copper and other future facing minerals

- Leverage competitive advantage in Mongolia
- Discover and define the next major regional mineral deposits
- Focus on copper, gold and future facing minerals
- Incubate portfolio of high-quality projects through acquisition, exploration and development
- Use modern exploration techniques to uncover untapped resources, with high potential for major discoveries



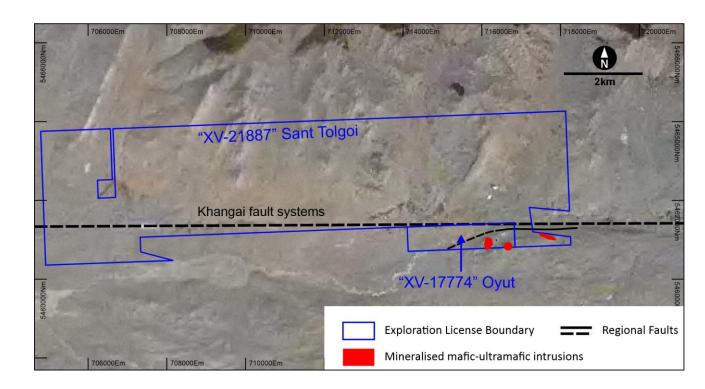
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Modified after Han et al., (2018)
24

Sant Tolgoi Added to Portfolio

New Magmatic Copper-Nickel project in Western Mongolia

- Binding term sheet signed, granting right to earn up to 80% interest in two exploration licenses, which comprise the Sant Tolgoi project
 - O XV-17774 (Oyut)
 - XV-21887 (Sant Tolgoi)
- Located the Zavkhan Province of Western Mongolia
- Highly prospective for discovery of new magmatic intrusion-related Copper-Nickel sulphide systems
- Hosts multiple shallow copper-nickel targets over several kilometres of strike
- Detailed mapping, geochemistry and geophysics is planned to start in March 2024



What to Expect in March 2024 Quarter

Horizon 1 – Kharmagtai JV

- Complete input models for the PFS including geotechnical, hydro and geometallurgical
- Commence process and mine engineering studies and design work & continue non-process infrastructure studies including tails management, power and water
- News flow on sulphide met test-work and first pass results from Oxide Leaching test-work

Horizon 2 - Exploration

- Pivot discovery effort to Red Mountain in the spring
- Continue deep exploration at Kharmagtai + address sterilisation issues for the PFS

Horizon 3 – Business Development

- Finalise paperwork on Sant Tolgoi and commence field work in the spring
- Continue evaluating new opportunities in the region with a focus on precious and base metals



Xanadu Investment Highlights



Great Exposure to near term Copper

Globally significant scale, low strip open-pit project in proven and growing mining jurisdiction of Mongolia. 2023 Mineral Resource: 1.3Bt Resource grading 0.3% Cu & 0.2g/t Au (containing 3.4Mt / 7,500Mlb Cu and 8.4Moz Au), incl. >125Mt higher-grade zone.¹



Company Value Underwritten

Strategic partnership with Zijin invested US\$35M to complete Kharmagtai PFS & continue discovery exploration.²



We are Responsible and Respected

Sustainability is core to our business.³ Strong social license to operate, ESG integrated into business practices and supportive shareholders.



Proven Explorer with a Regional Advantage

A formidable track record of discovery and deep Mongolian experience. Ongoing discovery exploration at Kharmagtai retains significant upside potential, and actively expanding portfolio with projects aimed at copper, gold and future facing minerals.



Happy New Year!



Keep up to date with us



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Contact Us

Colin Moorhead

Executive Chairman and Managing Director

P: +61 2 8280 7497

E: info@xanadumines.com



Competent Person's Statement

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.

Mineral Resources: 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 with 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. 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.

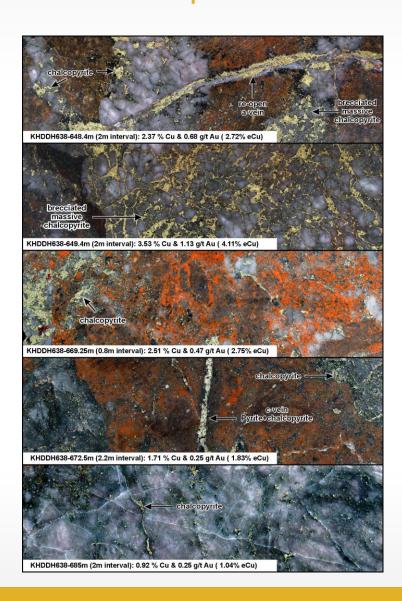
Exploration Results: The information in this announcement that relates to Exploration Results is based on information compiled by Dr Andrew Stewart who is responsible for the exploration data, comments on exploration target sizes, QA/QC and geological interpretation and information. Dr Stewart, who is 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.

