



**Somerset**  
MINERALS LTD

# **COPPERMINE: NEW HIGH-GRADE COPPER ACQUISITION**

ASX:SMM  
Investor Presentation

December 2024



# Disclaimer

## Cautionary Statements & Disclaimer

The information contained in this presentation is not investment or financial product advice and is not intended to be used as the basis for making an investment decision. Please note that, in providing this presentation, the Company has not considered the objectives, financial position or needs of any particular recipient. The information contained in this presentation is not a substitute for detailed investigation or analysis of any particular issue and does not purport to be all of the information that a person would need to make an assessment of the Company or its assets. Current and potential investors should seek independent advice before making any investment decisions in regard to the Company or its activities.

This presentation contains certain “forward-looking statements” within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of the words “anticipate”, “believe”, “expect”, “project”, “forecast”, “estimate”, “likely”, “intend”, “should”, “could”, “may”, “target”, “plan”, “guidance” and other similar expressions. Indications of, and guidance on, future earning or dividends and financial position and performance are also forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, and which may cause actual results, performance or achievements to differ materially from those expressed or implied by such statements.

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### Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Christopher Hansen who is a Member of Member of the Australasian Institute of Mining and Metallurgy and is Managing Director of the Company. Mr Hansen has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hansen consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy securities.



# Corporate Overview

## Capital Structure

<b>SMM</b> ASX Code	<b>206.2m</b> Shares on Issue (Undiluted)	<b>\$2.7m</b> Market Cap (undiluted at \$0.013/sh)	<b>\$0.6m</b> Cash (As at 30 Sept 24)	<b>\$2.1m</b> Enterprise Value	<b>46.2m</b> Options <sup>1</sup>
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## Board of Directors



**Chris Hansen**  
Managing Director



**Mike Edwards**  
Non-Executive Chairman



**Melanie Ross**  
Non-Executive Director  
& Company Secretary

1. Excludes 22.1 million performance rights & 2.5m warrants

# Investment Highlights

Conditional agreement executed to **acquire the high-grade Coppermine Project** adjacent to White Cliff Minerals (ASX:WCN)<sup>1</sup>

The Coppermine Project contains high-grade copper occurrences with grades up to **45.4% Cu** and **263 g/t Ag**, with **historic drilling providing drill-ready targets**<sup>1</sup>

Sale of the Valle del Tigre II project in Ecuador to Barrick expected to complete in December (~A\$375k)<sup>2</sup>

The Prescott Project includes a significant land package directly along strike and adjacent to **American West Metals** (ASX:AW1) Storm Project<sup>3</sup>

Geophysical survey completed for the season with 65% of planned line kilometres flown at Prescott serving to identify several initial anomalies for follow-up

Portfolio of precious and base metals projects in both North & South America

**PRESCOTT**  
Nunavut, Cu-Ag-Zn-Pb

**COPPERMINE**  
Nunavut, Cu-Ag

**ELIZABETH & BLACKDOME**  
British Columbia, Cu-Ag-Zn-Pb

**ZAMORA**  
Ecuador, Au-Cu

1. See ASX:SMM 10/10/2024; 2. See ASX:SMM 16/07/2024; 3. There is no certainty that further work by the Company will lead to achieving the same size, shape, grade, or form of the comparison resource or project. The Company's project is in a different stage of development and that further exploration needs to be undertaken to further prove or disprove any comparison



