

# Nunavut Cu-Au-Ag Project primed for imminent field activities to commence with top targets identified

White Cliff Minerals Limited ("WCN" or "the Company") is pleased to provide an update on its activities as it prepares for its upcoming maiden field campaign at its Nunavut Copper-Gold-Silver Project in Northern Canada.

#### Highlights:

- The Nunavut Cu-Au-Ag project represents a district scale opportunity at the pre-discovery stage underpinned by the presence of both high-grade, volcanic hosted copper-silver lodes and the prospect of large tonnage sedimentary hosted copper deposits
- The Nunavut Cu-Au-Ag project hosts all required first order controls for formation of sedimentary hosted copper deposits, with proof-of-concept results from historic drilling less than 2 km east of the Company's mineral claims, on adjacent ground a 2015 drillhole returned 28.97m of 0.57% Cu from the basal Rae Group sediments
- Historic work has now been summarised at several priority target locations presenting a clear starting point for the Company to commence field activities:
  - Don: Located in the southern extents of the Company's mineral claims, this represents another cropping out lode system, which has returned the highest historical copper and silver assay results within the project area. Highlights in this area include samples taken on the northerly most quartz-chalcocite-bornite vein with a separation of 88m along strike and returned values of 30.7% Cu, 194g/t Ag and 8.29% Cu, 23g/t Ag and 7.84% Cu, 104g/t Ag
  - CU-TAR: Located in the SE of the Company's land holding offers at least four copper-silver lodes within NE trending vertical structures cutting the stacked basaltic flows of the Coppermine River Group. Historic grab samples include 21.18% Cu, 9g/t Ag and 35.54% Cu and 17g/t Ag with continuous chip samples returning 2.5m at 10.3% Cu and 5g/t Ag
  - Pickle Crow 140: This location has prominent NE/SW structures and a drift covered bench approximately 1000ft in length. Historic trench sampling results returned 1.13m at 16.75% Cu and 1.22m at 4.69% Cu
  - HALO: A N/S trending zone of chalcocite-chalcopyrite-bornite-malachite mineralisation which historically (2014) returned 5m at 4.34% Cu and 5.4g/t Ag from surface composite rock chip sampling

### Commenting on the update, White Cliff Managing Director, Troy Whittaker said:

"The Nunavut Cu-Au-Ag Project presents the Company with a significant opportunity. Previous operators proved the presence of high grade Copper veins however there was no sufficient follow up drill testing providing us with the opportunity for considerable exploration upside.

Despite their being inference and description of substantial strike extents across the project, only single samples were taken from limited occurrences. These single occurrences provide us with a substantial

foundation to undertake activities looking at district scale potential.

We look forward to over the coming months as the team deploys to the field to undertake the aerial geophysical MobileMT survey and ground reconnaissance works taking rock chip samples from outcrops channel saw sampling providing further updates"

This announcement has been approved by the Board of White Cliff Minerals Limited.

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#### **FURTHER INFORMATION**

The Company is targeting high grade copper-silver deposits within this under-explored frontier region, which boasts a wealth of historic mineral occurrence data however lacks significant drilling activity.

Two broad deposit types are noted and will form the basis of exploration activity by the Company:

- 1. Structurally controlled, high-grade lodes (Cu-Ag) within basalts of the Coppermine River Group
- 2. Sedimentary-hosted copper deposits within the basal Rae Group

The following information has taken exploration data and descriptions of targets from Kindle 1972, GSC Bulletin 214, and thus much of the information is historic in nature.

#### **CU-TAR**

CU-TAR, located in the southeast of the mineral claims held by the Company offers at least 4 coppersilver lodes within NE trending vertical structures cutting the stacked basaltic flows of the Coppermine River Group.

Surface grab sampling by Tundra Copper Corp. in 2013 on lode No.1 and No.3 returned values of 21.18% Cu, 9g/t Ag and 35.54% Cu, 17g/t Ag respectively. Sampling in 2014, conducted by Tundra Copper Corp. returned 2.5m at 10.3% Cu and 5g/t Ag from composite rock chip sampling across lode No. 2. (NUMIN File Reference 086024).