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Geology & Mineralisation

Kharmagtai is a Global-Scale, Porphyry Copper-Gold District

- **Hosted** in the orogenic belt of the Southern Mongolian fold system, within the Central Asian Fold Belt.
- Characterised by extensive sequence of Devonian to Carboniferous volcanoclastic ash siltstone & sandstone, intruded by lower to upper Carboniferous rocks.
- **Structural Control** clear & dominated by WNW striking reverse faults, producing a positive flower structure.
- **Porphyry alteration model** with potassic alteration associated with mineralised intrusive suites surrounded by phyllic alteration halo & broad propylitic wash.
- Principle minerals of economic interest chalcopyrite & bornite copper, plus gold.
- Main mineralisation styles Porphyry stockwork, tourmaline breccia.
- Copper to gold ratios for porphyry stockwork: 1% Cu to 1g/t Au (early stockwork); 1% Cu to 2g/t Au (higher-grade C-vein); 1% Cu to 3g/t Au (bornite zone).
- **Tourmaline Breccia** occurs throughout, with Stockwork Hill deposit exhibiting most mineralised tourmaline breccia of significant size. Ratio: 1% Cu to 0.5g/t Au.



2023 MRE Improved Across All Metrics

Pit Shells >90% Indicated, Higher-Grade Core 25% Larger

Larger Scale increased from 1.1Bt to 1.3Bt

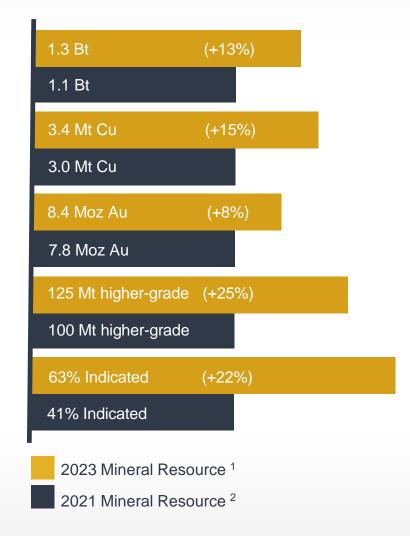
More High-Grade Added 25% to the higher-grade zones (>0.75% CuEq)

Better Defined Higher indicated classification from 41% to 63% (>90% inside PEA pit shells)

More By-Product Higher gold by-product from 7.8Moz to 8.4Moz

Still Has Upside Strong growth potential at depth and along strike

	Cutoff	Grades					Contained Metal						
Resource	Cutoff (% CuEq)	Classification	Tonnes (Mt)	CuEq (%)	Cu (%)	Au (g/t)	CuEq (Mlbs)	CuEq (kt)	Cu (kt)	Au (koz)			
2023	0.20 (OC)	Indicated	790	0.38	0.27	0.22	6,700	3,000	2,100	5,600			
2023	0.30 (UG)	Inferred	460	0.37	0.27	0.19	3,800	1,700	1,300	2,800			
2024	0.20 (OC)	Indicated	450	0.40	0.28	0.25	4,100	1,900	1,300	3,700			
2021	0.30 (UG)	Inferred	660	0.35	0.25	0.19	5,100	2,300	1,700	4,100			



Detailed 2023 Open Pit MRE by Deposit and Classification

Strong uplift in indicated material

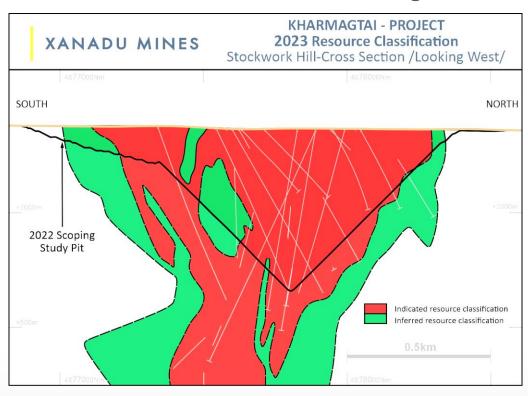
		Tonnes		Grades		Contained Metal							
Deposit	Classification	(Mt)	CuEqRec (%)	Cu (%)	Au (g/t)	CuEqRec (Mlbs)	CuEqRec (Kt)	Cu (Kt)	Au (Koz)				
SH		190	0.43	0.28	0.28	1,800	810	540	1,700				
WH		340	0.33	0.25	0.17	2,600	1,100	850	1,900				
CH		28	0.42	0.29	0.25	260	120	80	200				
ZA	Indicated	8.0	0.26	0.15	0.23	49	20	10	100				
GE		42	0.28	0.13	0.30	260	120	50	400				
ZE		21	0.31	0.18	0.26	140	60	40	200				
Total Indicated		640	0.36	0.25	0.22	5,000	2,300	1,600	4,500				
SH		31	0.30	0.18	0.23	210	100	60	200				
WH		93	0.28	0.21	0.13	570	260	200	400				
CH		1.0	0.28	0.21	0.13	7.0	-	-	-				
ZA	Inferred	12	0.25	0.15	0.19	64	30	20	100				
GE		27	0.26	0.12	0.26	160	70	30	200				
ZE		19	0.26	0.14	0.24	110	50	30	100				
Total Inferred		180	0.27	0.18	0.18	1,100	510	340	1,000				