# Prime Location



**Both projects located adjacent to coast**



**Access to designated sealift route**



**Historical mining district with established logistics network and supportive local government**



**Year-round mining, with reliable shipping windows**





# **COPPER MINE PROJECT**

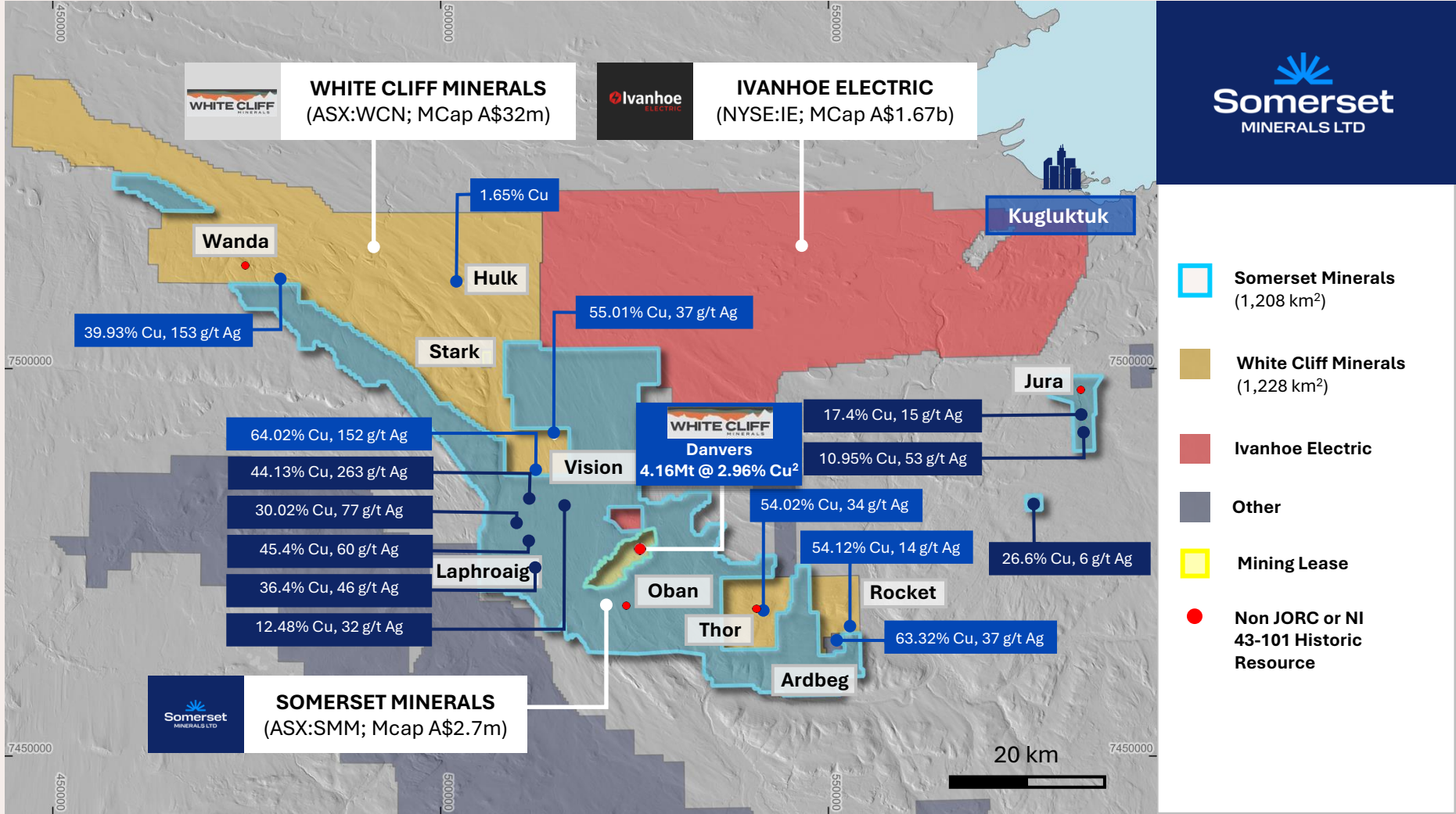
**Nunavut (Cu, Ag)**





# Coppermine Project

1,208 km land holding in the historic Coppermine region



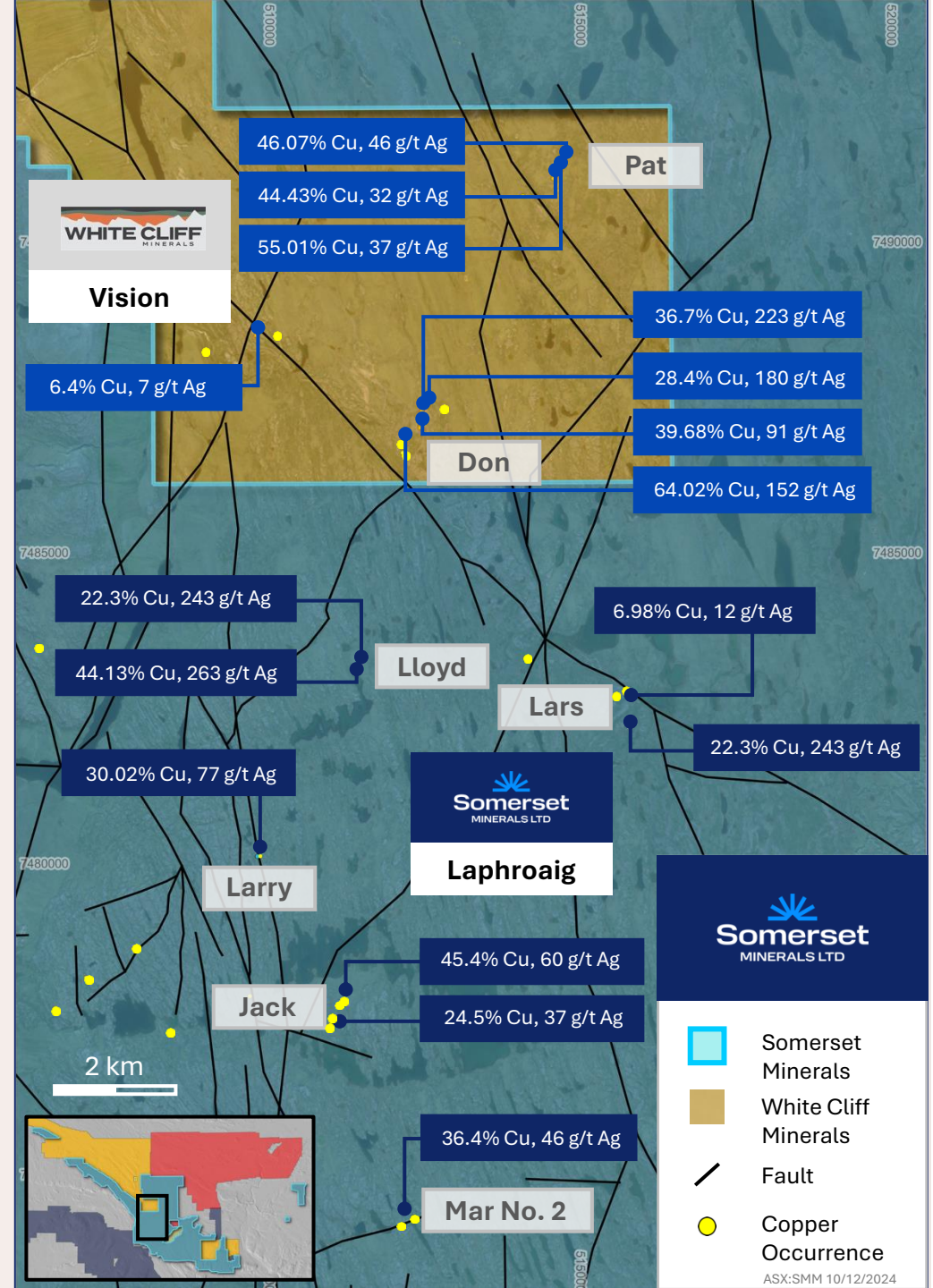
1. See ASX:SMM 10/12/2024  
2. See ASX:WCN 26/11/2024

# Coppermine: Laphroaig District

## High-grade copper-silver trend immediately along strike from White Cliffs' Vision District

- Somerset's Laphroaig District is located immediately south of White Cliff Minerals' Vision District which hosts the high-grade Pat and Don targets.
- Somerset have a dominant land position surrounding the Pat and Don targets, supported by a number of very high-grade copper rock chips, hosted within steeply dipping fault zones as chalcocite and bornite.
- The Laphroaig District extents over 15 km and hosts the historical Lloyd, Larry, Jack, Lars and Mar No. 2 targets, with significant rock chips including<sup>1</sup>:
  - 44.13% Cu, 263 g/t Ag
  - 36.4% Cu, 46 g/t Ag
  - 24.5% Cu, 37 g/t Ag
  - 30.02% Cu, 77 g/t Ag
  - 22.3% Cu, 243 g/t Ag
  - 45.4% Cu, 60 g/t Ag
- At least 24 historic drillholes from the 1960's throughout the district, serving to provide high-priority drill ready targets with significant exploration upside.