The lodes, as described by Kindle 1972 in GSC bulletin 214 are between 0.6m and 4.5m thick and can be traced for up to 457m on surface. Despite extensive mineralisation at surface, drilling information exists for only one lode with 160 m of total drilling. In 1969 lode No. 3 was tested with 6 near-surface holes and returned a **true thickness of 2.5m and 3.74% Cu** (weighted for mineralised intervals in the 6 drillholes) remaining open along strike and untested at depth.





Figure 1 - Field photographs of the Cu-TAR mineralisation (Lode No. 2) taken by Tundra Copper Corp in 2014. Photo illustrates the 2.5 m continuous chip sample which returned 2.5m at 10.3% Cu and 5g/t Ag. (NUMIN File Reference 086024)

Given the high-grade results of previous sampling, the extensive strike lengths of mapped lodes and under-explored nature of the target the Company will be conducting a detailed geological mapping and sampling program during 2024 fieldwork. Rock sampling will be completed along the length of the exposed lodes to give confidence in grade continuity prior to a maiden drilling campaign.





Figure 2 - Map of the Cu-TAR target location with mapped lodes and results of the 2013-2014 sampling conducted by Tundra Copper Corp. Map illustrates the projected lengths of the lodes and sparse sampling efforts by previous operators.

#### **PICKLE CROW 140**

The Pickle Crow 140 target represents a high priority target for the Company. Limited drilling was historically conducted at Pickle Crow. This location has prominent NE/SW structures and a drift covered bench approximately 1000ft in length, matching the description of the trench locations as per Kindle, 1972, GSC Bulletin 214. The target sits just 5.5km NW of the Cu-TAR target area.

Historic trench sampling results returned 1.13m at 16.75% Cu and 1.22m at 4.69% Cu with historic drilling confirming continuity of the mineralised zone over 457.2m strike length and 1.8 to 5.2m width, however assay results, collar locations and geological logs are not available.

The Company intends to complete surface sampling along the strike length of exposed lodes, collecting geological and structural data to inform a future maiden drilling campaign.

#### CARL

The CARL target, located in the NW of the Company's mineral claims hosts a historic, non JORC/NI 43-101 compliant estimate of 125,000t at 2% Cu from another volcanic hosted lode deposit (Kindle, 1972, GSC Bulletin 214). Previous operators did not visit this target location, and thus it remains a priority for the Company to confirm previous work through a detailed mapping and sampling campaign. The CARL target offers yet another zone of historically confirmed mineralisation that can be efficiently converted into modern exploration results.

#### **NWT and Kilauea**

NWT and Kilauea are in the NW of the Company's mineral claims, just 7km west of the CARL lode occurrence. These targets represent another style of copper mineralisation within the mineral claims, where brecciated and amygdaloidal basalt flow tops host malachite, chrysocolla, chalcocite and native copper. A 2015 grab sample taken by Kaizen Discovery of this material at Kilauea returned 9.1% Cu and 18g/t Ag. The grab sample was taken from a NNE trending zone extending for at least 20m. 1km west at the NWT showing a zone of 152 x 61 x 1m is historically noted to host similar copper mineralisation with grab samples exceeding 10% Cu (Kindle, 1972, GSC Bulletin 214). The basalt flows dip approximately 10 degrees to the north. Mineralisation is interpreted as an association of a permeable horizon (basalt flow top) and a nearby fault hosted lode. It is possible the Kilauea target represents the eastern extension of this north dipping mineralisation observed at NWT.

#### FAR, FAR Extension and Moose Lake

These 3 targets are located along a similar WNW/ESE structural trend covering over 4km strike length. Faulting is associated with the regional Bob and Long Lake Faults. Veining is observed trending WNW/ESE within topographic lows representing surface expressions of near-vertical faults and perpendicular N/S. Grab samples from Kaizen Discovery's 2015 program returned results up to 12.1% Cu from a chalcocite rich quartz vein observed for over 200 m N/S, with further grab sample highlights at the target of 12%, 8.8% and 4.5% Cu.