- Figure may not sum due to rounding.
- · Significant figures do not imply an added level of precision.
- CuEq accounts for Au value and CuEqKt must not be totalled to Au ounces.
- Resource constrained by 0.1%CuEqRec reporting solid in-line with geological analysis by XAM.
- Resource constrained by open cut above nominated mRL level by deposit as follows SH>=720mRL, WH>=915mRL, CH>=1100mRL, ZA>=920mRL, ZE>=945mRL and GE>=845mRL.
- CuEqRec equation (CuEqRec=Cu+Au*0.60049*0.86667) where Au at USD\$1400/oz and Cu at USD\$3.4/lb was employed according to the Clients' (XAM) direction.
- Au recovery is relative with Cu rec=90% and Au rec=78% (rel Au rec=78/90=86.667% with number according to the Clients' (XM) direction.
- The above reported estimates have taken into account all earlier assumptions including but not limited to, updated long term metal price, foreign exchange and cost assumptions, and mining and metallurgy performance to inform cut-off grades and physical mining parameters used in the estimates in-line with the Clients analysis and direction to SGC.
- Reported at a 0.2% CuEq cut-off grade and inside reporting solid 0.1%CuEq above nominated mRL by deposit area Resources as at 6 December 2023.

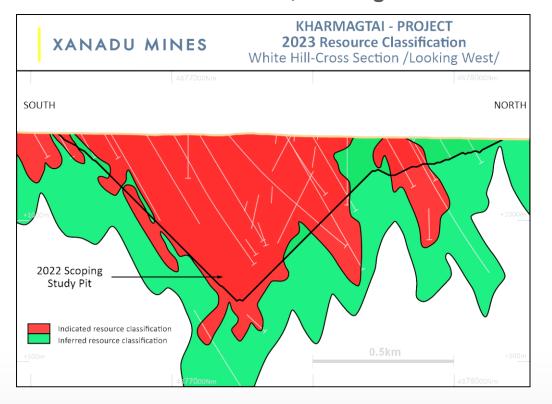
Open Pit Material at Inferred Classification

Supports a Maiden Ore Reserve in H2 CY2024

Stockwork Hill - Cross Section, Looking West



White Hill - Cross Section, Looking West



Kharmagtai Gold-Rich Copper Evolving into World Class Project

XAM's top drill intersections in 2023/24

	Best Mineralised Results	gram-metres g/t AuEq.m	grade-metres % CuEq.m	KHDDH
1	762.7m at 0.83g/t AuEq (or 0.42% CuEq)	633	320	670
2	733m at 0.77g/t AuEq (or 0.39% CuEq)	564	286	665
3	597.7m at 0.84g/t AuEq (or 0.43% CuEq)	502	257	669
4	1080m at 0.41g/t AuEq (or 0.21% CuEq)	443	227	648
5	654.5m at 0.67g/t AuEq (or 0.34% CuEq)	439	223	634
6	544m at 0.79g/t AuEq (or 0.4% CuEq)	430	218	638
7	370m at 1.08g/t AuEq (or 0.55% CuEq)	400	204	655
8	421.25m at 0.93g/t AuEq (or 0.48% CuEq)	392	202	660
9	593m at 0.63g/t AuEq (or 0.32% CuEq)	374	190	626
10	659.8m at 0.52g/t AuEq (or 0.26% CuEq)	343	172	627
11	644.6m at 0.49g/t AuEq (or 0.25% CuEq)	316	161	659
12	402.6m at 0.77g/t AuEq (or 0.4% CuEq)	310	161	645
13	424m at 0.71g/t AuEq (or 0.36% CuEq)	301	153	649
14	559.7m at 0.53g/t AuEq (or 0.27% CuEq)	297	151	807
15	608.6m at 0.48g/t AuEq (or 0.24% CuEq)	292	146	631
16	592.5m at 0.49g/t AuEq (or 0.25% CuEq)	290	148	639
17	374.6m at 0.77g/t AuEq (or 0.4% CuEq)	288	150	613
18	276m at 1.01g/t AuEq (or 0.52% CuEq)	279	144	650
19	294m at 0.89g/t AuEq (or 0.46% CuEq)	262	135	594
20	325m at 0.74g/t AuEq (or 0.38% CuEq)	241	124	661
21	357.4m at 0.61g/t AuEq (or 0.31% CuEq)	218	111	637
22	499.1m at 0.43g/t AuEq (or 0.22% CuEq)	215	110	619
23	493.1m at 0.42g/t AuEq (or 0.21% CuEq)	207	104	668
24	335m at 0.58g/t AuEq (or 0.3% CuEq)	194	101	808
25	397m at 0.46g/t AuEq (or 0.24% CuEq)	183	95	624