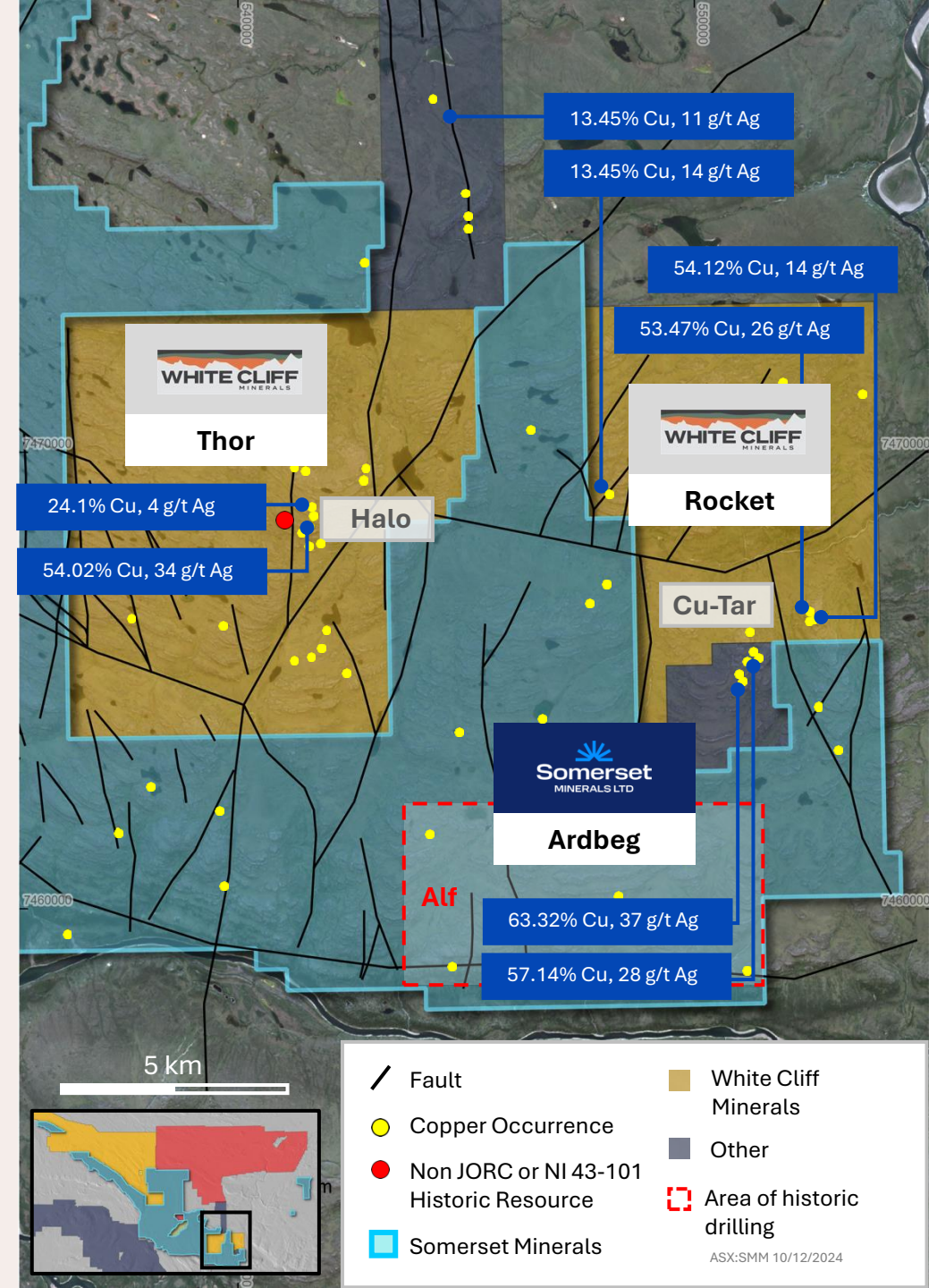
1. See ASX:SMM 10/12/2024



# Coppermine: Ardbeg District

Along strike from White Cliff Minerals Thor & Rocket targets, supported by historical drilling

- Somerset's Ardbeg District is located immediately south of White Cliff Minerals' Thor and Rocket Districts which host the high-grade Halo and Cu-Tar targets.
- Somerset have dominant land position surrounding the Thor and Rocket Districts, supported by a number of historic drill holes and surface samples.
- Historic drilling, trenching and rock chip samples from the southern area provide Somerset with immediate follow up targets for the maiden field season
- Recent rock chip sampling by White Cliff Minerals serves to validate the perspective of the Ardbeg region, with significant rock chips including<sup>1,2</sup>:
  - 63.32% Cu, 37 g/t Ag
  - 54.02% Cu, 34 g/t Ag
  - 54.12% Cu, 14 g/t Ag
  - 57.14% Cu, 28 g/t Ag
- Mineralisation is largely hosted in brecciated basalt, and principally consists of chalcocite.



1. See ASX:SMM 10/12/2024; See ASX:WCN 29/10/2024

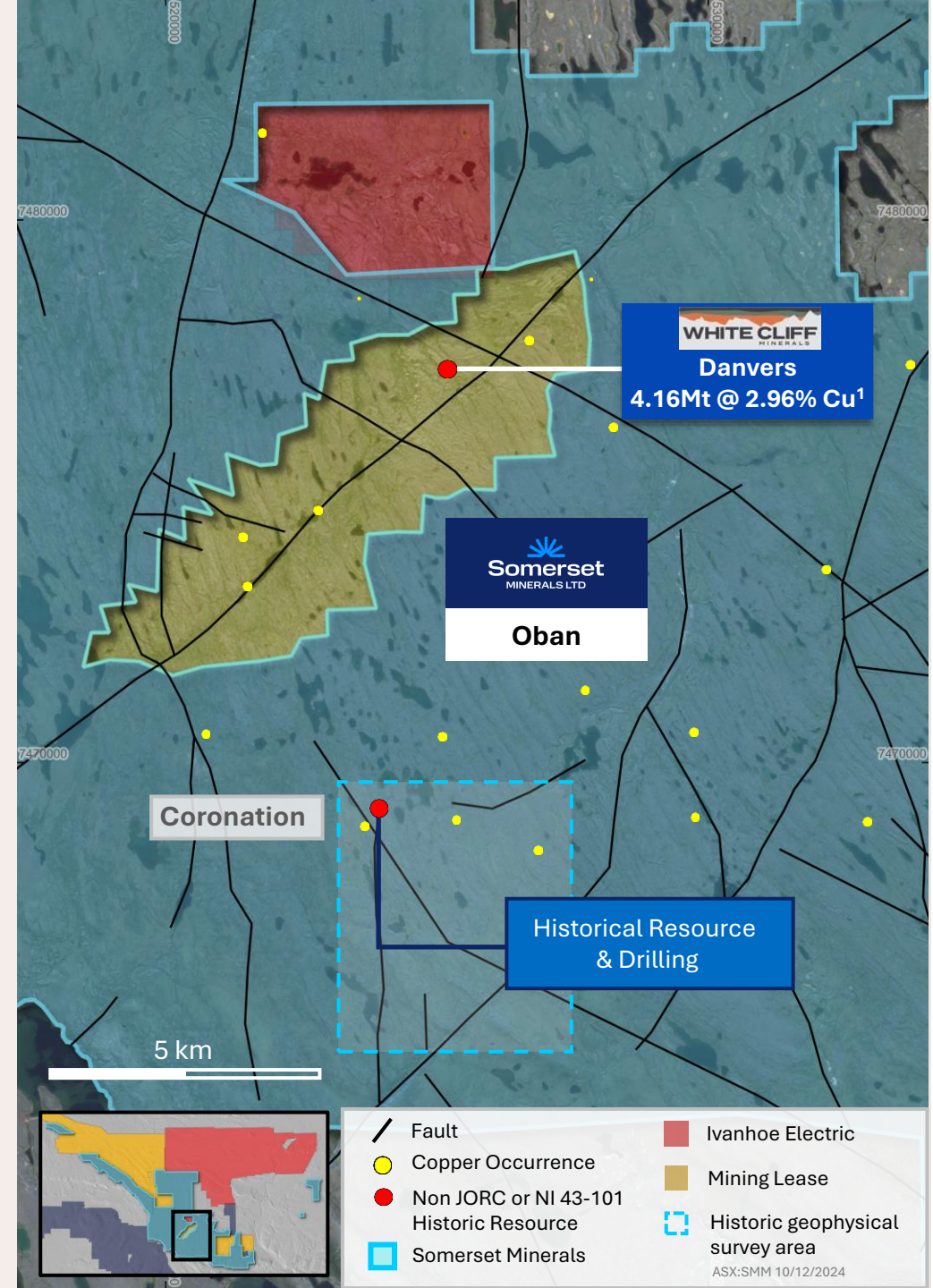


# Coppermine: Oban District

## Drill-ready targets leveraging off historic drilling & surface sampling results

- Oban contains a number of historic drillholes from the 1960's, providing the Company with drill-ready targets for its maiden field season. At least eight historic drillholes with copper mineralisation from surface have been identified from open-source data, including historic assay data.
- The Oban district hosts the Coronation prospect which contains a small historic non-JORC compliant resource which remains open at depth and along strike, and contains similar mineralised drill intercepts and grades to that seen at the neighbouring Danvers deposit, which is 8.5 km to the north.<sup>2</sup>
- Mineralisation is hosted as brecciated flow-top replacement style in the basalts, as well sub-vertical brecciated fault zones. Copper occurs as native copper, chalcocite, and bornite.
- The area has had a historic ground based electromagnetic (EM) and induced polarization (IP) surveys cosmpleted over the Coronation prospect, which indicates several large anomalies.
- The Oban district has seen little-no exploration since the late 1960's
- The company will seek to validate this historic data to support the proposed maiden drill campaign in early-2025.

