# **ASX Announcement**

Released 29 January 2024



# Licence Approval Received from Nunavut Planning Commission for Coppermine Project

White Cliff Minerals Limited (White Cliff or the Company) is pleased to announce it has received a positive conformity determination ("the Approval") for its licences from the Nunavut Planning Commission (NPC) for the high-grade Coppermine project. This critical regulatory approval marks a major step in the permitting process and allows the company to now appoint contractors for 2024 exploration initiatives and complete the logistical planning phase. This approval also ensures that any proposed activities align with regulatory expectations and underscores White Cliffs' demonstrable commitment to responsible resource development with local, territorial and federal stakeholders.

The Company is **now fully permitted** and will take up where state, public & private sponsored historical exploration previously identified dozens of **outcropping** occurrences of copper and silver mineralisation as well as non JORC mineral estimates along more than a **100km long structural trend**.

- Previously reported high grade copper results include<sup>1</sup> but are not limited to:
  - 30.24% Cu, 34g/t Ag at Halo Prospect
  - o 30.25% Cu, 43g/t Ag at Halo Prospect
  - o 35.54% Cu, 17g/t Ag at Cu-Tar Prospect
  - o 30.7% Cu, >200g/t Ag at Don Prospect
  - o >40% Cu, 115g/t Ag at Don Prospect (above Cu detection range)
  - o >40% Cu, 107g/t Ag at Don Prospect (above Cu detection range)

Coppermine contains numerous historical non JORC or NI 43-101 and 'blue sky' mineral estimates that will be a priority during 2024.

The company will leverage recent advancements in airborne sensing & data gathering technologies as well as undertaking detailed mapping and sampling to identify areas for further detailed study within the licence area. Ultimately, this work will culminate in extensive drilling on higher priority areas identified throughout this large-scale mineralised structure.

Negotiations with several Canadian based service providers continue for various work programmes on what will be the first systematic exploration at this project area in decades. The Company will base its logistical hub initially in Kugluktuk, a town of approximately 1,500 people, located to the northeast of the project area. Kugluktuk is accessible by both plane and ship.

Once finalised, these work programmes will be announced to market and will run in close collaboration with planned work at Radium Point, the companys' **recently acquired district scale uranium project.** 

While focus will move to finalising operational aspects of the upcoming exploration programme the Company will also continue to work closely with local communities, indigenous groups and other stakeholders to ensure activities align with community expectations and these considerations are actively integrated into all activities.

See ASX Release 8 November 2023 "White Cliff Secures Multiple High-Grade Copper Projects in Canada"

# Commenting on the transaction, White Cliff Chairman, Roderick McIllree said:

"With this Nunavut Commission licence approval, we are now fully permitted and can move to finalise our exploration initiatives including contractor selection. This milestone was a critical component of our strategic planning phase and is now delivered. We can now focus on validating a significant database of historical mineral resources, high grade outcrop samples and ultimately prepare for drilling. We look forward to updating shareholders in the coming months on further developments both in terms of field activities for 2024 at our current and future project acquisitions."

# **Initial Exploration and Study Activities**

The Company proposes to undertake the following exploration and study activities which are broadly based on successful exploration methodologies adopted for similar sedimentary and volcanic copper deposits globally:

- Field crews to be mobilised for orientation / reconnaissance and planning for future work.
- Acquisition of all high resolution satellite hosted products, ariel photography and multispectral and electromagnetic data.
- Assessment of modern airborne geophysical techniques for targeting, particularly electromagnetic surveys, such as MobileMT
- Systematic rock and trench sampling.
- Drilling to test the extensional potential of high grade structurally controlled and stratiform copper mineralisation.

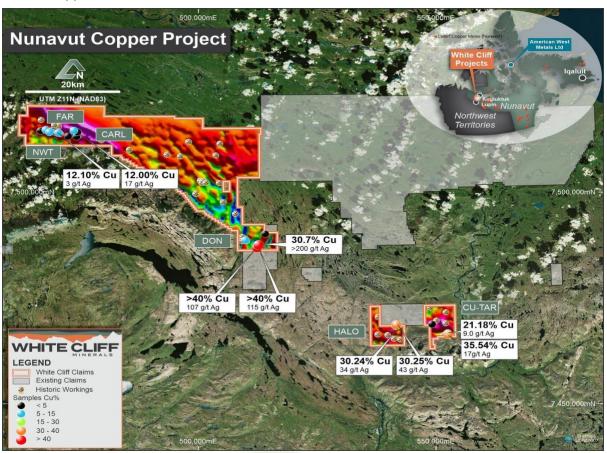


Figure 1: Location map of licences and high grade copper occurrences

# **Historical Copper Mineral Estimates**

The Coppermine River Project contains historical non JORC or NI 43-101 and 'blue sky' mineral estimates throughout the licence holdings. The verification and conversion of these into a 2012 JORC classification will be a priority for targeted drilling with an initial focus on Cu-Tar, Halo, and Far/NWT prospects due to existing outcropping material pre JORC mineral estimates however the Company is very confident that several additional areas will host high grade copper and silver mineralisation along what is more than 100km of mineralised structures and trends.

# **Exploration History**

Tools, weapons and idols, made from native copper from the Coppermine area, have been worked and traded by the local Inuit going back centuries amongst the circumpolar communities. The area first came to the attention of European and English explorers in the 17<sup>th</sup> century.

Prospector Samuel Hearne first reached the Coppermine River in 1771 and reported finding a four pound (~2kg) copper nugget at surface (Hearne, 1792).

The Coppermine River area was first staked in 1929 and continued slowly until 1966 when, due to the discovery of several high grade surface deposits of copper. By late 1967 over 40,000 claims were lodged by more than 70 different companies, setting off the largest staking rush in Canada's history to that date (E.D. Kindle, 1972). In his report, Kindle locates and gives a brief description of over 80 high grade copper outcrops throughout the Company's current licenses and surrounding area.

