



NEWS RELEASE | 6 OCTOBER 2021

PRAIRIE ACQUIRES INTEREST IN HIGHLY PROSPECTIVE GREENLAND COPPER PROVINCE

Prairie Mining Limited (**Prairie** or **Company**) is pleased to advise that the Company has entered into an Earn-in Agreement (**EIA**) with Greenfields Exploration Ltd (**GEX**) to acquire an interest of up to 80% in the Arctic Rift Copper project (**ARC** or **Project**) in Greenland.

Highlights:

- Significant, large-scale project (5,774km² license area) with historical exploration results indicative of an extensive mineral system with potential to host world-class copper deposits
- The ARC mineral system is known to be prospective for basalt, fault, and sedimentary rock-hosted copper mineralisation however, it remains virtually unexplored, giving the Company a first mover advantage in a major new metallogenic province
- Historical field programs identified widespread copper-silver occurrences at surface:
 - geochemical sampling found that 80% of stream sediment samples contain native copper
 - native copper is found in situ or as float, with individual clasts of native copper weighing up to 1 kg+
 - high grade copper sulphides, grading up to 2.15% Cu and 35.5g/t Ag over 4.5m true width, are known from trench sampling of fault zones within sediments
 - assay results from individual samples are much higher grade, including:

▪ 53.8% Cu and 2,480g/t Ag	▪ 7.9% Cu and 53 g/t Ag
▪ 20.7% Cu and 488g/t Ag	▪ 5.3% Cu and 112 g/t Ag
▪ 12.5% Cu and 385g/t Ag	▪ 5.0% Cu and 304 g/t Ag
▪ 9.0% Cu and 112 g/t Ag	▪ 4.0% Cu and 82 g/t Ag
- High priority target covering ~640 km² already identified with near-term discovery potential (**Minik Anomaly**) which has the highest copper grades that are proximal to a coincident gravity, conductivity and magnetic anomaly in the north-eastern portion of ARC (*Figure 1*)

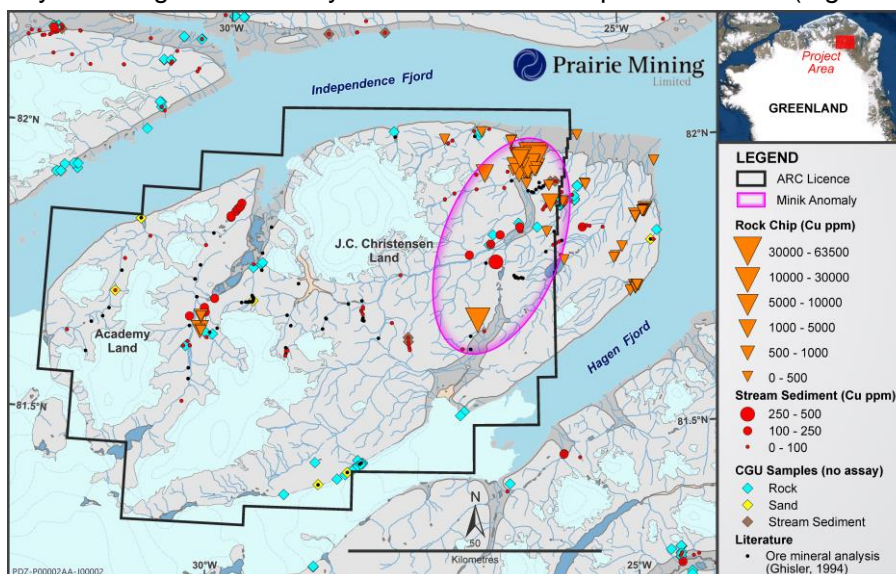


Figure 1: ARC licence area showing historical geochemistry and the Minik Anomaly

Prairie Mining Limited | LSE / ASX / GPW: PDZ | ABN: 23 008 677 852 | www.pdz.com.au

LONDON Unit 3C, 38 Jermyn Street | London | SWY1 6DN | T: +44 207 478 3900

PERTH Level 9, 28 The Esplanade, Perth WA 6000 | T: +61 8 9322 6322 | F: +61 8 9322 6558

WARSAW Wiejska 17/11 | Warsaw | 00-480

For personal use only

- Greenland is a mining friendly jurisdiction with strong Government support for expanding its mining industry, simple laws and regulations, and a competitive fiscal regime
- Greenland is increasingly recognised as one of the last great mineral resource frontiers having recently attracted interest from Rio Tinto, Anglo American, DeBeers, Glencore, Trafigura, and IGO, as well as KoBold Metals who have joint ventured with Bluejay Mining to explore in Greenland for critical materials used in EVs. KoBold is backed by Microsoft co-founder Bill Gates, Bloomberg founder Michael Bloomberg, Amazon founder Jeff Bezos, and Ray Dalio, founder of the world's largest hedge fund Bridgewater Associates (see Figure 3)
- Strong pipeline of news flow is expected as Prairie mobilises the award-winning GEX exploration team who have extensive operating experience, including managing the Frontier Project in JV with IGO, and well-established relations with government and other key stakeholders in Greenland



Figure 2: Native copper sample from south of the Minik Anomaly (~81.66°N, 26.8°W)

- The initial exploration program creates the potential for multiple discoveries with the objective of delineating relatively highly certain, drill-ready targets and will focus on high-resolution satellite mapping, a range of geophysical surveys, widespread geochemical sampling/analysis and hand-held core drilling

The Company will earn an 80% interest in the Project by:

- a) spending A\$3,500,000 on the Project within three years to earn a 51% interest;
- b) spending a further A\$3,500,000 on the Project within four years to earn a further 19% interest (taking the total interest to 70%); and
- c) spending a further A\$3,000,000 on the Project within five years to earn a further 10% interest (taking the total interest to 80%).

Thereafter, the parties must contribute on a pro rata basis or be diluted. Prairie must also issue GEX 3 million shares at the commencement of the JV (escrowed for 12 months). Further terms of the EIA are outlined below in the Commercial Terms section.

Prairie's CEO Mr Ben Stoikovich commented: *"The ARC project marks Prairie's first move into the energy metals space. Copper is integral to the energy transition, with copper consumption over the next 25 years forecast to be more than has ever been mined. The transaction gives Prairie a first-mover advantage in what we think is a prolific but virtually unexplored major new metallogenic province, in a pro-mining jurisdiction with a highly experienced Greenland exploration team utilising cutting-edge exploration to maximise the potential for discovery of a world class copper deposit from the outset"*.

Entitlements Issue

To provide funding for new and current activities the Company will undertake a one (1) for ten (10) pro rata non-renounceable entitlements issue at \$0.25 (£0.16/€0.15/PLN0.72) per share (**Entitlements Issue**) to raise up to \$5.8 million before costs.

Eligible shareholders will be entitled to acquire one (1) new ordinary share (**New Share**) for ten (10) ordinary shares held at the record date (5 November 2021). New Shares under the Entitlements Issue will be offered at \$0.25 (£0.16/€0.15/PLN0.72) per share.

Dispute with the Polish Government

The Company will continue to defend its interests in Poland through International arbitration claims (**Claim**) against the Republic of Poland under both the Energy Charter Treaty (**ECT**) and the Australia-Poland Bilateral Investment Treaty (**BIT**) (together the **Treaties**).

Prairie's Claim alleges that the Republic of Poland has breached its obligations under the applicable Treaties through its actions to block the development of the Company's Jan Karski and Debiensko mines in Poland which has effectively deprived Prairie of the entire value of its previous investments in Poland.

For further information, please contact:

Prairie Mining Limited

Ben Stoikovich, Chief Executive Officer
Sapan Ghai, Head of Corporate Development
Kazimierz Chojna, Commercial Officer

Tel: +44 207 478 3900

Email: info@pdz.com.au

For personal use only

GREENLAND'S RAPIDLY EXPANDING RESOURCES SECTOR

Greenland is increasingly recognised as one of the last great mineral resource frontiers, and has recently attracted interest from mining majors (Figure 3).