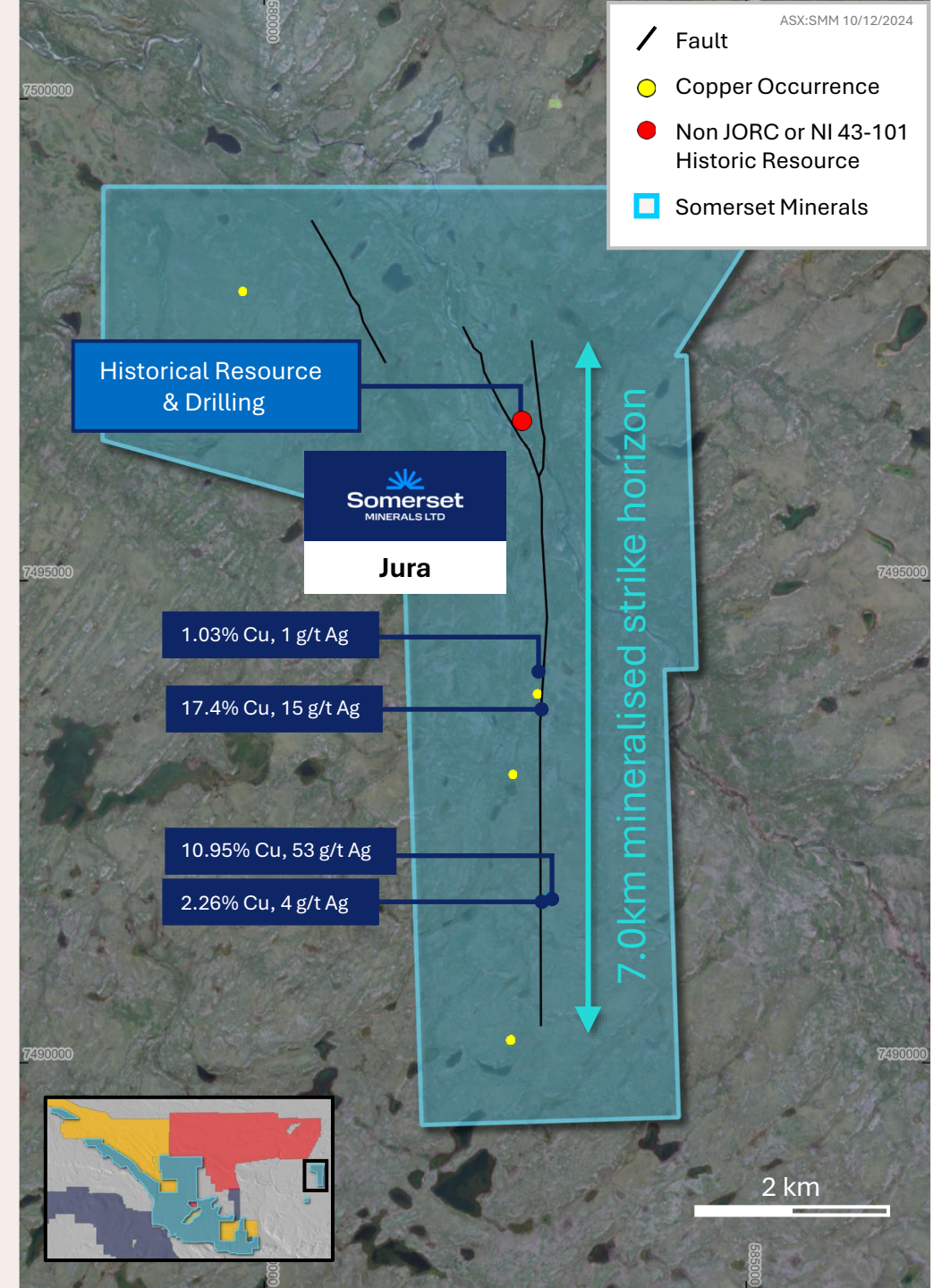
1. See ASX:WCN 26/11/2024; 2. Cautionary Statement: Readers are cautioned that the Historical Estimate for the deposit referred to in this Presentation is not reported in accordance with the JORC 2012 Code. A Competent Person has not undertaken sufficient work to classify the Historical Estimate as a Mineral Resource in accordance with the JORC 2012 Code. Nothing has come to the attention of the Company that causes it to question the accuracy or the reliability of the Historical Estimate. However, the Company has not independently validated the estimate and therefore is not to be regarded as reporting, adopting or endorsing the estimate. Following evaluation and further exploration work, it is uncertain whether it will be possible to report the Historical Estimate as a Mineral Resource in accordance with the JORC 2012 Code.



# Coppermine: Jura District

## 7.0 km high-grade mineralised trend supported by historical drilling to the north

- Somerset's Jura District is located to the east of the main project area and consists of a 7.0 km high-grade mineralised trend.
- The Jura District extends over 7.0 km and includes a historical resource to the north, with high-grade rock chips along strike to the south including<sup>1</sup>:
  - 17.4% Cu, 15 g/t Ag
  - 10.95% Cu, 53 g/t Ag
- 12 historic shallow drillholes exist on the property to the north and define a historical resource, with mineralisation open at depth and along strike.
- Fault hosted mineralisation is interpreted to continue for a further ~6.0km south of the historical mineral resource, consisting of fracture-hosted chalcocite which is visible at the surface and remains undrilled.
- Mineralisation is principally hosted within a north-south striking vertical fault zone, hosting high-grade copper mineralisation within a brecciated basalt.
- Jura is a high-priority target with significant exploration upside and drill-ready targets.
- Jura is located only 25 km south of the town of Kugluktuk.