Just 3km north of these high grade, volcanic hosted lodes lie the basal Rae Group sediments. These are prospective for sedimentary hosted copper deposits (as detailed later in this release), especially where structures, associated with known copper occurrences cross-cut into the reducing siltstones.

Where mineral occurrences have been previously sampled at a single location along the strike length of the structure the Company intends to conduct regular grab and channel saw sampling to demonstrate continuity. 3km north of these showings, the Company will be undertaking prospecting within sediments of the basal Rae Group sediments to assess for sediment-hosted copper mineralisation.

#### HUSKY

The HUSKY target lacks any modern exploration data, but is described and located using information in Kindle, 1972, GSC Bulletin 214. Located in the southwest of the Company's mineral claims within the Coppermine Basalt sequence lies a zone of chalcocite mineralisation occurring within fractures forming a fan-shaped feature. The zone is north trending and exposed for approximately 200ft. At one point the copper content is historically reported as 4.85% over 30ft and further to the north the indicated grade is 1% Cu across 22.3ft. This information is historic in nature but represents another target area for 2024 follow up during the maiden field season for the Company.



Figure 3 - Geological map of the NW volcanic-hosted copper target area. Copper assay results from 2015 surface grab sampling by Kaizen Discovery illustrate extensive strike lengths of high-grade copper mineralisation.

#### DON

The DON target is in the southern extents of the Company's mineral claims and represents another cropping out lode system, which has returned the highest copper and silver assay results within the project area.

Described in GSC Bulletin 214, Kindle 1972, the target hosts at least 2 vertical quartz-chalcocite veins approximately 8m apart with a strike length of 152m striking NE. Historic sampling pre-1972 returned 25.84% Cu over 0.8m and 21% Cu over 1m.

Sampling in 2014 by Tundra Copper Corp. (NUMIN File Reference 086024) returned further grab sample results of:

- 26.8% Cu and 26g/t Ag
- 34.7% Cu and 76g/t Ag
- 24.7% Cu and 27g/t Ag
- 5.61% Cu and 5g/t Ag

Samples taken on the most northerly quartz-chalcocite-bornite vein (Kaizen Discovery. 2015) had a separation of 88m along strike and returned values of:

- 30.7% Cu, 194g/t Ag
- 8.29% Cu, 23g/t Ag
- 7.84% Cu, 104g/t Ag

445m to the south of these samples another quartz chalcocite vein returned 15.5% Cu and 34g/t Ag.

A third mineralised zone 325m SW of the previous 15.5% Cu assay result was sampled in a historic exploration trench exposing 3m of bedrock in an area of thin vegetation cover. Intense malachite staining is observed around the trench and the vein is assumed to continue beneath the cover. Samples from this small trench returned assays of:

- >40% Cu and 107g/t Ag
- >40% Cu and 115g/t Ag

These high-grade results are located along mapped faults, with limited work completed to follow/sample along strike by previous operators. Similar structural zones and fault intersections exist near the sampled showings and will form a basis for 2024 follow up by the Company, to identify further mineralisation at the DON target. The Company will also use suitable lab techniques to quantify copper mineralisation above the previous 40% Cu upper limits.



Figure 4 - Map of previous sampling completed by Tundra Copper Corp in 2013 and 2014 field programs. Over 800 m prospective strike extent between high-grade copper-silver rock samples.