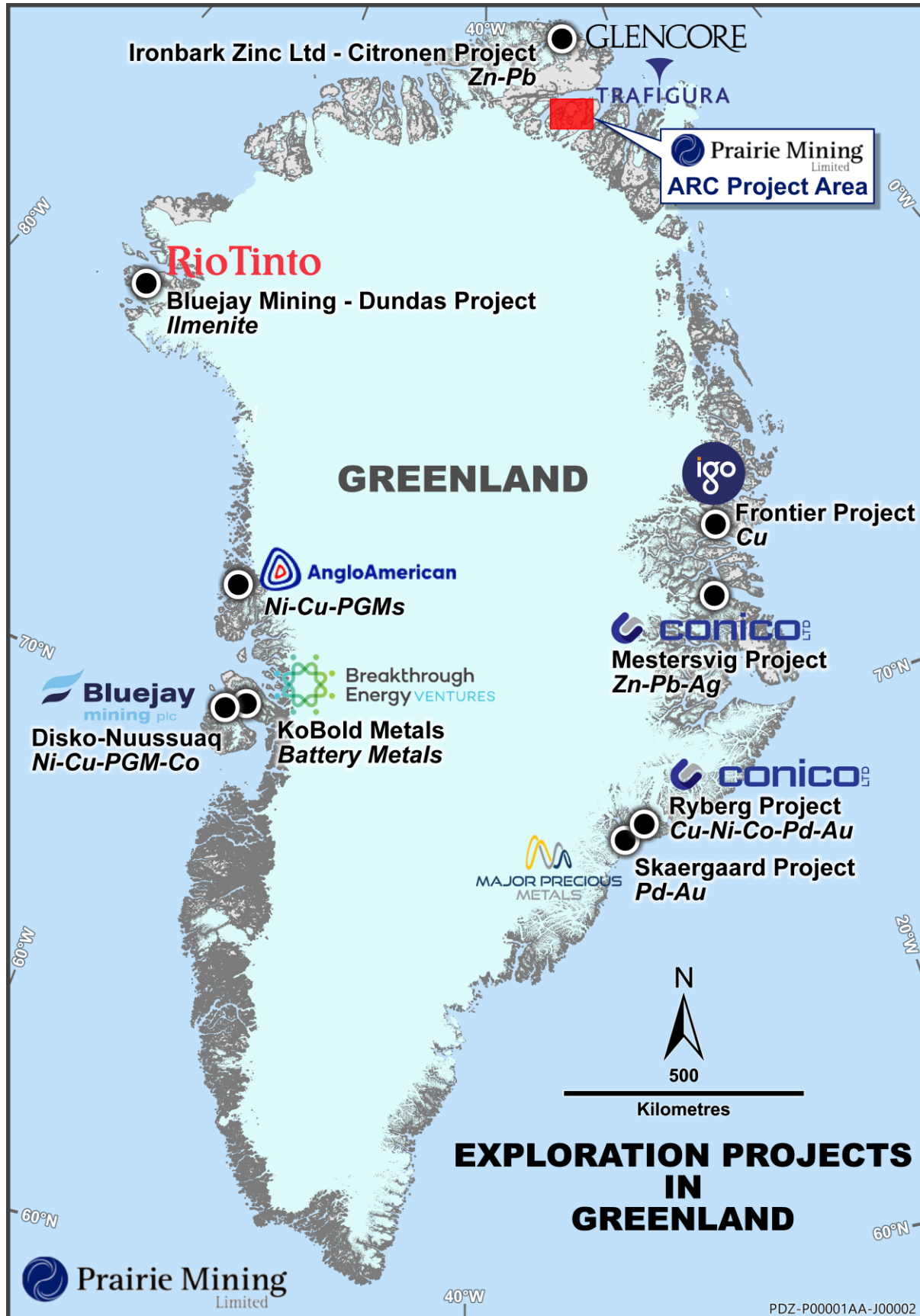


Figure 3: Greenland Mineral Occurrences and current minerals activity in the Country

For personal use only

Private mineral exploration company KoBold Metals recently signed an agreement with London-listed Bluejay Mining (JAY.L) to explore in Greenland for critical materials used in electric vehicles. KoBold's principal investors include Breakthrough Energy Ventures, a climate and technology fund backed by Microsoft (MSFT.O) co-founder Bill Gates, Bloomberg founder Michael Bloomberg, Amazon (AMZN.O) founder Jeff Bezos, and Ray Dalio, founder of the world's largest hedge fund Bridgewater Associates. Other KoBold investors include Silicon Valley venture capital fund Andreessen Horowitz and Norwegian state-controlled energy company Equinor. KoBold have committed US\$15 million in exploration funding to earn a 51% interest in the Disko-Nuussuaq Ni/ PGE project on Greenland's west coast.

ARC PROJECT SUMMARY

Prairie and GEX consider the observed geological setting and features of ARC to be indicative of an extensive mineral system capable of hosting world-class copper deposits.

The large scale of the mineral system, widespread copper anomalism, combined with dual mineralising events are analogous to the largest copper systems known worldwide. Accordingly, Prairie considers that ARC has the potential to be a globally significant metallogenic province.

Very high-grade copper mineralisation identified at ARC is associated with the Minik Anomaly, a coincident magnetic-electromagnetic-gravity feature in an area where there is a change in oxidation state and widespread native copper in stream sediments. These features are presented as the footprint of a large-scale hydrothermal system. The frequency and size of the native copper clasts, and the high grade of the copper-silver sulphides that are exposed at the surface, bode well for the probability of discovery.

There are multiple additional identified targets and favourable geological settings to be tested within the ARC project area, including:

- the highly anomalous basalt is a high priority target that has not previously been the focus of commercial exploration. These basalts are the source of the native copper.
- the sulphide mineralised faults passing through these basalts into the overlying sediments have been subject to first pass exploration and shown to be rich in copper and silver. The high-grade sulphides in these faults will be the focus of further exploration.
- the permeable coarse-grained sandstone within the Jyske Ås Fm has high grade copper that is effectively unexplored. This stratiform mineralisation adds the potential for significant lateral extension of the known mineralisation exposed in the faults of the Discovery Zone.

As such, the extensive ARC mineral system is known to be prospective for basalt, fault, and sedimentary rock-hosted ('sediment-hosted') mineralisation that despite the attractive grades, is virtually unexplored.

ARC PROJECT OVERVIEW

The ARC project consists of a single Special Exploration Licence, covering an area of 5,774km², in northern Greenland.

ARC is located within an inner-fjord system and covers most of J.C. Christensen Land, a promontory that is flanked to the north and northwest by Independence Fjord, and to the southeast by Hagen Fjord (Figure 4). The expansive cliff faces of the fjords provide a unique insight into the structural geology of ARC and aid in geological interpretation (Figure 5).

The project area is uninhabited, with the nearest permanently inhabited site being the Station Nord military facility, located approximately 200km to the east.

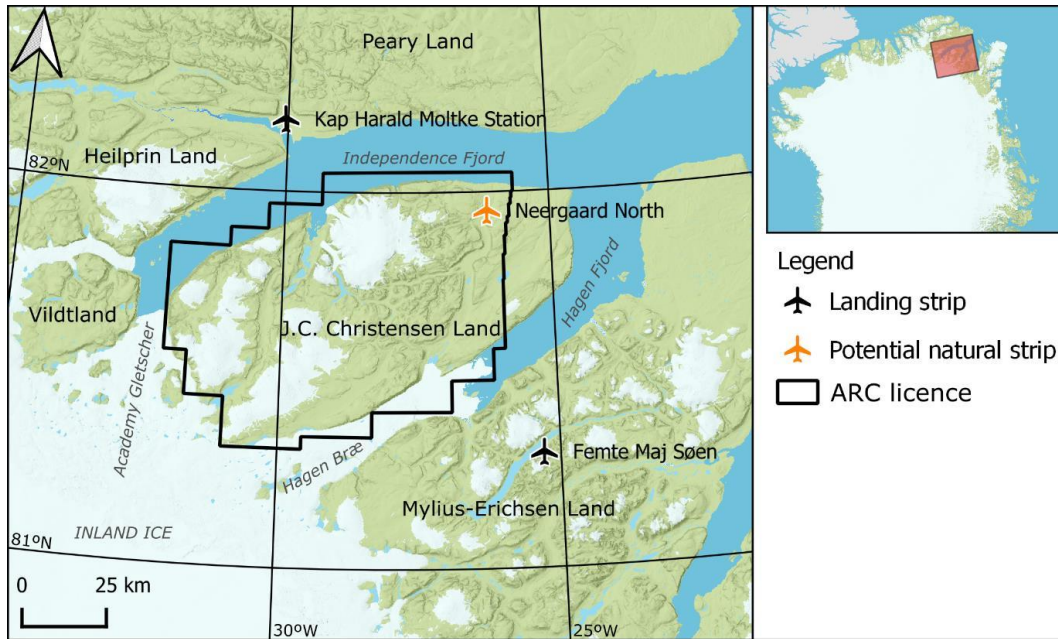


Figure 4: ARC licence area



Figure 5: Independence Fjord (looking east)

For personal use only

The region is an Arctic desert, vegetation and wildlife are minimal and there are no designated sensitive areas within the Project. Flat, low elevations are typical of northeast J.C. Christensen Land and the rest of the area consists of high plateaus with elevations around 800m above sea level, with incised 'U' shaped valleys (Figures 6 and 7).