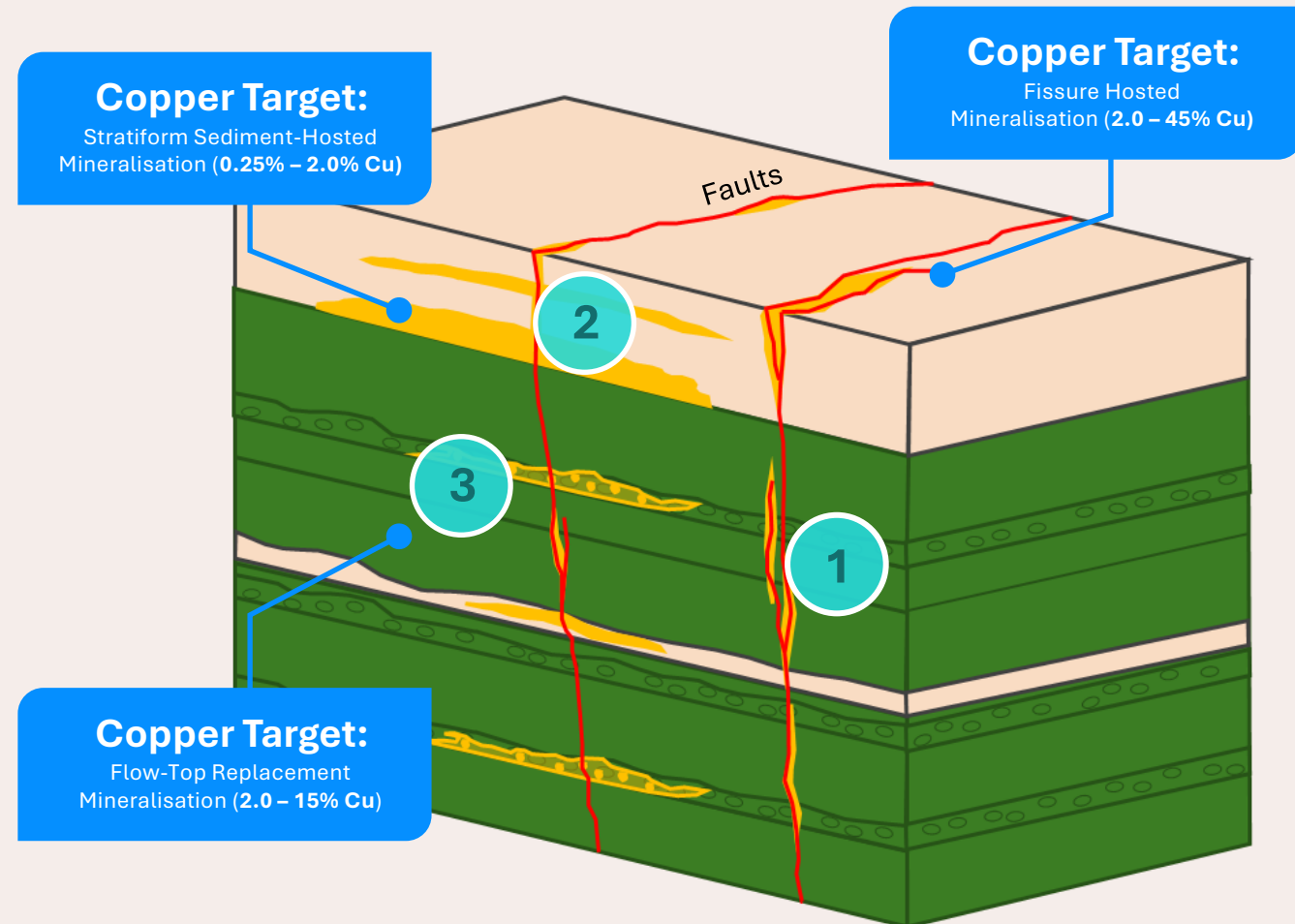
# Target Mineralisation Styles

Three principal styles: fissure-hosted, sedimentary-hosted and basalt flow top replacement

The Coppermine River area has abundant high-grade copper showings at surface, hosted in several mineralisation styles. The area is essentially unexplored since a rush in the late 1960's.

The area hosts three principal mineralisation styles: **(1)** structurally hosted fissure copper; **(2)** sediment-hosted copper; and **(3)** replacement style copper hosted in the tops of basalt flows.

Structurally hosted and replacement style copper are analogous to the Rocklands Mt Isa deposit in Australia, and Keweenaw copper mines in Michigan, and contain very high-grade copper often in the form of native copper, chalcocite, bornite, and chalcopyrite. Sediment hosted copper deposits are a significant source of copper, forming one of the worlds major sources of copper.





# Regional Geology

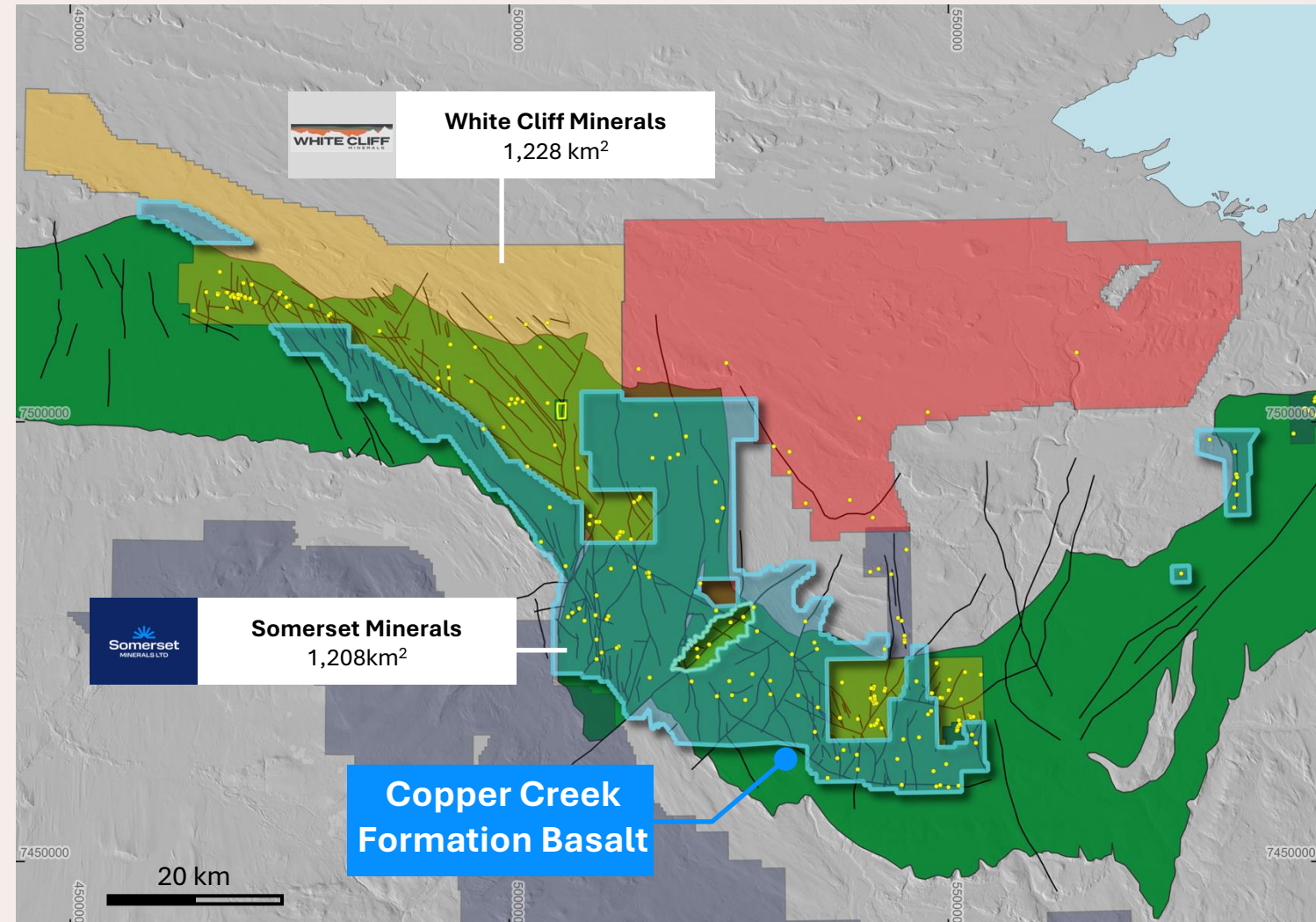
**Project contains ~1,055 km<sup>2</sup> of the prospective Copper Creek Formation basalts**