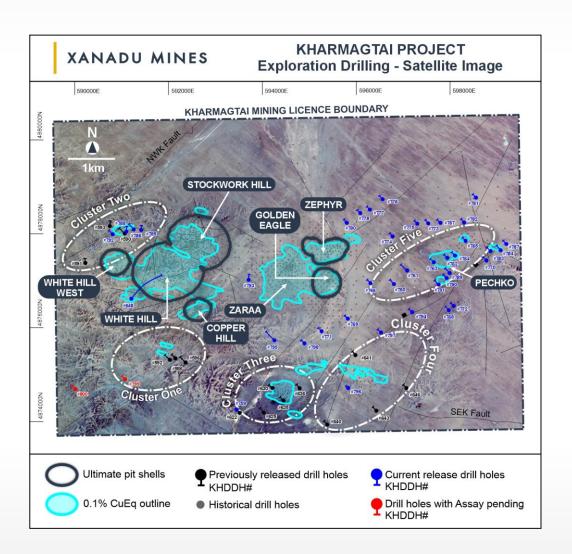
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	Best Mineralised Results	gram-metres g/t AuEq.m	grade-metres % CuEq.m	KHDDH
26	269.9m at 0.62g/t AuEq (or 0.32% CuEq)	167	86	603
27	259m at 0.61g/t AuEq (or 0.31% CuEq)	158	80	658
28	250m at 0.6g/t AuEq (or 0.31% CuEq)	150	78	802
29	205.3m at 0.71g/t AuEq (or 0.36% CuEq)	146	74	691
30	291m at 0.49g/t AuEq (or 0.25% CuEq)	143	73	685
31	245.1m at 0.56g/t AuEq (or 0.29% CuEq)	137	71	654
32	314m at 0.39g/t AuEq (or 0.2% CuEq)	122	63	651
33	287.4m at 0.41g/t AuEq (or 0.21% CuEq)	118	60	806
34	250m at 0.46g/t AuEq (or 0.24% CuEq)	115	60	623
35	287m at 0.39g/t AuEq (or 0.2% CuEq)	112	57	618
36	206.7m at 0.53g/t AuEq (or 0.27% CuEq)	110	56	667
37	209m at 0.52g/t AuEq (or 0.26% CuEq)	109	54	599
38	271m at 0.39g/t AuEq (or 0.2% CuEq)	106	54	633
39	153.4m at 0.68g/t AuEq (or 0.35% CuEq)	104	54	805
40	253m at 0.41g/t AuEq (or 0.21% CuEq)	104	53	597
41	203m at 0.5g/t AuEq (or 0.25% CuEq)	102	51	723
42	244.4m at 0.4g/t AuEq (or 0.21% CuEq)	98	51	674
43	298m at 0.33g/t AuEq (or 0.17% CuEq)	98	51	779
44	218.8m at 0.45g/t AuEq (or 0.23% CuEq)	98	50	717
45	144m at 0.67g/t AuEq (or 0.34% CuEq)	96	49	786
46	196m at 0.48g/t AuEq (or 0.25% CuEq)	94	49	736
47	171m at 0.53g/t AuEq (or 0.27% CuEq)	91	46	663
48	232m at 0.39g/t AuEq (or 0.2% CuEq)	90	46	657
49	197.4m at 0.45g/t AuEq (or 0.23% CuEq)	89	45	721
50	115.8m at 0.76g/t AuEq (or 0.39% CuEq)	88	45	677

Highlighted drill intersections are excluded from 2023 MRE = demonstrate potential for future MRE growth