Figure 6: Physiography of ARC (Note: orange tents in the middle of the image for scale)



Figure 7: Air photo of main area of interest at ARC (c1979)

The big fjords that surround the Project reliably provide deep-water access throughout the ARC licence. An airstrip which has been used to land heavy-lift aeroplanes is adjacent to the Project, and sites suitable for smaller airstrips are located within it.

As a jurisdiction for exploration and mining, Greenland has many favourable attributes, such as being politically stable, pro mining, one of the lowest rates of corruption in the world, simple laws and regulations, low royalties, favourable tax treatment for mineral projects, and good access to markets.

Project Geology and Exploration Potential

The ARC mineral system is known to be prospective for basalt, fault, and sediment -hosted copper mineralisation however, it remains virtually unexplored. This provides the Company and GEX with essentially a first mover opportunity in a metallogenic province with the potential to host world class copper deposits.

ARC is located near an ancient triple junction that is associated with an ascending mantle plume in Mesoproterozoic times. This mantle plume emplaced a large amount of basalt lavas over a short period of time.

ARC contains a sequence of Mesoproterozoic-aged sediments sandstones belonging to the Independence Fjord Group that have been intruded by highly altered dolerites and overlain by 1.2km of Mesoproterozoic-aged flood basalts ('Zig-Zag Fm' basalts). In turn, the basalts are overlain by 1.1km of Neoproterozoic-aged clastic and carbonate sediments belonging to the Hagen Fjord Group (Figures 8 and 9). The lower portion of the Hagen Fjord Group is dominated by sandstones and siltstones, and the upper part by limestone and dolomites.

The metamorphic grade of the Zig-Zag Fm basalts is of the zeolite facies, and the Hagen Fjord Group sediments show lower grade metamorphism. Due to the location within a passive margin, there is adequate preservation aside from mechanical erosion.

The strata dips sub-horizontally (1-3°) to the northeast and hosts fault orientations parallel to major regional structures (Figures 9 and 10). Folding is almost non-existent.

For personal use only

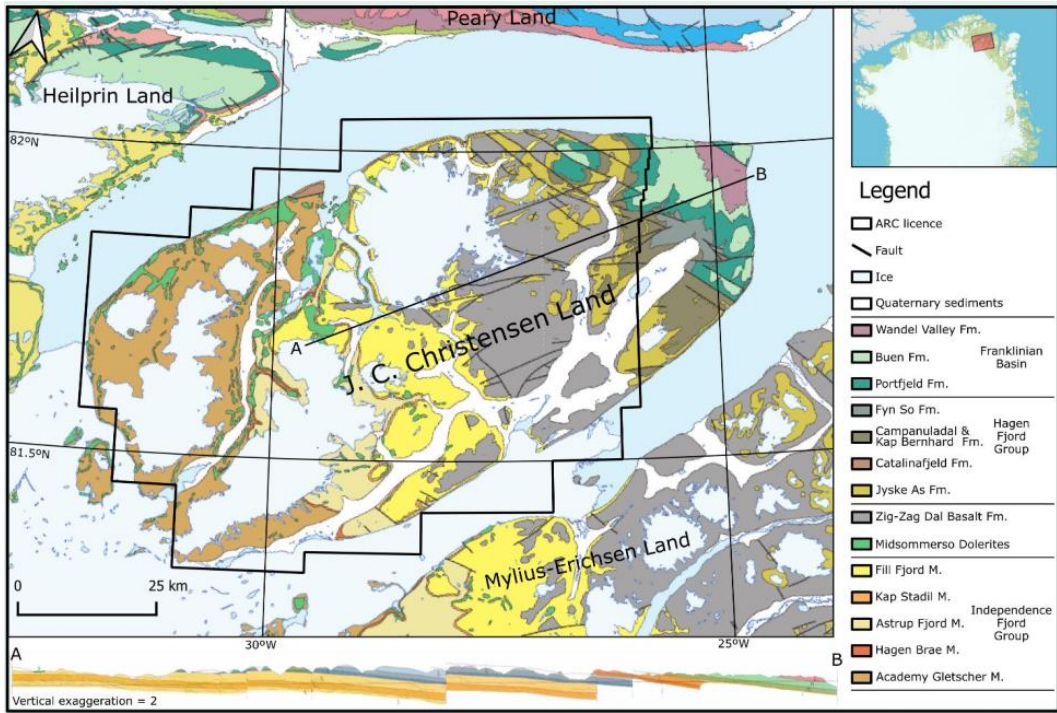


Figure 8: Geological Map of J.C Christensen Land



Figure 9: Oblique photo showing exposure of Stratigraphy and Structures in the fjord. Cliff height is ~400m

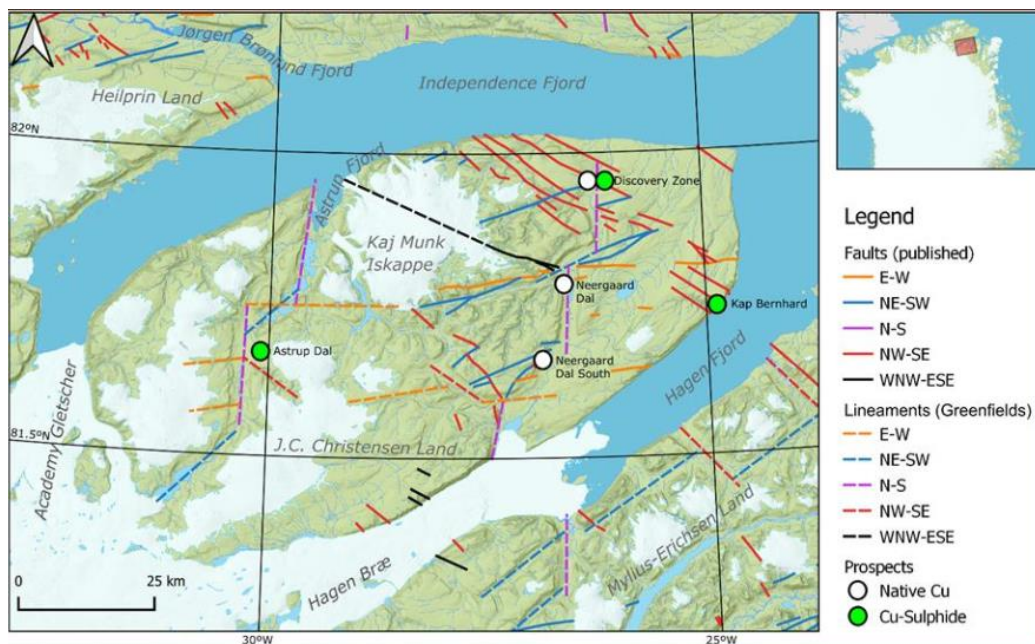


Figure 10: Faults and lineaments of J.C. Christensen Land and Prospect locations

For personal use only

Copper mineralisation occurs in both the Zig-Zag Fm basalts and Hagen Fjord Group sediments. The basalts are known to contain in situ native copper, which is found extensively in the surrounding drainage systems. Significantly, native copper specimens weighing up to 1kg have been recovered during historical exploration campaigns.

The age, setting and mineral composition makes the Zig-Zag Fm copper analogous to the copper deposits of the Michigan Upper (Keweenaw) Peninsula, and a primary source of copper for anomalies reported in the overlying sediments. Fault breccias observed to transect the basalts and overlying sediments are interpreted to represent fluid pathways. These breccias, which are up to 25m wide, also show copper mineralisation.

Copper and associated silver mineralisation occur in the source rocks, faults, and in 'classic' deposition sites. The highest copper grades are close to geophysical gravity, magnetic and electromagnetic anomalies.

Previous Work within ARC and Northern Greenland

ARC, and Northern Greenland in general, have been subject to scant exploration, with prospecting being restricted to reconnaissance-scale commercial exploration and government/academic work. No work has occurred within ARC for over a decade.

Mapping and Sampling

Initial geological expeditions took place as early as 1921, with a handful of follow-up geological expeditions taking place from the late 1940's to the late 1960's.