Local geology is dominated by the Coppermine River group, which hosts numerous high grade copper lodes occurring as chalcocite, bornite, chalcopyrite, and native copper, in brecciated fault zones and within stratigraphic horizons hosted by basalts and sediments.

The Coppermine River Group, formed during the Mesoproterozoic as part of the McKenzie Igneous event, is attributed to an extensional regime influenced by a mantle plume. This event produced over 650,000 km<sup>3</sup> of flood basalts, ranking among the largest in the world alongside the Keweenaw Peninsula and Deccan Traps. The basal Copper Creek Formation comprises subaqueous to subaerial basalt flows, reaching thicknesses of up to 4 km. Above it, the Husky Creek Formation features intercalated basalts with siltstones and red sandstones.

Large scale faults are the main control on mineralisation, which allowed copper bearing fluids to concentrate and precipitate within appropriate host rocks and structural traps.

This large land package contains 1,055 km<sup>2</sup> of Copper Creek Formation basalts, and has had little to no exploration since the late 60's, providing a significant opportunity for investors to gain exposure to a first mover in an emerging copper region.





# **PRESCOTT PROJECT**

**Nunavut (Cu, Ag, Zn, Pb)**

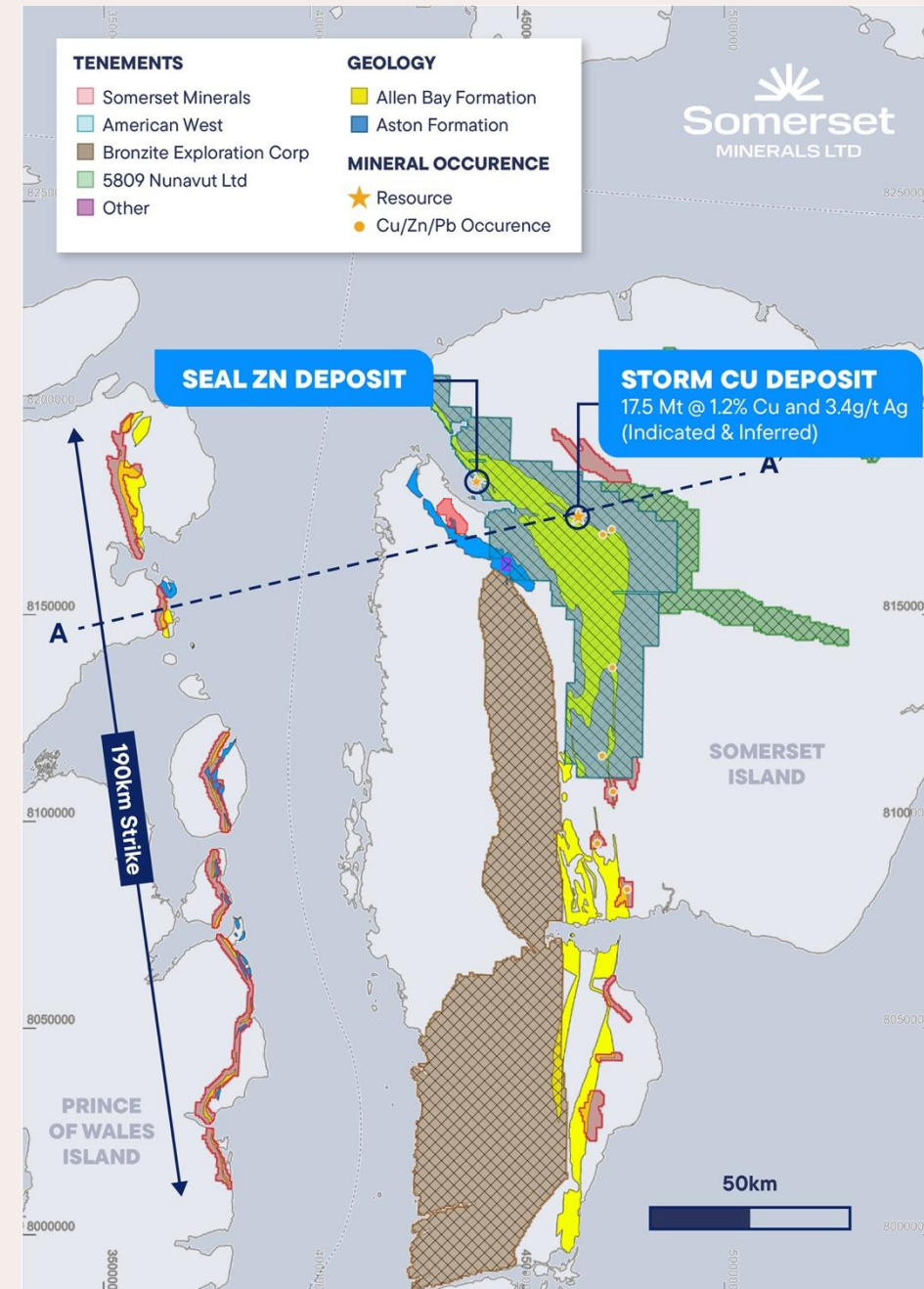


# Prescott Base Metals Project

Spanning over 240km, the Prescott Project area has excellent potential to host Sedimentary Hosted Copper deposits (Cu-Ag) and Mississippi Valley-Type deposits (Zn-Pb)

- The Prescott Project includes a significant land package directly **along strike and adjacent to American West Metals (ASX:AW1) Storm Project**<sup>1</sup>
- American West Metals Storm Copper Project currently hosts an Indicated & Inferred resource of 17.5 Mt @ 1.2% Cu and 3.4g/t Ag<sup>1</sup>
- An interpreted anticlinal structure has resulted in a **repetition of the same geological sequence which hosts the Storm Project** on the adjacent island where Somerset holds a 190km strike extent
- **Large ongoing airborne geophysical survey (~65% complete) has already identified a large gravity high at the Miguel prospect** located on Somerset Island and is 29 km from American West's Storm deposit
- The Prescott Project also **includes a significant land package which is directly along strike from the Storm Copper Project**
- Detailed **geochemical mapping completed in August** to validate Miguel and other anomalies identified from the geophysical survey and multispectral targeting