#### HALO

The HALO target is in the southern extents of the Company's mineral claims and was investigated by Tundra Copper Corp in their 2014 exploration work. The mineralisation is chalcocite, chalcopyrite and bornite dominant with associated malachite secondary minerals forming crusts and fracture fills. A continuous chip sample was taken by 1m samples across a 5m wide volcanic hosted copper lode. The lode strikes approximately N/S and returned a weighted average grade of **5m at 4.34% Cu and 5.4g/t Ag** sourced from NUMIN File Reference 086024. Individual 1m composite chip results are as follows:

- 2.94% Cu 2g/t Ag
- 6.74% Cu 13g/t Ag
- 5.77% Cu 8g/t Ag
- 3.56% Cu 2g/t Ag
- 2.69% Cu 2g/t Ag



Figure 5 - Photograph of the HALO lode which returned 5m at 4.34% Cu and 5.4g/t Ag. Photograph sourced from NUMIN File Reference 086024.

2024 fieldwork at the HALO target will commence by resampling and logging the historic mineral showings, utilising a channel saw to ensure representative sampling across the lode. Work will then focus on extending the known strike length along the N/S structure and increasing data density to inform future possible drilling efforts.





Figure 6 - Geological map of the Company's mineral claims, Nunavut. Map highlights the priority volcanic hosted copper-silver targets and extensive other noted occurrences.

#### Volcanic Hosted High-Grade Copper–Silver

A total of 42 historic copper occurrences have been digitised from historic records within the Company's mineral claims at the Nunavut Cu-Au-Ag Project and are associated with a network of laterally extensive near vertical faults within the flood basalts of the Coppermine River Group.

Historic grab sample results locally exceed 40% Cu where mineralisation is massive chalcocite-bornitechalcopyrite +/- native copper and copper secondaries, malachite, azurite and chrysocolla. To efficiently allocate time and capital resources the Company has undertaken a detailed study of available data to produce a list of priority targets for 2024 fieldwork.

### **Sedimentary-Hosted Copper**

The Coppermine Project hosts the required first-order controls to harbour a sedimentary-hosted copper deposit. Table 1 below outlines the required controls for the formation of such a deposit and the features within the Coppermine Project matching these criteria. This mineralisation style has been derisked by drilling results of Kaizen Discovery in 2015, where drillhole CP15\_DD009 intersected 28.97m of 0.57% Cu from 197.03m within the basal Rae Group sediments, above the unconformable contact with the Coppermine River Group basalts <u>Kaizen Discovery Inc. - News Releases - Kaizen Discovery announces drilling results from 2015 exploration<br/>br>program at the Coppermine Project in Nunavut, Canada. Kaizen was conducting drill testing on widely spaced holes progressing west towards the mineral claims now held by the Company. Drillhole CP15\_DD009 evolved to copper. This indicates a zonation from distal to proximal environments within the mineralising system to the west, where the Company's mineral claims cover over 48 km strike length of the basal Rae Group sediments. Follow up drilling planned for 2016 by Kaizen Discovery was never completed, however 8 of 11 planned drillholes are now located in the Company's mineral claims.</u>

West of the proof-of-concept drillhole by Kaizen Discovery in 2015, within the Company's claims lies an area of structural complexity with 3 N/S to NW/SE trending regional structures crosscutting the Coppermine basalts into the Rae Group sediments. These regional structures are known fluid pathways for copper bearing fluids as they are associated with numerous volcanic-hosted lode copper occurrences. Within this target area of the basal Rae Group lies a historic sediment hosted copper occurrence, which will be a starting point for ground-based prospecting along the sediment-basalt contact. Figure 7 below illustrates the movement west between 2015 drillholes, zoning from distal to proximal, and the greater than 48km strike length of basal Rae Group sediments within Company's mineral claims.

First order controls	Coppermine Project
Source of copper	Husky Creek red bed sediments, Coppermine basalts
Transport agent	Evaporites of the Upper Rae Group marine carbonates offer a source of metal transporting brines
Pathways	Network of regional and local scale structures crosscut the Coppermine basalt sequence and Rae Group sediments
Redox Boundary	Unconformable contacts between basalts, Husky Creek (oxidised), and Rae Group sediments (reduced)
Sink/reactive host rock	Lower (basal) Rae Group marine siltstones with diagenetic pyrite - reductants
Proof of concept	Several surface showings of sedimentary hosted copper 2015 drill intercept of 28.97m of 0.57% Cu (CP15_DD009)

Table 1 - Summary of mineral system components for sedimentary-hosted copper deposits and fulfilling features of the Coppermine Project.