The first commercial investigation of the geology in northern Greenland was conducted between 1969 and 1972 by the Greenarctic Consortium (**Greenarctic**). The work involved a first pass evaluation of a 40,000 km² area encompassing the region around Independence Fjord. The 1969 field program was successful in identifying native copper occurrences at two locations in the Mylius-Erichsen Land, to the southeast of ARC (Figure 4). In 1970, an airborne photogeological survey and interpretation was commissioned over the area. In 1972, Greenarctic conducted its second field mapping program over a ~5,000 km² exploration licence on Heilprin Land and southern Peary Land, to the west of ARC, and identified occurrences of sediment-hosted copper-silver sulphides.

Between 1978 and 1980, the Greenland Geological Survey (**GGS**) conducted a campaign in the region. The program successfully identified sediment-hosted copper sulphides and oxides. The regional mapping program included stream sediment sampling for geochemistry, microscopy and heavy mineral analysis. Between 1993 and 1995, the GGS conducted a 1:500,000 scale geological mapping exercise, with mapping and stream sediment surveys identifying sediment-hosted copper sulphides and additional native copper bearing basalts.

Modern exploration activity was conducted between 2010 and 2011 by Avannaa Resources Limited (**Avannaa**). In its first year, Avannaa focussed its work in a small area in the northern part of ARC, known as Neergaard North. The work involved mapping and sampling designed to follow up on sediment-hosted copper sulphides identified by government workers in the 1990s. The program was successful in identifying the three brecciated faults that comprise the 'Discovery Zone'. In response to this success, trench sampling was also performed.

In 2011, Avannaa greatly increased its exploration by conducting a heli-supported reconnaissance program over a large area to test the copper prospectivity of various stratigraphic positions, as well as extending the length of the 'Discovery Zone'. The 2011 program extended the strike length of the Discovery Zone breccias from 800m to over 2km before disappearing undercover, and successfully identified copper anomalous stratigraphic horizons over the entire licence area.

Geochemistry

There are 549 known geochemical samples from within J.C. Christensen Land (Figure 11). The samples comprise a mix of Government and private sector programs:

- 310 rock chip, trench and grab samples from the 2010-2011 Avannaa exploration program. These samples cluster in northern ARC;
- 145 rock chip samples from 1978-1980. The samples are heterogeneously distributed and comprise 1 litre of unsieved sediment. Native copper occurs in 80% of samples from ARC; and
- 94 stream sediment samples collected by the GGS from 1993-1994.

In government storage in Copenhagen, there are 405 samples of which 311 are unique, and 40 have been subject to more recent analysis. In addition, there were 227 stream sediment samples that were analysed in the field using handheld X-ray fluorescence (XRF) equipment by Avannaa in 2011. The XRF samples were left in the field. No other analysis methods were used.

The historical field programs identified widespread copper-silver occurrences at surface:

- native copper was found in situ or as float, with individual clasts of native copper weighing up to 1 kg+
- high grade copper sulphides, grading up to 2.15% Cu and 35.5g/t Ag over 4.5m true width, are known from trench sampling of fault zones within sediments
- assay results from individual samples are much higher grade, including:
 - 53.8% Cu and 2,480g/t Ag
 - 20.7% Cu and 488g/t Ag
 - 12.5% Cu and 385g/t Ag
 - 9.0% Cu and 112 g/t Ag
 - 7.9% Cu and 53 g/t Ag
 - 5.3% Cu and 112 g/t Ag
 - 5.0% Cu and 304 g/t Ag
 - 4.0% Cu and 82 g/t Ag

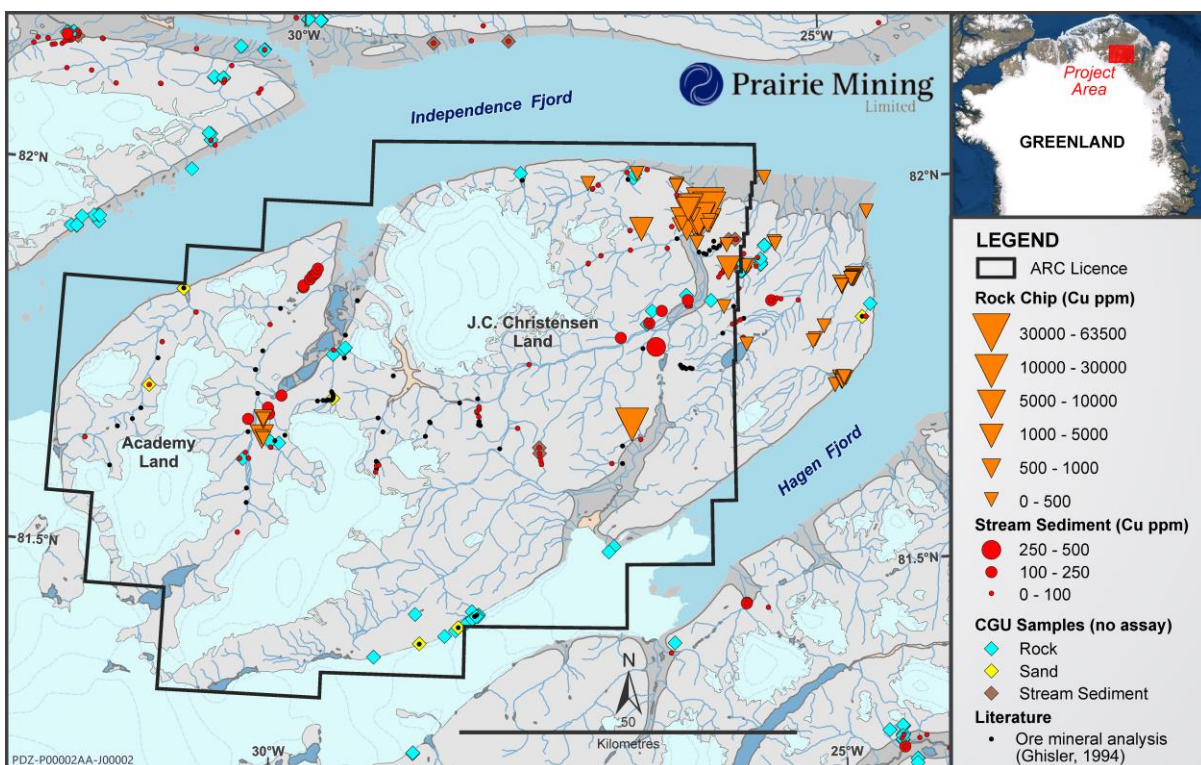


Figure 11: Historical Geochemical Sampling Results

Geophysics

There are five identified geophysical surveys within or covering ARC. The most recent survey that focussed on ARC was conducted over 20 years ago. In 1971, the Greenarctic Consortium funded an airborne magnetic survey over much of northern Greenland. The first-pass, low-resolution survey flew with a grid spacing of 2.5km by 15km and at an altitude of 1.85km.

In 1978, the Geodetic Institute (Copenhagen) conducted a land-based gravity survey of North Greenland with an irregular grid. A gravity map was produced with contours of 20mgal. A gravity high was identified in the north of Hagen Fjord (within northern ARC), which was attributed to the Zig-Zag Fm and Midsommersø Intrusions.

Between 1993 and 1996, the Alfred Wegener Institute (**AWI**) for Polar and Marine Research conducted a high-level aeromagnetic survey of eastern and northeastern Greenland. The survey flew using inline and crossline direction from 10km to 40km and the altitudes up to 3,700m above sea level.

In 1998, the Greenland Government commissioned an airborne electromagnetic-magnetic survey (**AEM1998**) which focussed on the northern portion of J.C. Christensen Land. The survey had 400m line spacing with 4,977 line kms flown. The total magnetic intensity was highest in the middle of the survey area (Figure 12). The apparent electromagnetic conductance indicates linear anomalies that are consistent with the regional mapping of the lithology and faults in the area.

In 2009, a collaborative effort between academics and geological surveys with Arctic interests compiled new gravity and magnetic anomaly maps under the Circum-Arctic Mapping Project (**CAMP**). The project merged potential field data from the collaborating institutes to create seamless gravity and magnetic maps of the Arctic. The magnetic map has a grid resolution of 2km x 2km and the gravity map has a resolution of 10km x 10km (Figure 13).

In 2011, satellite imagery was processed over J.C. Christensen Land, Mylius-Erichsen Land, Heilprin Land, and Erlandsen Land. ASTER multispectral data was used to identify lithologies data which was processed to produce a digital elevation model ($\pm 10\text{m}$ vertical within a 15m radius).