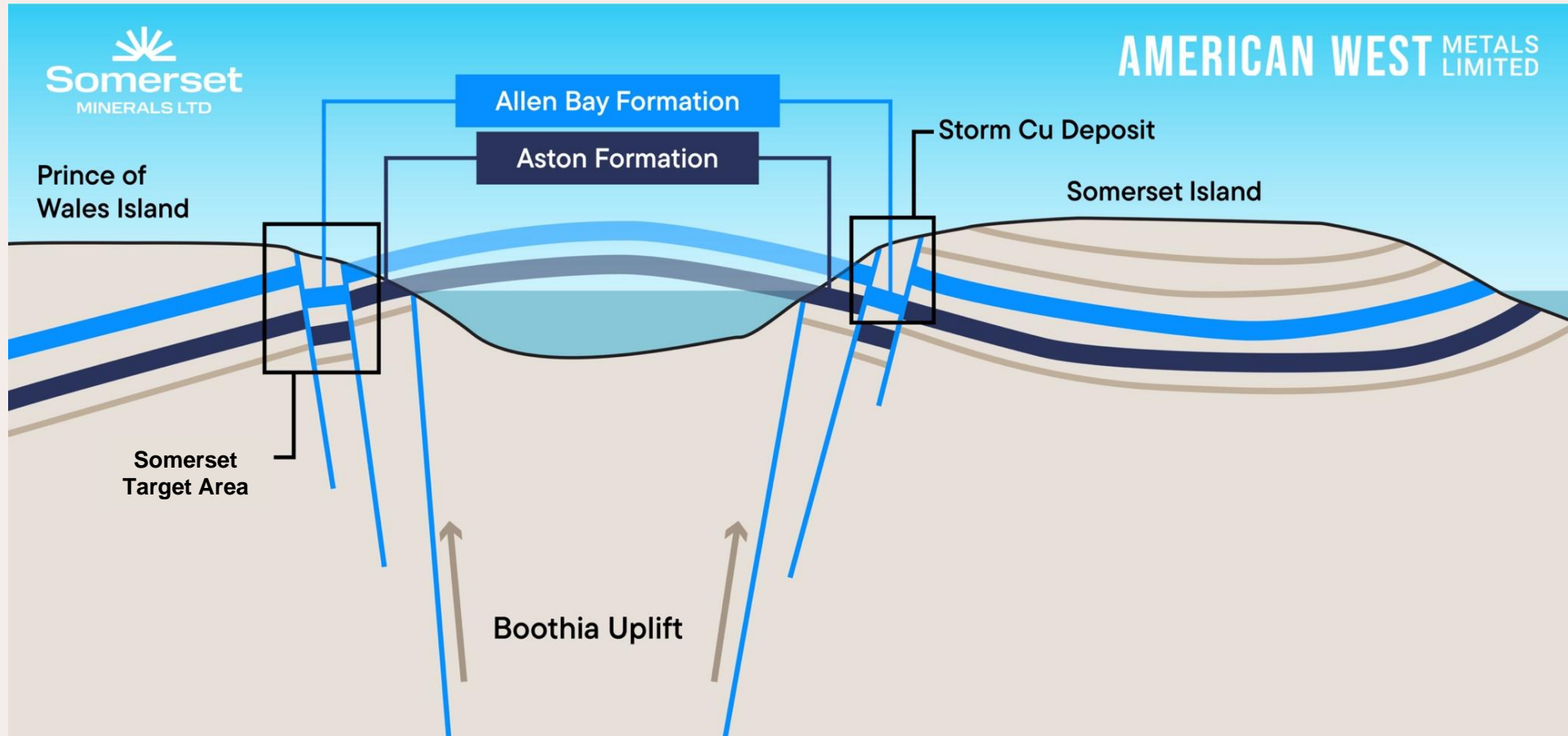
1. Refer to American West Metals Ltd's (ASX: AW1) (AW1) ASX Announcement on 30/01/2024 - Maiden JORC MRE for Storm. There is no certainty that further work by the Company will lead to achieving the same size, shape, grade, or form of the comparison resource. The Company's project is in a different stage of development and that further exploration needs to be undertaken to further prove or disprove any comparison.





# Anticlinal Structure Results in Repetition of Geology

An interpreted anticlinal structure has resulted in a potential repetition of the same geological sequence which hosts the neighbouring Storm Project, but on the adjacent Prince of Wales Island.





# Mineralisation Model

Somerset is targeting sediment hosted copper deposits akin to the neighboring Storm deposit (ASX: AW1).

## 1. Oxidised Source Rock

Source rock must be haematite stable and contain ferromagnesian minerals from which copper can be leached. Typical source rocks are continental red sandstone. **The likely source for the Storm deposit is the Aston Formation red beds.**

## 2. Brine to Mobilise Copper

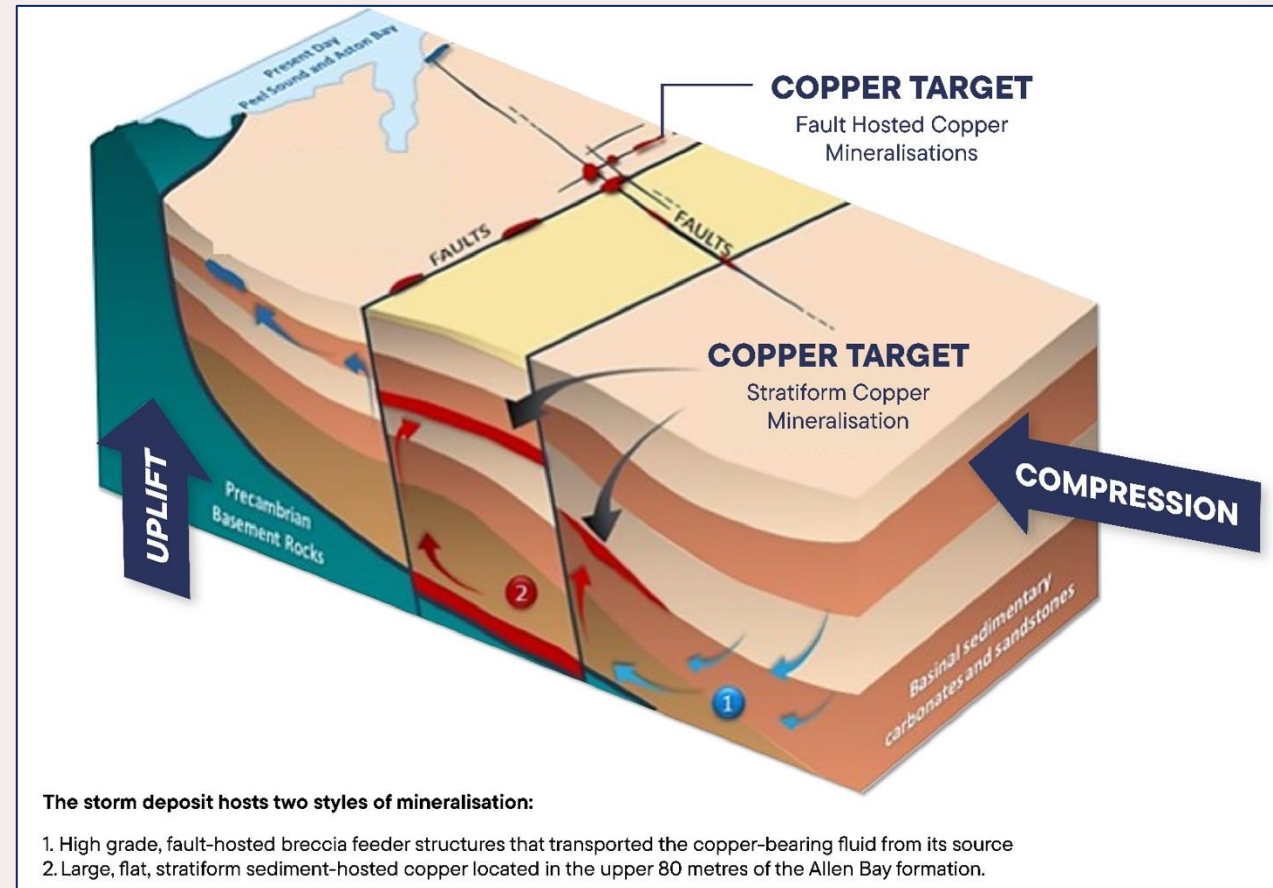
There must be a source of brine to mobilise copper. Evaporites are a common brine source and are often interbedded with red beds. **Evaporites are noted in the Bay Fiord Formation** and in other parts of the basin, which underlie the Allen Bay formation.