The Rae Group sediments, unconformably overlying the Coppermine basalts dip north between 3 and 5 degrees. Stratabound mineralisation within the basal siltstones will be near horizontal and therefore easily explored through vertical drilling, offering a near true thickness.

The 2024 fieldwork will focus on prospecting within the basal Rae Group sediments where structural density is highest, offering the fluid pathways required by copper bearing fluids. Geological mapping, structural measurements and rock chip sampling of any mineralised showing will be conducted to inform a future drill program targeting the western extension of mineralisation reported in 2015 drilling efforts by Kaizen Discovery just 2 km east of the Company's mineral claims. An example target area is labelled as Target A in Figure 7 below. This area has 3 regional faults crossing the unconformable basalt-sediment contact and are associated with volcanic hosted copper mineralisation.



Figure 7 - Geological map of the northwestern block of mineral claims that makes up the Coppermine Project. The basal Rae group sediments can be seen striking NW/SE for over 48 km and crosscut by a network of regional and local scale structures, many of which are associated with volcanic-hosted copper lodes.

#### **Exploration History**

Tools 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, 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 copper deposit in the area is called Area 47 or the DOT 47 Lode in a vertical, tabular body 1,500 feet long and 35 feet wide along one of the faults of the Teshierpi fault zone (Kindle, 1972).

Mapping and exploration in the area were conducted over several campaigns by regional workers and individual companies until 1970, when the area was mapped in detail by W.A. Barager and J.A. Donaldson. During this time, Barager conducted a litho-geochemical study of the Coppermine River basalts. E.D. Kindle followed this work and produced the first major collaboration of mineralisation, geology, and geologic history in 1972. Following this, Ross and Kerans (1989) mapped Middle Proterozoic sediments of the Hornby Bay and Dismal Lake Groups to the south and west of the region.

Exploration and development persisted sporadically between 1990 - 2010, when companies started to utilise geophysics at the Area 47 and Muskox Intrusion to the southeast of the project area, the latter of which witnessed drilling for several years.

Mineral claims in the region continued to lapse because of depressed economic conditions, until most of the Coppermine area was free and available for staking.

The White Cliff acquisition is of new mineral claims to the west and contiguous to a current operator, Tundra Copper Corp. White Cliff plans to validate historical rock chip assays and validate historical drilling, with the aim of converting historical mineral estimates to JORC 2012.

#### REFERENCE

2013 and 2014 sampling by Tundra Copper Corp. consisted of surface grab sampling of visibly mineralised rock, which was processed at ALS Yellowknife and analysed by ALS Canada, Vancouver. Sample preparation PREP-31BY and analysis by ME-ICP61a (high-grade four acid ICP-AES) with copper over assay by Cu-VOL61 and Cu-SCR21. 2015 sampling by Kaizen Discovery consisted of surface grab sampling of visibly mineralised rock, which was processed at ALS Yellowknife and analysed by ALS Canada, Vancouver. Sample preparation was completed by PREP-33D or PREP-31B and analysis by ME-ICP61A and ME-ICP61. Drilling intervals reported were completed and reported by Kaizen Discovery Corp. Kaizen Discovery Inc. - News Releases - Kaizen Discovery announces drilling results from 2015 exploration<br/>
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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 Roderick McIllree, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr McIllree is an employee of White Cliff Minerals. 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.

#### **CAUTION REGARDING FORWARD-LOOKING STATEMENTS**

This document may contain forward-looking statements concerning White Cliff Minerals. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information by White Cliff Minerals, or, on behalf of the Company.

Forward-looking statements in this document are based on White Cliff Minerals' beliefs, opinions and estimates of the Company as of the dates the forward-looking statements are made, and no obligation is assured to update forward-looking statements if these beliefs, opinions and estimates should change or to reflect future developments.