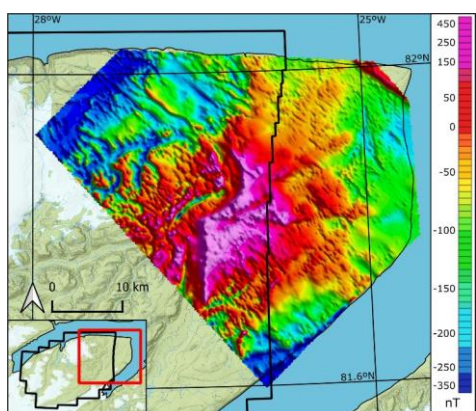


Figure 12: AEM98 Total Magnetic Intensity

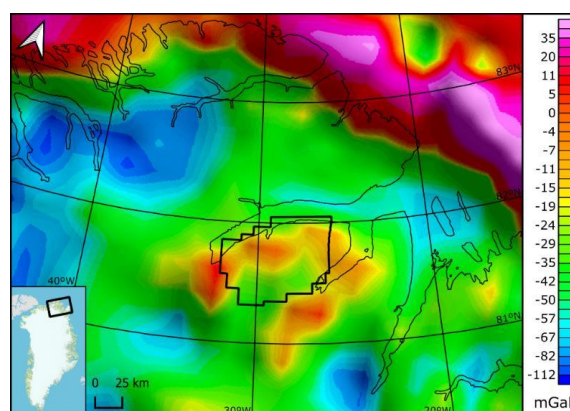


Figure 13: CAMP Gravity Map

In 2021, the Government updated its data portal to include a new gravity data set that was compiled by the Technical University of Denmark (**DTU**). The modelled responses in the DTU honor the ground gravity measurements shown in (Figure 14). The gravity high located in northeastern JC Christensen Land is also coincident with the magnetic high identified by AWI and in AEM1998.

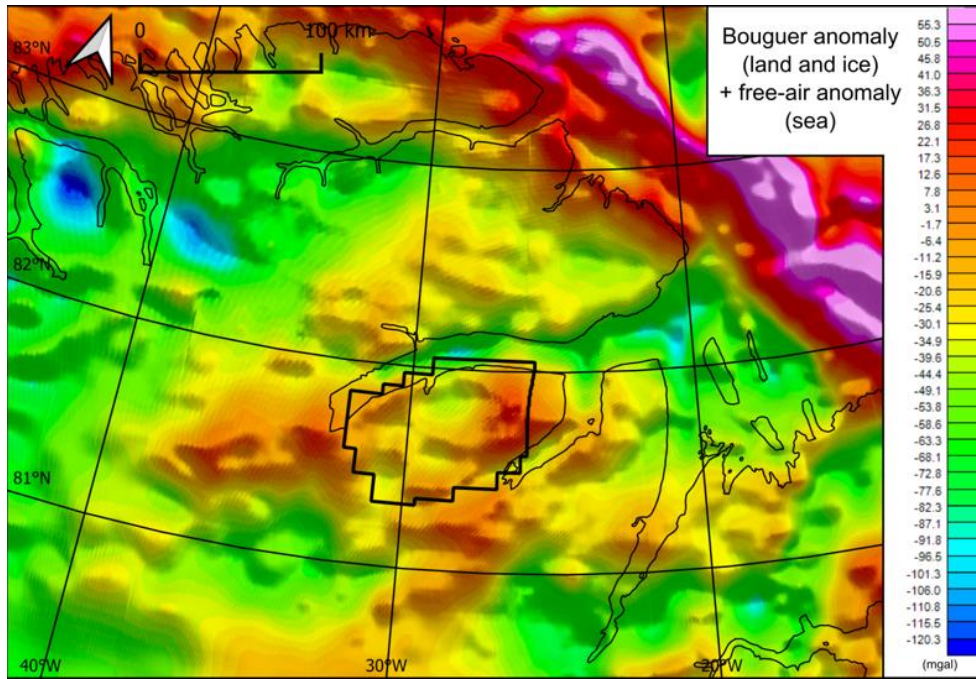


Figure 14: DTU gravity compilation

Identified Prospects and Target Areas

Discovery Zone

The most advanced prospect within ARC is the copper-silver bearing Discovery Zone, located at the northern end of Neergaard Dal (Figure 15). The Discovery Zone was identified in 2010 as a follow up to a geochemical anomaly identified by the GGS in 1994.

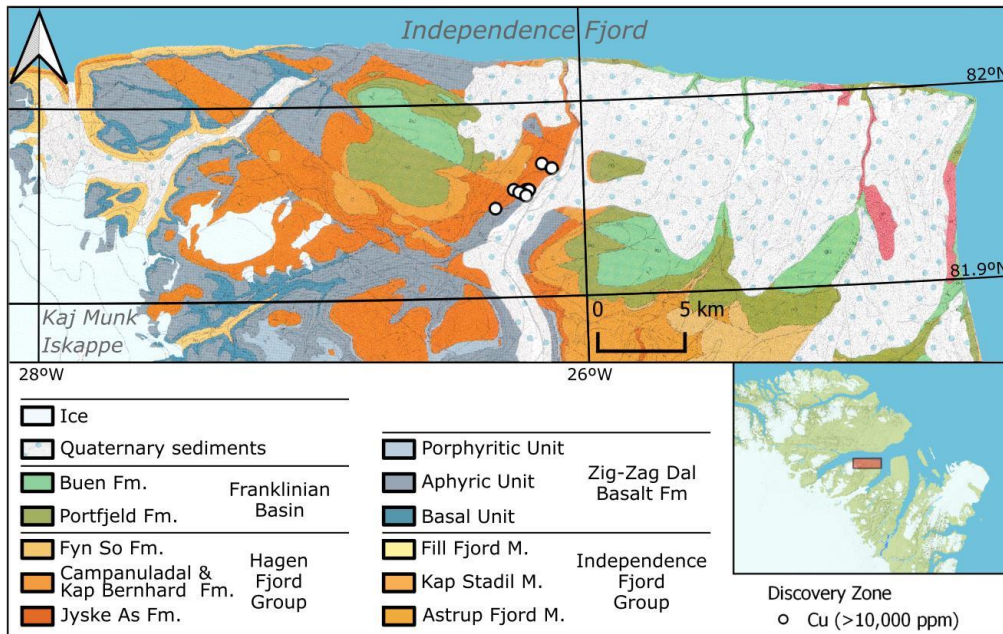


Figure 15: Location and Geology of Discovery Zone

The Discovery Zone is comprised of at least three parallel breccia faults trending northwest-southeast, with the furthest faults being around 2km apart (Figures 8, 9, 10 and 15). The faults are traced for a minimum of 2km along strike before they disappear underneath moraine. The Discovery Zone is open in both directions.

For personal use only

The width of the fault breccias is variable, ranging from 1m to 25m thick. The host lithology is red sandstones of the lower Jyske Ås Fm, and they are proximal to outcrops of Zig-Zag Fm. The breccias have copper sulphide and copper oxide mineralisation. The copper-bearing species include chalcocite, brochantite, bornite, chalcopyrite, and malachite. The mineralisation is expressed in two main forms, within which there are two sub-forms:

1. **Breccia bound.** Mineralisation occurs in thin quartz-dominated veining within the fault breccia and contains disseminated copper sulphides (Figure 16). Assays from this material grades up to 53.8% Cu and 2,480g/t Ag (Figure 17).

Within the breccia-bound mineralisation are intensely potassic, unconsolidated materials known as 'Black Earth' (Figure 18). The multiple but discontinuous 0.7m to 3m horizons have lengths between 2m to 50m. The Black Earth material contains high grades of copper and silver, with reported true widths of 4.5m grading 2.15% Cu and 35.5g/t Ag (Chip Line #7, sampled interval 5.25m, estimated true width 4.5m).

2. **Stratiform.** Mineralisation occurs immediately adjacent to the faults and comprises lenses and blebs of chalcocite and bornite measuring from mm-scale to 15cm long (Figure 20).

Within the stratiform mineralisation is a poorly consolidated sandstone that is identified as a potentially vast target horizon within the Jyske Ås Fm. The outcrop shows pervasive interstitial chalcocite, bornite and chalcopyrite (Figure 19).



Figure 16: Mineralisation types of the Discovery Zone

Note: The photo is of the 2010 field campaign.