Shallow Exploration Finds New Mineralised Clusters

Strong Results Across Multiple, Largely Unexplored Areas

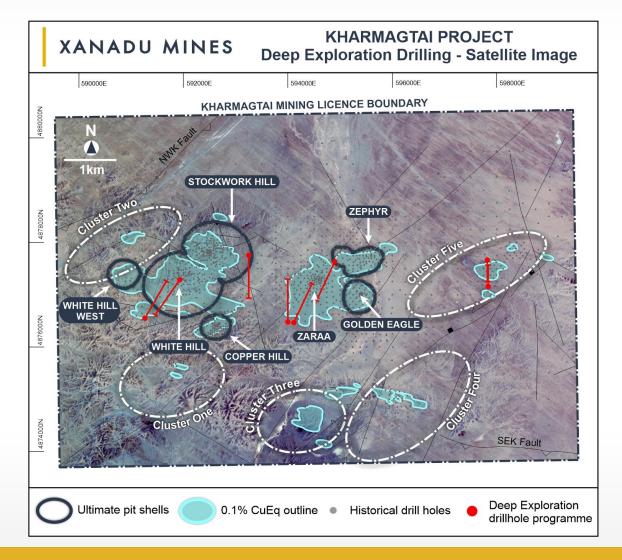
- Broad zone of porphyry mineralisation above the Resource cut-off grade
 - Including a cohesive zone >0.6% CuEq, may represent a faulted offset to Stockwork Hill.
- Mineralised structures at Cluster Three near surface containing up to 1.3% Cu.
- 2km long zone of gold-rich tourmaline breccia at Cluster Five.
- Broad zones of peripheral porphyry and tourmaline breccia mineralisation
 - approximately 1km along strike from the Stockwork Hill Tourmaline Breccia.
- Broad zone of shallow, low-grade porphyry mineralisation
 - approximately 1.5km southwest of Golden Eagle where there is little drilling to date
 - o suggesting a large-scale porphyry in this area.



Kharmagtai Deep Exploration Delivers Positive Early Results

Indications of a large Cu-Au porphyry system at depth

- Targeting an analogue to Hugo North at depth, with potential to transform project value
- Initial 6,000m drilling (first 3 of 4 planned holes)
 completed, identifying broad zones of mineralisation
- Long intercept of mineralisation below White Hill;
 - KHDDH648 1,080m at 0.21% CuEq from 491m
- Two broad zones of porphyry and tourmaline breccia mineralisation between Stockwork Hill and Zaraa
 - Potentially indicating the edges of a very large Cu-Au system
- More assays expected over coming months, including 3rd planned hole plus additional deep exploration planned.

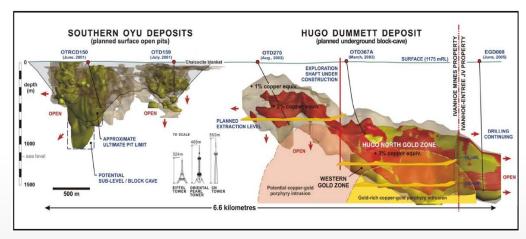


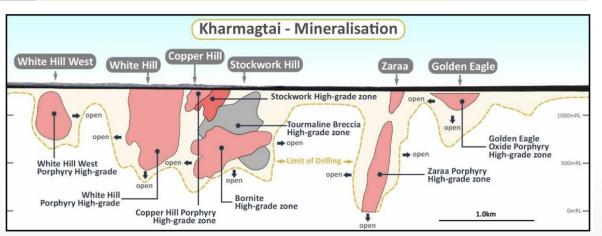
Kharmagtai Upside Remains – Hugo North Example

Higher-grade depth limit untested; targeting a "Hugo North" analogue

Kharmagtai vs Hugo North

Factor	Hugo North (HN) ¹	Kharmagtai (KH)	KH vs HN Scorecard
Mineralisation	Stockwork with bornite rich core, zoning to chalcopyrite & pyrite	Stockwork Hill has bornite rich core, zoning to chalcopyrite & pyrite	<u> </u>
Cu & Au Grades	Starts below 900m and increases to the north.	Starts at surface and increases with depth	
Au : Cu Ratio ²	 Up to 1:10 in south Up to 1:1 in north Best Au grades associated with bornite 	 Up to 2:1 at surface Up to 5:1 at depth Higher Au grades (avg 3:1) in bornite zone 	✓
Depth	Starts at 800 – 900m	Limited drilling below 800m	





Hugo North Mineralisation³ – Starting Depth ~800m

Kharmagtai Mineralisation – Limits of Drilling ~800m

² shown as Au (g/t) : Cu (%)