By 1970 exploration activity decreased, due to the instability of copper prices, difficult access, and later, an oil embargo that dramatically increased exploration expenses. The largest known copper deposit called Area 47 or the DOT 47 Lode, a vertical, tabular body 1,500 feet long and 35 feet wide along one of the faults of the Teshierpi fault zone (Kindle, 1972).

# **About The Project <sup>2</sup>**

The Coppermine River Project covers 805km² of flood basalts, including multiple, highly prospective mineral showings/outcrops (**Figure 1**). Most of these copper occurrences are structurally controlled along steeply dipping fault fissures and fault-breccia zones in the basalts. Mineralisation occurs mainly as massive bornite-chalcocite occurrences with lesser chalcopyrite and associated calcite, hematite, native copper and chlorite. The geology of the Coppermine District is characterised by an easterly-trending copper bearing belt of Meso-Proterozoic continental flood basalts and associated marine sedimentary rocks of Neo-Proterozoic age. This belt extends 80 kilometres south from Kugluktuk, on the Coronation Gulf, and 174 kilometres west to 64 kilometres east of Coppermine River. The district is best known for the 'Coppermine River Group' basalts which feature extremely high grade copper showings of >45% Cu within the volcanic pile.

Flood basalts of the Coppermine River Group occur over a strike distance of 700km and up to 4,700m in thickness with an estimated volume of ±650,000 cubic kilometres, **comparable with the largest flood basalt regimes in the world, including those of the West Greenland flood basalts, Keweenaw Peninsula in the US, the Siberian flood basalts of Russia, Columbia River, and the Deccan Traps.** 

The Coppermine River Group is composed of two formations. The basal Copper Creek Formation is 2,000 - 3,500m thick and composed of over 100 different flood basalt flows that exhibit massive bases grading to amygdaloidal flow top texture. The individual flows range in thickness from 3m to 90m, averaging between 8 and 23 meters. The lower flows display submarine genesis with typical pillow lava texture. The upper sequence was emergent and subaerial, displaying A'a' and ropey textured tops with increased iron oxidation and vesiculation with columnar jointing.

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Basalts in the Coppermine River Group contain fine crystals of plagioclase and augite, with a concentration of strongly altered olivine and orthopyroxene phenocrysts lower in the package, and plagioclase concentrations increasing in the upper stratigraphy. The basalts are tholeiitic and exhibit a notable decrease in magnesium up section, which suggests a well differentiated source (Baragar 1996). Chromium, silica and potassium also decrease up section. Native copper is restricted to the upper third of the formation.

The Husky Creek Formation, the upper formation in the Coppermine River Group, is approximately 1,200m thick and includes extensive 'red bed' (oxidized, iron rich) sandstones with minor intercalated

Extensive deep seated structural rifts can be traced for long distances within the licence area. These sutures are of particular interest; much of the identified surficial mineralisation occurs near these large fissure / fault zones. Three of these regional sutures the Long Lake, Dixon, and Teshierpi fault systems (listed from west to east) and associated structures have a major correlation with most mineral showings in the area. The potential for large scale high grade occurrences of copper is significant.

Copper mineralisation at the Coppermine River Project formed in an extensional tectonic setting, where basement fluids utilised structural conduits to transport and deposit copper and silver metals such as chalcocite, bornite, and chalcopyrite along structural corridors coincident with highly reactive rocks.

The dominant presence of chalcocite, bornite, and native copper ore mineral assemblages of Cu >> S > Fe > O at the Coppermine River Project indicates that the fluids were stabilised at very low levels of oxygen (Taylor, 2011), in a low intermediate sulphidation system, exhibiting characteristics of fluids that involved H2S, likely from a meteoric source (Einaudi, 1994). The fluids also formed in high pH conditions without the presence of iron, lacking in development of pyrite and chalcopyrite Haynes and Bloom, 2008). Together, this information suggests that the copper mineralisation formed over a significant period synchronous with basin extension coupled and continued basalt formation indicating the potential for copper mineralisation to great depths.

# **Costs Of The Application Process.**

Importantly the Company only paid a CAD\$150,000 facilitation fee, paid in shares in the Company using a 30 day lookback VWAP of the WCN share price as at the day of announcement and CAD\$25,000 to a Canadian consultant who completed the application process on behalf of the Company.

This announcement has been authorised for release by the Board of White Cliff Minerals Limited.

#### For further information, please contact:

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#### **Competent Persons Statement**

The Information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr. Roderick McIllree, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. McIllree is an employee of the company. Mr. McIllree has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr. McIllree consents to the inclusion of this information in the form and context in which it appears in this report.

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### **Further Information**;

A conformity determination is an official decision made by the Nunavut Planning Commission (NPC), allowing a project or development to move forward after committee determination that a proposed project or activity aligns with the newly established Nunavut land use plans, regulations, and environmental standards. In the context of mineral exploration, like in White Cliff Minerals' case, it means that the exploration licence and work programmes for the next 2 year years have been reviewed and found to be in compliance with the regulatory framework and guidelines set by the relevant authorities. This is a critical step for the Company given a new plan was implemented after a 10 year consultation that completed on September 30<sup>th</sup>, 2023.

In the case of White Cliff Minerals, receiving a conformity determination from the NPC signifies that their proposed airborne geophysical and drilling program near Kugluktuk, Nunavut, are in accordance with the land use plans outlined in the Nunavut Land Claims Agreement and other recently implemented legislation. This determination is a crucial step in gaining regulatory approval for the exploration activities, providing assurance that the project aligns with environmental, cultural, and social considerations.

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