# WHITE CLIFF

#### **About White Cliff Minerals**

White Cliff Minerals (ASX: WCN) is an energy metals company focused on the discovery of **district-scale**, **high-grade** and **quality** projects in **tier-one jurisdictions** within **historic** and **proven** areas.

Led by its internationally experienced executive team that has significant frontier exploration, development, corporate and technical expertise, White Cliff has positioned itself with the right team, in the right locations, with the right projects to deliver significant returns to shareholders.

The Company's projects in **Canada** include the Radium Point Uranium Project, which has been recognised by the Northwest Territories Geoscience Government office as having the highest probability for the hosting of iron-oxide-copper-gold (IOCG) uranium plus silver-style mineralisation in the North American nation, and the proven high-grade copper, gold and silver Nunavut Coppermine project in the Coppermine River area.

- The Radium Point area is recognised as a significant source of uranium and is recorded as being one of Canada's largest uranium mining districts, with prior exploration rock chip assays producing results that include: 14.15% uranium oxide, 6.22 grams per tonne gold and 122g/t silver and 7.5% copper, 1.63% U3O8, 1.56g/t Au and 729g/t Ag at Thompson Showing; 11.69% Cu, 1330g/t (~40oz) Ag, 8.30% zinc at Spud Bay; and 8.28g/t Au, 1.86% Cu and 43.4g/t Ag at Sparkplug Lake.
- Exploration at the Nunavut Coppermine project, also known as Coppermine River project, has validated numerous highly prospective Cu and Ag mineralisation occurrences that include: 30.24% Cu and 34g/t Ag and 30.25% Cu and 43g/t Ag at its Halo prospect; >40% Cu, 115g/t and 107g/t Ag at Don prospect; and 35.54% Cu and 17g/t Ag at Cu-Tar prospect.



A refocused strategy within **Australia** has involved White Cliff refining its portfolio to four highly prospective projects that includes the **Reedy South Gold Project that contains a JORC resource** of **42,400 ounces of gold.** 

- The high-grade **Reedy South Gold Project** sits immediately south of the Westgold Resources' (ASX: WGX) Triton/South Emu Mine in the proven **Goldfields** area of **Western Australia**.
- Lake Tay Gold and Lithium Project sits in the highly prospective multi-metals Lake Johnston region of WA and is adjacent to the TG Metals (ASK: TG6) Lake Johnston Lithium Project and Charger Metals (ASX: CHR) and Rio Tinto (ASX: RIO) lithium exploration joint venture.
- Diemals Gold, Copper, Lithium and Nickel Project, within the Southern Cross area of the Yilgarn in WA, contains two greenstone belts on the east and west of the tenement being prospective for gold, nickel, copper, lithium and rare earths.
- **Bentley IOCG Project** currently in an exploration application stage has had numerous prospective Gold and Copper targets identified.



# **APPENDIX 1.**

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at the Company's Nunavut Cu-Au-Ag project.

## **Section 1: Sampling Techniques and Data**

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Surface rock chip (grab) sampling of outcrop unless specified as a rock chip composite. Rock chip composites were taken at measured intervals perpendicular to the strike of the mineralised outcrop. Drill core for the reported drillhole was sampled as half core, cut on site by an electric-powered core saw. Field duplicates were cut again to form quarter core samples.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Samples of different lithologies, alterations and mineralisation styles were collected based on visual appearance.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.	<ul> <li>2013 and 2014 sampling by Tundra Copper Corp. consisted of surface grab sampling of visibly mineralised rock, which was processed at ALS Yellowknife and analysed by ALS Canada, Vancouver. Sample preparation PREP-31BY and analysis by ME-ICP61a (high-grade four acid ICP-AES) with copper over assay by Cu-VOL61 and Cu-SCR21.</li> <li>2015 sampling by Kaizen Discovery consisted of surface grab sampling of visibly mineralised rock, which was processed at ALS Yellowknife and analysed by ALS Canada, Vancouver. Sample preparation was completed by PREP-33D or PREP-31B and analysis by ME-ICP61A and ME-ICP61.</li> <li>Reported drillhole samples were sent to ALS Minerals preparatory lab in Yellowknife, N.T., followed by secure transport to and multi element assay at ALS's principle laboratory in North Vancouver, B.C. Analytical procedures consisted of 33 Element Four Acid ICP-AES, followed by automatic Ore Grade Four Acid ICP-AES for all copper over limits</li> </ul>
Drilling techniques	Drill type (e.g., core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is orientated and if so, by what method, etc.).	One diamond drillhole is reported, NQ2 diameter. Core orientation procedure is unknown. Standard or triple tube drilling is unknown.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Core recovery was calculated as the difference between drilled intervals between drillers core blocks and the length of recovered core.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Representative core samples were taken by sampling half core, cutting the core along the long axis with an electric powered core saw.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain	No relationship observed. 99.5% core recovery is calculated for drillhole reported in this release (CP15_DD009).