For personal use only

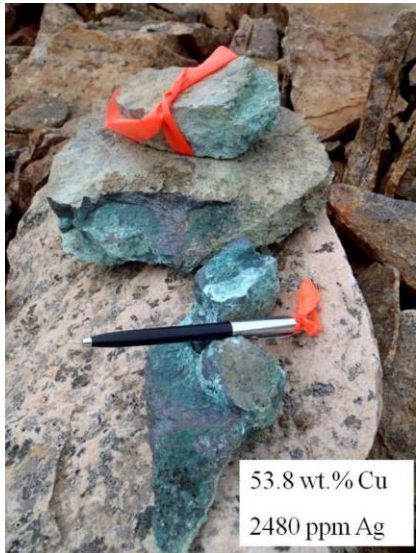


Figure 17: Breccia bound copper mineralisation

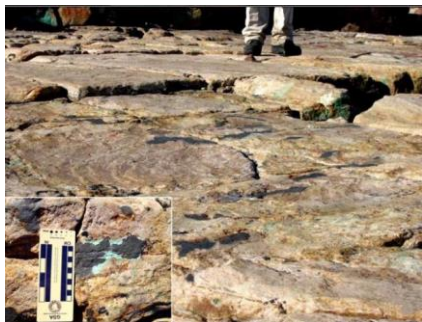


Figure 19: Stratiform copper mineralisation in the Jyske Ås Fm

Note: Dark minerals are mostly chalcocite, although bornite is present as well.



Figure 18: 'Black Earth' copper mineralisation



Figure 20: Stratiform copper mineralisation in the poorly consolidated Jyske Ås layer.

Note: The white arrows denote chalcopyrite, and the red arrows show bornite with chalcocite rims.

Zig-Zag Formation

Native copper float frequently occurs near the Zig-Zag Fm in the area around the Discovery Zone and Neergaard Valley (Figure 21). Outside of ARC a 1.5m long chip sample returned a significant grade of 1.97% Cu, and a grab sample returned 3.17% Cu from chalcocite filled vesicles (Figure 22). The Company and GEX consider the widespread occurrence of low-grade copper mineralisation, the frequent presence of sizeable native copper, and the sampled grades within the licence to be very significant.



Figure 21: Large native copper specimens from ARC. Sample on the right weighs ~1 kg

Note: Samples come from immediately east of licence (81.87° N, 24.79° W). They were found as float that originated from the basalt within ARC.



Figure 22: Chalcocite filled vesicles of Zig-Zag Fm

Note: Chalcocite appears light grey in colour due to metallic reflections. The sample is ~4cm in width and comes from outside of the licence (~80.64°N, 24.59°W).

Campanuladal Formation

The Campanuladal Fm was known to contain anomalous copper since the late 1970s. Government work in the early 1990s managed to trace chalcopyrite and galena for several kilometres within the central part of the formation. Disseminated copper sulphides (often chalcopyrite) are widespread, and one such location is close to the Discovery Zone in the northeast corner of ARC.

Minik Anomaly

The empirical geophysical and geochemical evidence shows multifaceted anomalous within ARC. The Minik Anomaly is defined by multiple coincident, and proximal, geophysical (magnetic-electromagnetic-gravity) and geochemical anomalies over a ~640 km² area in the north-eastern portion of ARC where high grade copper mineralisation has been identified (Figure 23). This large scale, high priority target area will be a key focus of the first field campaign.

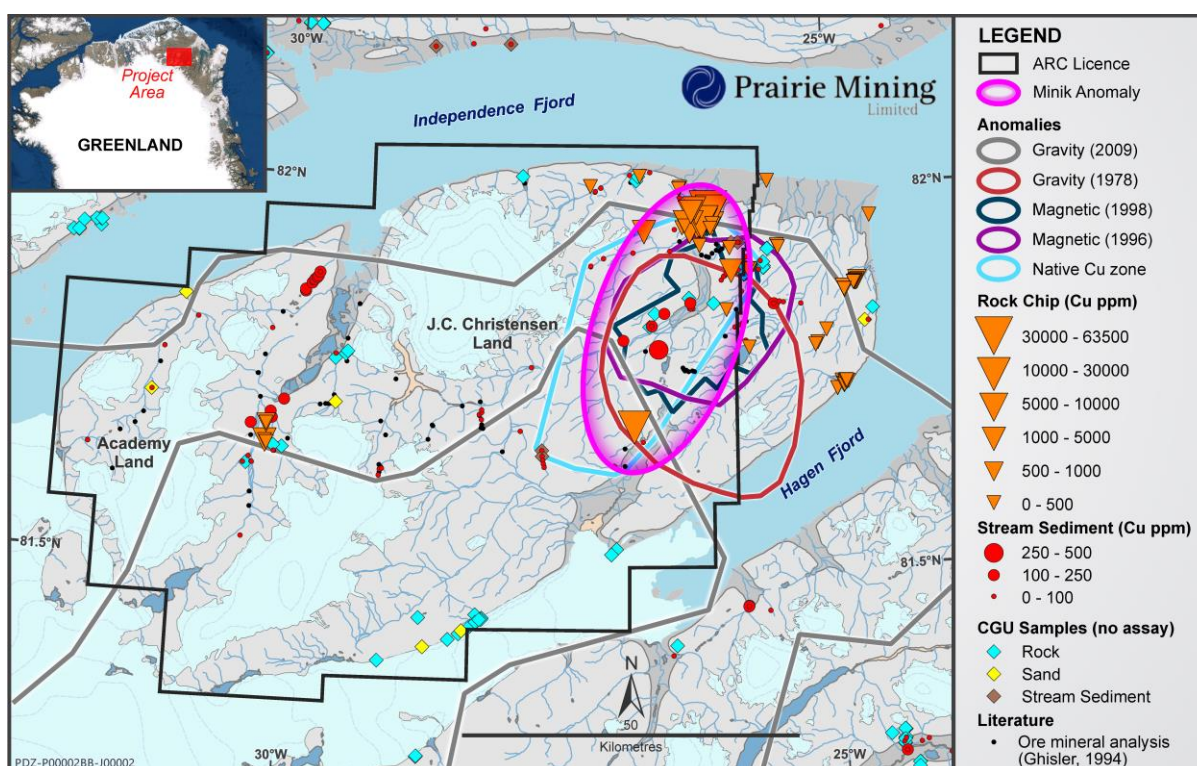


Figure 23: Minik Anomaly

Other Commodities

North Greenland contains multiple indications of mineralisation, and whilst copper is the target commodity for the ARC, the region to the north includes a large-scale zinc deposit, and there are indications of nickel-platinum group elements within the ARC licence. The known mineralisation occurs across a range of stratigraphic positions and is believed to be the result of more than one mineralising event.

The mafic intrusions of the Midsommersø Intrusions are prospective for magmatic-hosted nickel-copper-platinum group element (**Ni-Cu-PGE**) mineralisation. The Company and GEX identify supportive evidence in both the intrusions and their extrusive equivalents in the overlying Zig-Zag Fm.

The basal flows of the Zig-Zag Fm basalts show a marked depletion in nickel. Such a depletion suggests that the nickel may have been deposited into sulphides and conceptually, as nickel sulphide deposits. There has been no effective commercial work on testing the nickel sulphide potential of ARC.

Target Generation – Deposit Types

In terms of exploration targeting at ARC, the known mineralisation is ascribed to two distinct deposit types:

- Sediment-hosted stratiform copper - within this family of deposit types, ARC is analogous to the super-giant Katangan Basin ('Copperbelt'), the Zechstein ('European Kupferschiefer') and the White Pine-Presque Isle ('White Pine') deposit models. Such deposit models account for a large proportion of the world's highest quality mineral deposits due to their potential favourable size and grade combinations.
- Basaltic native copper - which is a comparatively poorly understood deposit type. Such deposits occur around the world however, documentation of the American and Canadian deposits is most readily available (e.g., Keweenaw, Michigan; Kennecott, Alaska; Sustut, British Columbia). Of the historical native copper districts, the Keweenaw Peninsula dominates the literature and production statistics are available. The Keweenaw Peninsula had a pre-mining endowment of 8.9Mt of native copper, of which 6.5Mt was mined for ~100 years from the 1840's. Most of the commercial production of native copper was from stratiform deposits, which facilitated high production rates and early introduction of mechanisation. Notably, mining from 'fissures' produced masses of native copper weighing hundreds of tonnes.

The closest geological analogue to ARC based on present understanding is the Keweenaw Peninsula which had a known pre-mining copper endowment including both native and sulphidic copper of over 16Mt and was a prolific mining district as noted above. Whilst the Keweenaw Peninsula is notable for its native copper, the sulphidic sediment-hosted mineralisation is also significant (Figure 24). The endowment of the copper sulphide mineralisation contained in two well-known deposits is around 4.5Mt Cu. The copper sulphide deposits also contain substantial amounts of silver, with the White Pine deposit having yielded 50Moz of silver, as part of the 2.0Mt of copper that was mined with average grades of 1% Cu and 12g/t Ag. The White Pine mine was in production between 1953 and 1996. The other known deposit is the Copperwood copper sulphide deposit which is subject to current economic evaluation.