Detailed 2023 Underground MRE by Deposit and Classification

Strong uplift in inferred material

		Tonnes		Grades		Contained Metal							
Deposit	Classification	(Mt)	CuEqRec Cu (%) (%)		Au (g/t)	CuEqRec (Mlbs)	CuEqRec (Kt)	Cu (Kt)	Au (Koz)				
SH		31	0.58	0.35	0.44	390	180	110	400				
WH		93	0.46	0.37	0.16	940	430	350	500				
CH		3.0	0.37	0.28	0.18	26	10	10	-				
ZA	Indicated	27	0.46	0.32	0.28	270	120	80	200				
GE		_	-	-	-	-	-	-	-				
ZE		_	-	-	-	-	-	-	-				
Total Indicated		150	0.48	0.36	0.24	1,600	740	550	1,100				
SH		28	0.42	0.32	0.20	260	120	90	200				
WH		120	0.44	0.36	0.15	1,200	540	440	600				
CH		-	0.33	0.26	0.15	4.0	-	-	-				
ZA	Inferred	130	0.43	0.30	0.25	1,200	550	390	1,000				
GE		_	-	-	-	-	-	-	-				
ZE		_	0.40	0.06	0.67	1.0	-	-	-				
Total Inferred		280	0.43	0.33	0.20	2,700	1,200	920	1,800				

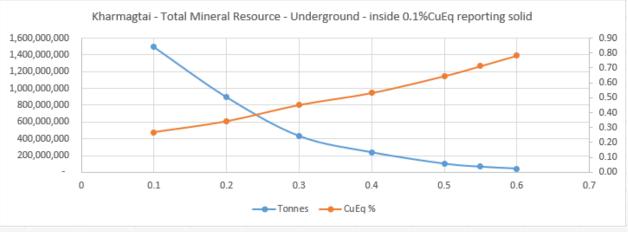
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- Resource constrained by 0.1%CuEqRec reporting solid in-line with geological analysis by XAM.
- Resource constrained by open cut above nominated mRL level by deposit as follows SH>=720mRL, WH>=915mRL, CH>=1100mRL, ZA>=920mRL, ZE>=945mRL and GE>=845mRL.
- CuEqRec equation (CuEqRec=Cu+Au*0.60049*0.86667) where Au at USD\$1400/oz and Cu at USD\$3.4/lb was employed according to the Clients' (XAM) direction.
- Au recovery is relative with Cu rec=90% and Au rec=78% (rel Au rec=78/90=86.667% with number according to the Clients' (XM) direction.
- Reported at a 0.3% CuEq cut-off grade and inside reporting solid 0.1%CuEq area Resources as at 6 December 2023.

2023 Resource Grade-Tonnage Curve

Relatively Flat; Influenced by Higher-Grade Zones

- Reflects typical porphyry grade distribution
- Key influencing factor is 125Mt higher-grade core at >0.75% CuEq



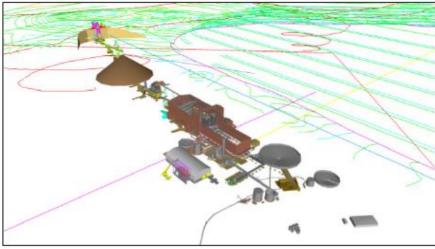


PEA / Scoping Study

Conservative, Long-Life, Low-Cost copper mine; works on scale and gold credits







Area	Measure	Unit	Stage 1 Initial	Stage 2 Expansion	LOM
Production	Period	Years	5	25	30
	Ore process rate	Mtpa	15	30	15-30
	Feed from Indicated Resource	%	100%	50%	55%
	Ore processed	Mt	70	690	760
	Average copper grade	%	0.29	0.21	0.21
	Average gold grade	g/t	0.30	0.16	0.18
	Copper produced	Mt	0.2	1.3	1.5
	Gold produced	Moz	0.5	2.8	3.3
Capital	Project Capital	US\$M	690	620	1,310
	Sustaining Capital	US\$M	40	530	570
Operating Cost	All In Sustaining Costs	US\$/lb	1.02	1.99	1.87
Economic	Copper Price	US\$/Ib	4.00	4.00	4.00
Assumptions	Gold Price	US\$/oz	1,700	1,700	1,700
Financials (after tax)	Net Present Value (NPV) @ 8%	US\$M			630
(arter tax)	Internal Rate of Return (IRR)	% (real)			20
	Capital Payback	Years	4	1	4
	Free Cash Flow (after tax)	US\$M (real)	155	3,260	3,420

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XAM is a Standout vs TSX/ASX Copper Developer Peers