Criteria	JORC Code explanation	Commentary
	of fine/coarse material.	
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Rock chip sampling was undertaken on surface alongside lithologic, alteration and mineralisation logging. Data input presented in tabulated form alongside coordinates and sample numbers. Drillhole lithology, alteration, mienralisation and structure was logged downhole on site. This was recorded into an excel spreadsheet with further information on recovery, RQD, core diameter and sampling information.
	The total length and percentage of the relevant intersections logged.	All recovered core intervals were logged.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all cores taken.	Half core samples taken, cut by an electric powered core saw on site. The nature of sample preparation is deemed fit for purpose for the target mineralisation style.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Half core samples taken to maximise representative sampling.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second- half sampling.	Quarter core duplicate samples were taken at specified intervals downhole as part of the quality assurance and control protocols. A total of 6 quarter core samples were taken within the reported drillhole.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample masses during 2013/2014 sampling efforts by Tundra Copper Corp. were reported between 0.17kg and 5kg. Half core samples as standard are applicable for the fine-grained copper mineralisation observed within the reported drillhole.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were processed at ALS Laboratories, Vancouver. Samples digested by aqua regia leaching represent a partial digestion, preferentially attacking sulphide minerals and thus certain refractory minerals will not be effectively leached. Four acid digestion represents a near-total digestion of the sample.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used. No field duplicates, blanks or certified reference materials were inserted to the sample stream by Tundra Copper Corp or Kaizen Discovery for surface sampling.
	Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	A range of certified reference materials, blanks and quarter core duplicates were inserted to the sample stream to control assay quality.
Verification of sampling and	The verification of significant intersections by either independent or alternative company	Not known.