In addition to copper mining, the Michigan mineral province also contains a high-grade magmatic nickel-copper sulphide-bearing deposit, Eagle Mine, discovered by Rio Tinto and now operated by Lundin Mining. Commercial production commenced from Eagle Mine in 2014. The mine is expected to produce 163Kt of nickel, 134Kt of copper and accessory platinum, palladium, and cobalt over its estimated nine-year mine life.

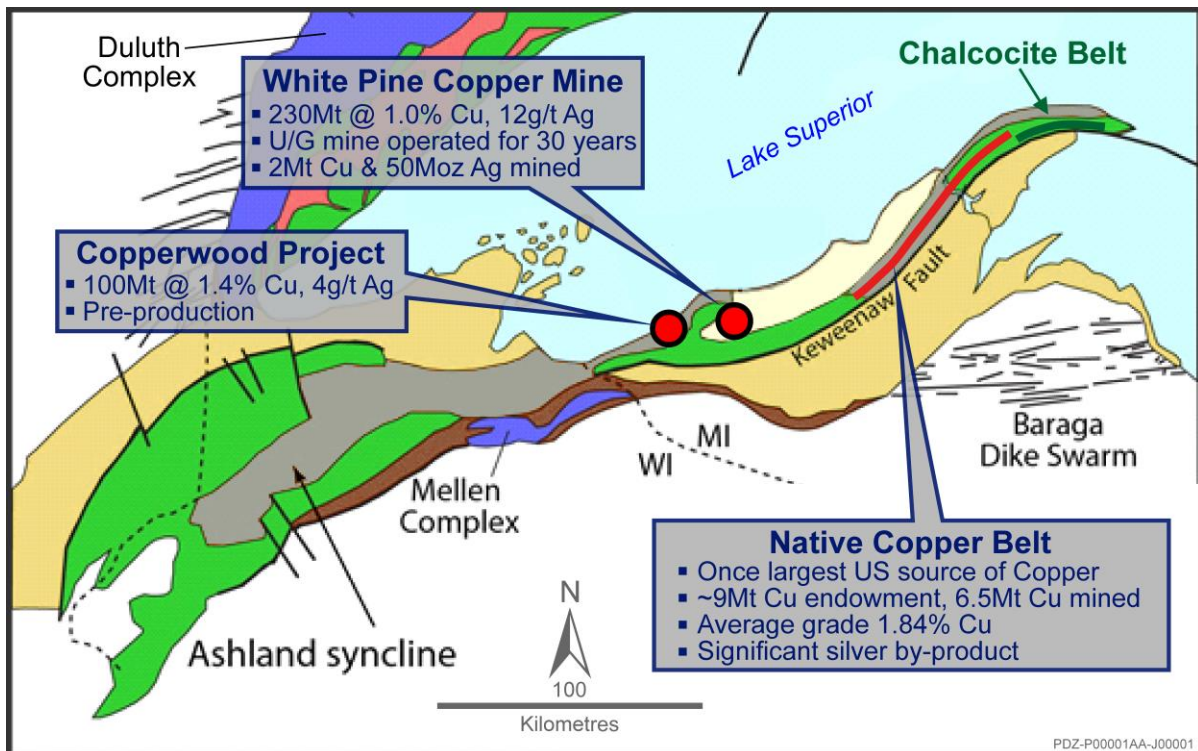


Figure 24: Copper endowment of the historic White Pine & Keweenaw mining districts - Michigan, USA

Exploration Plan

The Company and GEX will take a systemic approach to exploring ARC in the most cost-effective and sustainable manner. The near-term forward work program includes:

- Undertake a widespread geochemical sampling campaign i.e., stream sediment and rock chip sampling. Historical data is mainly clustered, and the southern portion of ARC is mostly unsampled. The intention is for rock samples to be collected with a handheld drill (41mm diameter) to produce core that can be subject to non-destructive analysis.
- Perform passive seismic over the Minik Anomaly and 3D induced polarisation (IP) surveys over the Discovery Zone. Seismic and IP data will also provide more context to the gravity-magnetic anomaly. Passive seismic tomography does not require explosives or vibration equipment to collect data, and has a low environmental impact.
- Conduct high-resolution satellite mapping. Since the last exploration activity, commercial products have become available at a 30cm pixel resolution. These products include multispectral bands at coarser resolutions that can aid in identifying different types of alteration type and intensity, lithologies, and structures.
- Re-analyse historical samples. The assay suite used in the government-funded work is very restricted. The Company has located the storage locations of 311 unique samples that are suited to comprehensive, modern analysis methods. The higher precision and additional element information, along with mineral species identification, can provide new insights that can help refine the exploration search space.
- Reprocess airborne magnetic data.
- Create a three-dimensional (3D) model. The available geological maps, reprocessed geophysics and satellite imagery can be incorporated into a low-cost 3D model. The purpose of this model is to provide an initial framework design that can be easily validated by field inspection.

The intent is for the above work and resultant geological model to provide refined targets to be tested by deeper diamond drilling during a second field campaign, and to aid in generating more advanced exploration targets undercover within ARC and its immediate surrounds.

The proposed exploration above could be completed within 18 months and creates the potential for discovery from the outset. This approach has low cost per unit of information gained and permits a significant increase in the targeting accuracy. The Company envisages that the proposed work program will yield relatively high-certainty, drill-ready targets.

Exploration Team

As part of the transaction, Prairie has secured the services of GEX as project managers for an initial two-year period, including GEX founder and principal exploration geologist, Dr Jonathan Bell.

GEX have been working in Greenland since 2017, with extensive operating experience across exploration and logistics in the Arctic environment managing the Frontier project as part of the JV with ASX listed IGO Ltd (ASX:IGO) (**IGO**).

GEX are proven prospect generators with their first Greenland project, Frontier, progressing from prospect stage to drilling on the back of seven weeks of helicopter reconnaissance and no geophysics.

GEX have established a solid reputation with the Government of Greenland, other relevant stakeholders, and have a 100% safety record. In 2019 GEX was awarded Greenlandic Prospector and Developer of the Year. This award is granted by the Government of Greenland to companies or people who have been active in exploration and have shown initiative and innovation, as well as inspiring other companies in how to explore in Greenland. Other requirements for the award are good environmental practices and social responsibility. The government of Greenland commented on making the award that:

“Greenfields Exploration's projects in East Greenland, the quality and methods of exploration, attitude towards high-quality data, joint venture with IGO and ability to attract investment left no doubts or questions to be recognized by the Government of Greenland.”

GREENLAND OVERVIEW

Greenland is the largest island on Earth and covers 2,170,00km² with a population of ~60,000. A quarter of Greenland's population live in the capital city, Nuuk. Approximately 88% of Greenlanders identify as Greenlandic (i.e., of Greenlandic Inuit descent), and native title issues that occur in Australia and Canada do not arise.

Greenlandic is the official language of Greenland, however Danish and English are also widely used by government authorities.

Greenland is an autonomous territory within the Kingdom of Denmark ruled by the Government of Greenland. Whilst Greenland was a part of the European Community from 1973, through Danish membership, Greenland formally withdrew from the European Community in 1985 and is therefore not a member of the European Union. Greenland gained home-rule in 1979, and in 2009 Denmark passed the Act on Greenland Self-Government giving Greenland greater autonomy and inter alia defined the natural resources of Greenland as being the property of the Greenlandic people. The Act gave Greenland the right to self-elect a government and parliament, although Denmark retains control over items like defence, currency, policing and the courts.

The Self-Government Act gives unique nation-building opportunity to indigenous people within the framework of Western institutionalism. In addition to indigenous empowerment, Greenland has other favourable metrics (through Denmark) such as being the world's least corrupt country, 11th on the Human Development Index, and 6th on the Human Freedom Index.

For personal use only

Although Greenland has had autonomous rule since 2009, the economy depends on Danish subsidies, which represent one-third of national income. Greenland's government has identified the mining industry as a source of national revenue, local jobs, and as a means of achieving financial independence from Denmark to ultimately become a country in its own. The 2019–2023 National Mineral Strategy sets the goal of simplifying the transition from resource exploration to exploitation, and the nation is actively seeking foreign investment in the mining sector.