XANADU MINES

Average

XAM Trading Discount vs Average

High Quality + Funded Production Certainty + Embedded Value

		_				_								7 i v oi ago	4
	Company	XANADU MINES	FILO	SolGold	Western COPPER AND GOLD	∱LTA COPPER	ARADAY COPPE	LOS ANDES COPPER _{LM}	hot c <mark>hil</mark> i	CARAVEL MINERALS	REX Minerals Ltd	Havilah Resources			
	Project	Kharmagtai Porphyry	Filo Del Sol Porphyry	Cascabel Porphyry	Casino Porphyry	Canarico Norte Porphyry³	Copper Creek Porphyry⁴	Vizachitas Porphyry⁵	Costa Fuego Porphyry ⁶	Caravel Porphyry ⁷	Hillside IOCG ⁸	Kalkaroo IOCG ⁹			
	Project Stage	PFS	DFS	DFS	FS Permitting	Optimised PEA	PFS	FS	PFS	DFS	FS Financing	Updated PFS			
	LOM Cu Production ¹ Mt	1.5	0.8	2.8	2.0	2.2	1.5	4.0	1.4	1.7	1.5	0.6	1.8		
	First Production	4Q'2027	No Guidance	Mid 2029	2028 Heap Leach 2029 Concentrate	2030	2028	2029	2029	3Q'2026	4Q'2026	No Guidance			
	LOM Strip Ratio	1.1	1.6		0.4	0.7	1.6	2.3	1.8	1.3	6.9	3.5	2.1		
	EV ² US\$M	45	1,892	417	151	20	52	249	71	47	64	29	276		
3	EV / Cu Resource US\$/t	13	943	33	31	3	24	21	21	16	28	26	105	87%	
- > 1	EV / Post- Tax Project NPV	0.07	1.44	0.14	0.05	0.02	0.07	0.09	0.06	0.05	0.11	0.05	0.20	64%	

¹ LOM production & EV metrics exclude impact of by products given endowment of most peers is comparatively minimal. XAM has 8.5Moz Gold Resource, producing 3.3Moz gold in concentrate

² EV as at 5 Febuary 2024 close. EV = Market Capitalisation - 100% Cash - Equity proportion of JV Cash. AUD:USD = 0.65, CAD:USD = 0.74

³ Inline with Company Disclosure, production data sourced from Canarico Norte. Construction period guided for 3yrs, with construction start guided for 2027.

⁴ Inline with Company Disclosure, production data sourced from Copper Creek. Construction period guided for 2yrs, with construction start guided for 2026. 5 Inline with Company Disclosure, production data sourced from Vizachitas. Construction period guided for 3.25yrs, with first production delivered 2029 as per recent royalty agreement with Ecora.

⁶ Inline with recent Company Disclosure, production data represents Costa Fuego PEA.

⁷ Inline with recent Company Disclosure, production data sourced from both Caravel PFS Processing Update (latest update), and Caravel PFS (original). With DFS scheduled to complete in 4Q'2024, assume construction starts 6 months later in 2H'25, for first concentrate production by 1Q'27, inline with prior guided timeline. 8 Inline with Company Disclosure, production data sourced from Hillside DFS (production stage 1), and Hillside Ore Reserve (production stages 1 & 2). Construction start guided for 3Q'2023, but not funded and not commenced. With FID guided for mid CY2024, assume construction starts 3Q'2024 for first concentrate production by 4Q'2026, inline with prior guided timeline.

⁹ Inline with Company Disclosure, production data sourced from Kalkaroo PFS and rebased for Kalkaroo Project Update, with latter guiding mine life extension to 20yrs (from 13yrs) driven by pit optimisation.

¹⁰ Benchmark Data included in Appendix, with data sourced from Company Disclosure

Benchmark Data

ASX / TSX Copper Developers

			Resource			Cut-off Grade	
Project	Cu	Au	Ag	Со	Мо		Resource Date
	Mt	Moz	Moz	Kt	kt	% Cu	
Kharmagtai Porphyry ^{1,2}	3.37	8.48				0.23	Dec-23
Filo Del Sol Porphyry	2.01	6.75	210.71			0.18	Jan-23
Cascabel Porphyry	12.73	27.27	102.80			0.21	Mar-22
Casino Porphyry	4.86	21.09	169.53				Apr-22
Canarico Norte Porphyry	6.43	3.87	92.54			0.15	Jan-22
Copper Creek Porphyry	2.15		17.10		36.79	0.13	Feb-23
Vizachitas Porphyry	12.14		76.10		463.12	0.25	Feb-23
Costa Fuego Porphyry	3.33	2.86	12.55		80.81	0.21	Mar-22
Caravel Porphyry	3.03	0.90	46.3		60.60	0.10	Nov-23
Kalkaroo IOCG	1.10	3.00		23.20		0.40	Jan-18
Hillside IOCG	2.29	1.94				0.20	Dec-22