Criteria	JORC Code explanation	Commentary
assaying	personnel.	
	The use of twinned holes.	No twin holes completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data was recorded on site and stored within excel spreadsheets. Details of secure storage of digital data is unknown.
	Discuss any adjustment to assay data.	Assay data has not been adjusted.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Locations of reported rock chip assay results are in NAD 83 / UTM Zone 11 N EPSG: 26911. Method of locating rock samples and diamond drillhole collars are by handheld GPS. Downhole surveys were completed at the start and end of hole for reported drillhole CP15_DD009.
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Reported results are spaced based on locations of prospective lithologies, alterations and visible mineralisation.
	Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Rock chip assay results are taken from zone of prospective lithologies, alterations or visible mineralisation. They are not suitable for inclusion in an MRE.
	Whether sample compositing has been applied.	2 composite rock chip transects are reported, undertaken by Tundra Copper Corp in 2014. Sample intervals were taken across the mineralised outcrops with composite rock chips taken. Results have been reported as weighted averages based on reported assay grades and their corresponding interval lengths.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Orientation of sampling relative to mineralised structures is unknown for surface rock chip data. Drilling was conducted on vertical drillholes, appropriate to test the near horizontal sedimentary hosted copper mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Reported drillhole is vertical, this is deemed appropriate to test the shallow dipping, sedimentary hosted copper mineralisation. No bias is expected to be introduced.
Sample security	The measures taken to ensure sample security.	Samples were bagged and sealed prior to shipping from site to ALS laboratory in Yellowknife, where ALS took custody of the samples.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not known.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Coppermine River Project is made up of 61 Mineral Claims. 24 Active mineral claims issued on 26/9/2023 to Eric Sondergaard (on trust for White Cliff Minerals Limited), with an anniversary date of 26/9/2025. 37 Active mineral claims issued on 1/11/2023 to Eric Sondergaard (on trust for White Cliff Minerals Limited), with an anniversary date of 1/11/2025. Field activities require a land use permit from the Nunavut Government. The mineral claims are in good standing to their anniversary dates.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous exploration in the Coppermine areas is listed under Exploration History in the release and mainly consists of sampling of outcrops/showings and limited drilling within the sediment hosted mineralisation and volcanic hoisted mineralisation found in the area. Tundra Copper Corp started the process of validation of historical rock chip assays and had planned to validate historical drilling and historical resources to NI43101, but this work was held up by land use planning by the Nunavut government and covid era restrictions. Tundra in 2013 reprocessed magnetics and sourced regional gravity data. This work was carried out by geophysical group HPX (High Power Exploration)
Geology	Deposit type, geological setting and style of mineralisation.	The area is prospective for primary Copper and silver mineralisation associated with structural rifting, faulting and shear zones, within the Coppermine River Group, and called volcanic hosted copper mineralisation. This has led to secondary mineralisation within sediments of the Rae Group that sits unconformably above the Coppermine River Group
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole, down hole length and interception depth, hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Reported drillhole completed by Kaizen Discovery Corp. on 02/09/2015 as part of a regional drilling program. <u>Kaizen Discovery Inc News Releases -</u> <u>Kaizen Discovery announces drilling results from 2015</u> <u>exploration brogram at the Coppermine Project in</u> <u>Nunavut, Canada</u> Drillhole CP15_DD009 was collared at 514507 E 7506029 N NAD83/UTM Zone 11N with an elevation of 190 m. The drillhole was vertical (-90) with an end of hole depth of 230 m. Reported interval of 29m commencing at 197m downhole.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.	Continuous rock chip sample results reported from Tundra Copper Corp 2014 exploration work. 3 intervals are combined in a weighted average across a total of 2.5 m of outcrop. No cut off grades or other value manipulations have been applied to the data. Reported copper interval for drillhole CP15_DD009 has a minimum cut of value of 0.1% Cu and was

Criteria	JORC Code explanation	Commentary
		calculated using standard weighted average.
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No significantly high-grade intervals are reported for the interval within CP15_DD009.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are being used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	The reported composite chip sample was taken perpendicular to the strike of the mineralised horizon. The downhole width is reported, which is interpreted to be very close to true width given the near horizontal orientation of sedimentary bedding which is controlling copper mineralisation. The vertical drillhole is fit for purpose.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Location maps provided of projects within the release with relevant exploration information contained.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	The reporting of exploration results is considered balanced by the competent person.
Other substantive exploration data	Other exploration data, if meaningful, should be reported including geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No further exploration data of note is being reported. Work is ongoing to integrate available geological datasets.

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Further work       The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).       Full technical review which includes site trips are planned.         Diagrams clearly highlighting the areas of possible extensions and future drilling areas, provided this information is not commercially sensitive.       Full technical review which includes site trips are planned.         • Assessment of modern airborne geophysical techniques for targeting as MobileMT       • Field crews will be mobilised for orientation / reconnaissance and pla for future work including drilling.         • Field mapping, rock chip and channe sampling.       • Field mapping, rock chip and channe sampling.	er work 7 (( e p in t	<ul> <li>Full technical review which includes site trips are planned.</li> <li>Assessment of modern airborne geophysical techniques for targeting, such as MobileMT</li> <li>Field crews will be mobilised for orientation / reconnaissance and planning for future work including drilling.</li> <li>Field mapping, rock chip and channel saw sampling.</li> </ul>

