

Expert Geophysics Appointed for Airborne Geophysical Survey at Coppermine Project

White Cliff Minerals (“the Company”) is pleased to announce the appointment of Canadian based Expert Geophysics Limited (“EGL”) to complete an airborne geophysical survey over the Coppermine Project, with work scheduled to commence in Q2 2024. The survey is designed to highlight and define structural trends, areas of contrasting resistivity as well as electromagnetic conductors that may be associated with and synchronous to high grade copper mineralisation within Coppermine’s subsurface.

Utilising EGL’s advanced MobileMT (Mobile MagnetoTellurics) System, the survey will deploy high-sensitivity magnetics measured by an optically-pumped airborne magnetometer. The survey will provide coverage over the entirety of the project on a 400m line spacing, focussing on both sedimentary and volcanic hosted copper potential. Operations will be based out of Kugluktuk, supported by additional facilities strategically located around the project area to enhance operational efficiency.

Highlights include:

- Expert Geophysics is recognised as a world-wide leader specialising in airborne geophysical surveys.
- 2,336 line kms of aerial survey targeting high priority targets covering an area of approximately 800km² at 400m spacing.
- MobileMT represents the latest generation of airborne AFMAG (Audio Frequency MagnetoTellurics) technologies, leveraging advancements in electronics, airborne system design, and sophisticated signal processing techniques.
- MobileMT employs advanced noise processing techniques at both electronic and signal processing levels, ensuring high data quality even in low natural electromagnetic field conditions.
- MobileMT allows the Company to image the subsurface resistivity for both volcanic and sedimentary hosted copper deposits.
- This programme is expected to optimise future drill targets and accelerate It is anticipated that the EGL programme will optimise drill targets and exploration across the entire Coppermine licenses.
- It is anticipated the survey will commence within Q2 2024.



Figure 1: Example of MobileMT Aerial Survey Equipment

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.

Commenting on the commencement of Exploration Activities, White Cliff Chairman, Roderick McIlree said:

“The engagement of Expert Geophysics is a major step for Coppermine. Since securing the project, we’ve diligently compiled and refined a comprehensive geological database, laying the foundation to prioritise high-potential targets. These activities mark the first substantive exploration efforts in the region since the late 1970s, and we eagerly anticipate leveraging the latest technological advancements in airborne sensing, particularly the innovative Mobile MagnetoTellurics (MobileMT) System, to assist with detailed mapping, sampling, and identify priority areas to focus our time and resources within the license area.

The deployment of MobileMT, known for capturing subsurface resistivity with its three-component sensor design, aligns with our commitment to unlocking the vast prospectivity of Coppermine. Now that we have started this major field programme we are optimistic about discovering copper resources and contributing significantly to the geological understanding of this region.”



Figure 2: Sensor unit to be used at Coppermine.

About The Project

The Project is now fully permitted¹ and previously reported areas of high grade rock chip results² will be the initial focus of the airborne and ground based survey:

- **30.24% Cu, 34g/t Ag** at Halo Prospect
- **30.25% Cu, 43g/t Ag** at Halo Prospect
- **35.54% Cu, 17g/t Ag** at Cu-Tar Prospect
- **30.7% Cu, >200g/t Ag** at Don Prospect
- **>40% Cu, 115g/t Ag** at Don Prospect (above Cu detection range)
- **>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 resource estimates that will be resampled during the upcoming ground 2024 field programme.

The Coppermine River Project covers 805km² of flood basalts, including multiple, highly prospective mineral showings/outcrops (**Figure 3**). 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.

¹ See ASX Release 29 January 2024 "Approval Received from Planning Commission for Coppermine"

² See ASX Release 8 November 2023 "White Cliff Secures Multiple High Grade Copper Projects in Canada"

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.**

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 $Cu \gg S > Fe > O$ 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 H_2S , 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.**

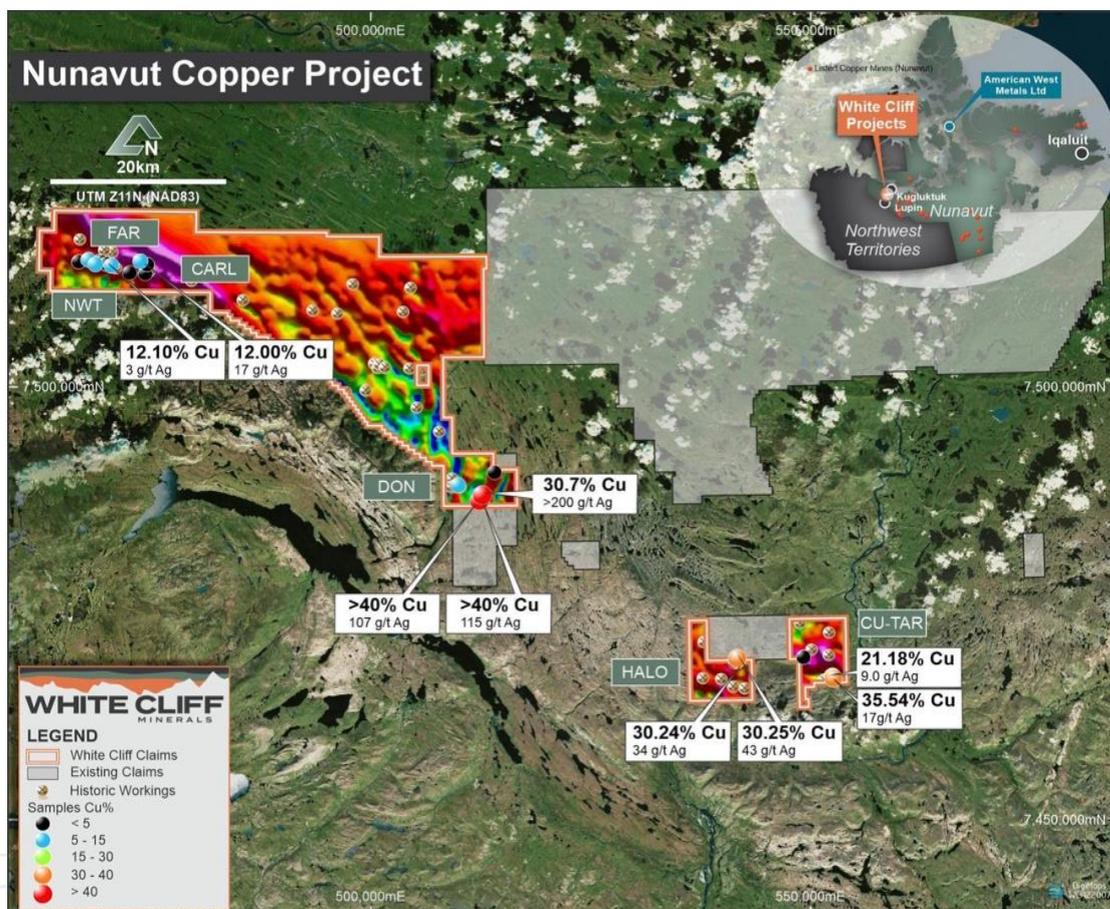


Figure 3: Location map of licences and high-grade copper occurrences

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 17th 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 staking activity significantly increased 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 was 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).

The Company intends to undertake a significant assessment of Coppermine during the next 6 months and is excited by the potential of the project.

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

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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 McIlree, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. McIlree is an employee of the company. Mr. McIlree 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. McIlree consents to the inclusion of this information in the form and context in which it appears in this report.