## 3. Fluid Conduit or Permeable Stratigraphy

These copper-bearing brines are then mobilised along a fluid conduit or permeable stratigraphic unit, there must be a reducing environment for the copper to precipitate. **The Allen Bay formation, which hosts the Storm deposit is rich in organic content (a reductant).**

## 4. Compression, Folding & Faulting

For a mineralising event to occur, metal-bearing oxidised fluids must mix with an appropriate reductant in a permeable or structurally accommodating host rock, often triggered by increased fluid pressures due to compression, faulting, or folding. **The Cornwallis fold belt and Boothia uplift events led to such compression**, resulting in significant folding and faulting.



Source: ASX:SMM 29/04/2024.



# **OTHER PROJECTS**





# Elizabeth Gold Project & Blackdome Mine

High grade gold exploration with future options for expediting production

## Elizabeth Gold Project

- High-grade mesothermal gold mineralization present in wide (~1.5 - 5m) vein sets
- Elizabeth Project is approximately 30km south of the Blackdome mill and is connected via contiguous claims along an existing forestry track
- Somerset has completed 80 holes for 19,500 metres to date
- 2023 Estimate: 632kt @ 4.73g/t Au for 96.1koz (Indicated & Inferred)<sup>1</sup>

## Black Dome Gold Mine

- High-grade Epithermal gold mineralisation, Previous producer, ~230k oz @ 22 g/t Au mill head grade
- Somerset drilled 5,000 metres at Blackdome in 2020, Alteration study completed highlighting potential for new discoveries
- Permitted 200 tpd capacity mill and tailings storage on site (suitable for processing Elizabeth and Blackdome ore)
- 2010 Estimate: 235kt @ 10.3g/t Au for 78.5Koz (Indicated & Inferred)<sup>2</sup>



1. See ASX:SMM 02/11/2023; 2. The Blackdome historic resource estimate was previously disclosed by the Company in the news release "Tempus Acquires Advanced Stage High-Grade Gold Project" dated August 19, 2019. The Company is not aware of any new information or data that materially affects the historical resource estimate included in this Investor Presentation and all material assumptions and technical parameters underpinning the historic resource estimates continue to apply and have not materially changed. There have been no material changes to the historical resource information released in the August 19, 2019 news release. The mineral resource estimate is historical in nature and are provided for information purposes only. A qualified person has not completed sufficient work to classify the historical estimate as current mineral resources under JORC and NI43-101 codes and should not be relied upon.



# Zamora Copper-Gold Projects

## Copper and gold exploration in Ecuador adjacent to Lundin Gold's Fruta del Norte Project

### Zamora

- Somerset's projects in Ecuador are located in heart of the Cordillera del Condor mineral belt of southeast Ecuador that hosts numerous major gold and copper porphyry deposits
- The Zamora Projects include the Valle del Tigre Project and the Rio Zarza Project
- Purchase Agreement executed with Barrick Gold (Ecuador) S.A. in July 2024 relation to the sale of the Valle del Tigre II mineral concession in southeast Ecuador for a total cash consideration of ~US\$320,000 and a 1.5% net smelter royalty on completion<sup>1</sup>
- Somerset still retains the Rio Zarza Project which is located adjacent to Lundin Gold's Fruta del Norte mine



1. See ASX:SMM 16/07/2024



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# Board of Directors



**Chris Hansen**

Non-Executive Director

Mr Hansen is a multidisciplinary metals and mining professional, combining core technical fundamentals with a strong finance and project development mind-set. Having initially focused on building a solid technical foundation with industry majors such as Fortescue Metals Group and Barrick Gold, Mr Hansen later joined a preeminent London based mining private equity fund developing robust investment skills, project development expertise, market knowledge and strong industry relations. Since returning to Australia, Mr Hansen has leveraged his experience in both public and private markets, more recently having led mining business development activities for one of Australia's largest private investment groups.

Mr Hansen is currently a Non-Executive Director of Horizon Minerals Limited (ASX:HRZ). Mr Hansen holds a BSc in Geology from the University of Auckland, and an MSc in Mineral Economics from Curtin University.



**Mike Edwards**

Non-Executive Chairman

Mr Edwards is a Geologist and Economist with over 25 years' experience in senior management roles within both the public and private sectors. Mr Edwards worked for Barclays Australia in their Commercial and Corporate Finance department before returning to university to complete a Bachelor of Science Geology. Mr Edwards then spent eight years as an Exploration and Mine Geologist, principally working in Australia with a focus on Archaean gold and base metals.

Over the past 15 years, Mr Edwards has held numerous Executive and Non-Executive Director roles, predominantly with ASX-listed companies and most recently was Non-Executive Chairman of Greenstone Resources Limited (ASX:GSR) which successfully merged with Horizon Minerals Limited (ASX:HRZ).

Mr Edwards is currently Non-Executive Chairman of Metal Hawk Ltd (ASX:MHK) and Non-Executive Director of De.Mem Pty Ltd (ASX:DEM). Mr Edwards holds a Bachelor of Business (Economics & Finance) from Curtin University of Technology, and a Bachelor of Science (Geology) from the University of Western Australia.



**Melanie Ross**

Non-Executive Director & Company Secretary

Ms Ross is an accounting and corporate governance professional with over 20 years of experience in financial accounting and analysis, audit, business and corporate advisory services in public practice, commerce and state government.

Ms. Ross is currently Director of a corporate advisory company based in Perth that provides corporate and other advisory services to publicly-listed companies.

Ms Ross is currently the Company Secretary for a number of small ASX-listed exploration companies. Ms. Ross holds a Bachelor of Commerce degree from Curtin University, West Australia and is a member of the Institute of Chartered Accountants in Australia and New Zealand and an associate member of the Governance Institute of Australia.