		Ore	Сорр	er Product	tion	All in					D	NIDV T	Calculated Post-	D:				
Project	Strip Ratio	Processing Throughput		Steady State	Annualised	Sustaining Cost	LOM	L	OM Pro	oductio	on	Reported NPV	Basis	Post- Tax NPV ³	Rate	Price	Reported Level of Study	Report Date
		Mtpa	ktpa	ktpa	ktpa	US\$/lb	yrs	Cu Mt	Au Moz	Ag Moz	Mo kt	US\$M		US\$M	%	US\$/Ib		
Kharmagtai Porphyry ^{1,2}	1.1	25.0	40		50	1.87	30	1.50	3.30			630	Post	630	8.0	4.00	Scoping / PEA	Apr-22, Jun-22
Filo Del Sol Porphyry	1.57	22.0			66	1.54	13	0.79	2.02	111.07		1,310	Post	1,310	8.0	3.65	Updated PFS / Ore Reserve	Feb-23
Cascabel Porphyry	0	25.0			132	0.06	26	2.80	7.60	21.70		2,907	Post	2,907	8.0	3.60	PFS / Ore Reserve	Apr-22
Casino Porphyry	0.43	53.0			74	-1.00	27	2.01	7.12	37.88		2,778	Post	2,778	8.0	3.60	FS / Ore Reserve	Aug-22
Canarico Norte Porphyry	0.66	25.0			79	1.28	28	2.20	0.88	19.70		1,010	Post	1,010	8.0	3.50	PEA	Mar-22
Copper Creek Porphyry	1.61	11.0			48	1.85	32	1.49		10.21	20.73	713	Post	713	7.0	3.80	PEA	Jun-23
Vizachitas Porphyry	2.33	50.0			153	1.25	26	3.98		32.71	124.00	2,776	Post	2,776	8.0	3.68	PFS / Ore Reserve	Apr-23
Costa Fuego Porphyry	1.8	22.0	96		88	1.74	16	1.41	0.72	0.12	47.98	1,100	Post	1,100	8.0	3.85	Scoping / PEA	Jun-23, Aug-23
Caravel Porphyry	1.3	30.0	71	65	65	2.07	25	1.66			22.50	1,428	Pre	1,000	7.0	4.00	PFS Processing Update / PFS / Ore Reserve	Apr-23, Jul-22
Kalkaroo IOCG	3.5	7.0			30	2.06	20	0.60	0.94			872	Pre	611	7.5	3.50	Project Update / PFS / Ore Reserve	May-21, Jun-19, Jun- 18
Hillside IOCG	6.9	8.0		42	24	1.79	33	1.49	1.27			593	Post	593	8.6	3.92	DFS / Ore Reserve	Dec-22, Jul-21

PFS Tracking to Budget & Schedule

Technical Report Expected Q3 CY2024

Data Acquisition Infill Drill Program (to Indicated) Metallurgy Primary Sulphide Metallurgy Oxide Leach Water Reserve	Completed Final Stages Q2 CY2024 Q2 CY2024
Trade-Off Studies & Resource Resource Update Tailings Storage Facility Power Supply Whittle Optimisation Mine Design & Engineering Plant Design & Engineering Surface Infrastructure Marketing & Concentrate Logistics	Completed Q1 CY2024 Completed Q1 CY2024 Q1 CY2024 Completed Final Stages Q2 CY2024
Convergent Studies Power Supply Surface Infrastructure	Q1 CY2024 Q2 CY2024
Permitting & Approvals Baseline Environmental Studies for DEIA Mongolian Feasibility Study Mongolian Resource Gov't & Regulator Education & Outreach	Q3 CY2024 Q2 CY2024 Final Stages Ongoing

OVERALL TRACKING



Attractive "Go Forward" Options Fortify JV

Unlocking a Funded Production Pathway

- Xanadu now has **right to exercise a Put Option** (up to 6 months post PFS completion), paving funded pathway to Kharmagtai production, and/or asset sale. Available Options for Xanadu after PFS
 - A. Sole Fund: 50% share financed through a combination of equity & debt
 - B. Partial Asset Sale & Loan Carry: Sell 25% share for US\$25M, remaining 25% loan carried with Zijin (see slide 25)
 - C. Full Asset Sale: Sell 50% share to Zijin for US\$50M
- With these Options, Xanadu is in a strong position to unlock greatest value
 - Providing strategic protection for Xanadu shareholders
 - Options are resilient to market conditions

ASX:XAM | TSX:XAM

Debt Funded Pathway to Production

Put Option: Sell 25% share in Kharmagtai for US\$25M to Zijin

Loan Carried for remaining 25% share of project construction:

- Project financed via direct loan with Zijin
- Interest priced variably at 6-Month Tenor Secured Overnight Financing Rate (SOFR) + 5% pa. Under current SOFR¹, project finance interest priced at 10.39%²
- Once **commercial production** achieved for Xanadu's 25% interest in Kharmagtai production & cashflow, the loan is immediately repaid from **90% of XAM share** of operating dividends

Scenario Delivers Mutually Beneficial Shareholder Outcome:

- ✓ NO further equity raisings to achieve Kharmagtai production
- ✓ **Attractively priced** project debt in the face of unpredictable market conditions & expectation for higher interest rate environment
- ✓ Special majority JV approval for critical business matters