Greenland's corporate tax rate for exploration and mining companies is 25%. The Greenland mineral royalty rate (excluding hydrocarbons, radionuclides and gemstones) is 2.5% on the value of the mine product ('ad valorem'), less corporate income and dividend taxes. The flat personal tax rate incurred by a non-resident working on exploration or mining projects is 35%, as opposed to the 42% on individuals working outside of the mineral sector. This lower tax rate for individuals working in mining and exploration is an incentive to grow the mining industry in Greenland.

Title

ARC comprises a single Special Exploration Licence (**SEL**) with an area of 5,774km². The license is valid until the end of 2024, at which point it can be converted into a standard Exploration Licence.

SEs are valid for three years with lower expenditure requirements compared to a conventional Exploration Licence. After a three-year term, a SEL may convert in part or whole, into a conventional Exploration License. SELs must cover more than 1,000km² and are only available in northern and eastern Greenland that are deemed by the government to be under-explored.

Conventional Exploration Licences are initially valid for five years, but may be renewed for an additional five years, and then three-year renewal periods after that. Exploration Licences may be converted to an Exploitation (**Mining**) License subject to approvals. Exploration Licences are exclusive and may not overlap. There is no mandatory area reduction requirement; however voluntary reductions are encouraged through annual increases in the minimum expenditure requirements. The Greenlandic government has led the world in pausing licence terms and expenditure obligations in response to the COVID-19 pandemic.

If economically exploitable deposits are discovered then an application is made to Greenland's Mineral Resource Authority for a Mining Licence. Mining Licences convey exclusive extraction rights for 30 years and can be renewed for a further 20 years.

COPPER MARKETS

The Agreement marks Prairie's entry into the copper sector at a time when global focus is on a green revolution paving the way to net zero emissions. Simply, there is no decarbonisation without copper.

Copper is the most cost-effective conductive material while boasting all the necessary physical attributes for capturing, storing, and transporting all sources of non-renewable and renewable energy – whether used to power an electric car or light an eco-city.

Copper is vital to numerous solutions for controlling climate change:

- Copper is key for the performance and efficiency of solar electricity panels which are increasing in global prevalence
- Both the generator within and cables connecting wind turbines require copper. Copper intensity in wind energy is expected to grow as offshore projects, which require twice as much copper, become more prevalent
- Electric vehicles contain five times the copper of their petrol or diesel counterparts. Copper is a major component used in electric motors, batteries, inverters, and wiring.

- Additionally, cabling for electric vehicle charging stations will require copper. Standard AC charging points require between 1kg to 7kg copper; a fast DC charger can contain up to 25kg copper.

According to a bottom-up model by Goldman Sachs, demand for copper used in green technologies (**Green copper**) will grow nearly 600% from 998kt to 5.4Mt by 2030 or 900% to 8.7Mt if green technologies are adopted faster. For the 2020s, this would imply the strongest phase of global copper demand in history (Figure 25).

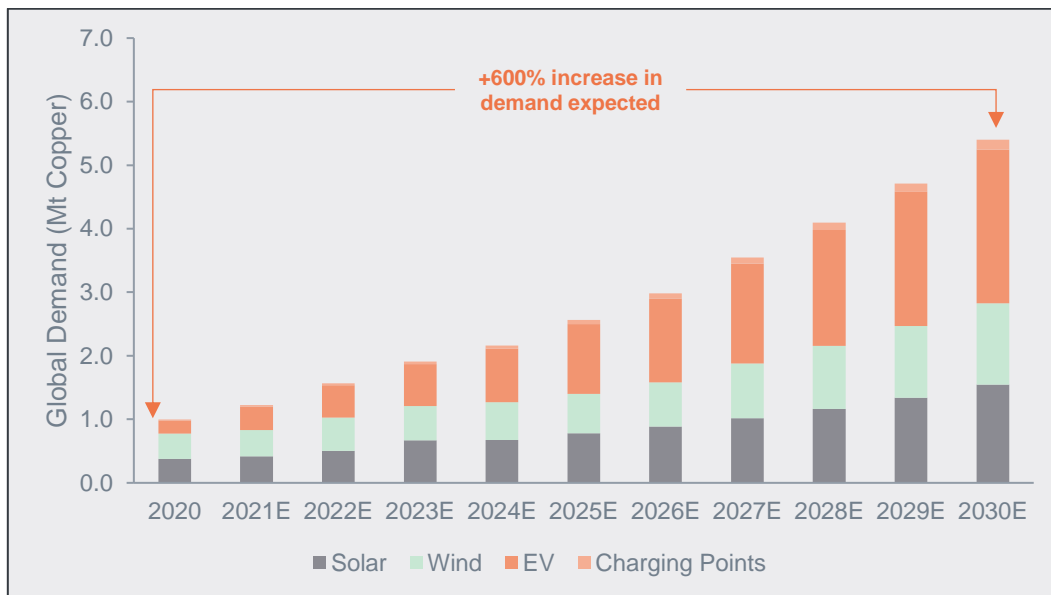


Figure 25: Green copper demand across clean-tech sectors (Source: Goldman Sachs)

The copper market is already facing a clear market deficit in both 2021 and 2022. Despite increases in supply from production expected to come online, market analysts estimate significant copper supply deficits from the second half of 2024 onwards culminating in a long-term supply gap of 8.2Mt. This is nearly double the long-term supply gap peaks in the 2000s and 2010s, when real copper prices were at US\$10,420/t and US\$11,440/t respectively.

During the last 5 years, there has been negligible increases in global copper production averaging approximately 1% per year as estimated by Goldman Sachs. Moreover, there have been no new significant copper discoveries in the past five years (Figure 26).

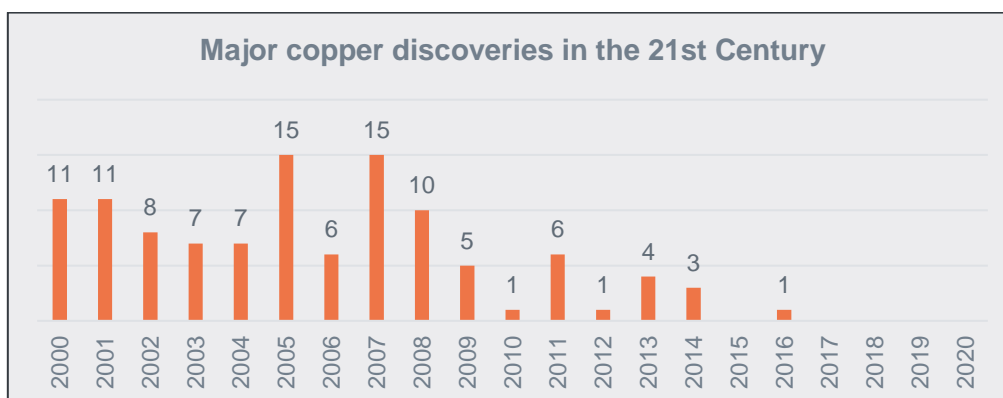


Figure 26: Number of major copper discoveries since 2000 (Source: S&P Global Market Intelligence)

For personal use only

COMMERCIAL TERMS OF THE EARN-IN AGREEMENT

Prairie will earn an interest of up to 80% interest in ARC through an EIA between Mineral Investment Pty Ltd, a wholly owned subsidiary of the Company, and GEX.

Key terms of the EIA provide:

1. The Company, via its subsidiary, will earn its interest in ARC by:
 - a. spending A\$3,500,000 on ARC within three years to earn a 51% interest (**First Earn-in Milestone**);
 - b. spending a further A\$3,500,000 on ARC within four years to earn a further 19% interest (taking the total interest to 70%) (**Second Earn-in Milestone**); and
 - c. spending a further A\$3,000,000 on ARC within five years to earn a further 10% interest (taking the total interest to 80%) (**Third Earn-in Milestone**).
2. Post the Third Earn-in Milestone:
 - a. Each Party must contribute on a pro rata basis or be diluted.
 - b. If a party dilutes down below 10%, then its interest in ARC automatically converts into a 1.75% Net Smelter Royalty (at this stage GEX can also elect to convert straight to the royalty rather than co-contributing or diluting down).
3. Prairie may withdraw from the earn-in in once it has spent a minimum of A\$1,000,000 prior to 31 December 2022.
4. To secure the services of the GEX exploration team, Prairie will pay GEX a monthly services fee of A\$54,167 per month for a period to 31 December 2023 or such longer time period as agreed between GEX and the Company. The GEX services will terminate if the EIA is terminated or where both parties mutually agree in writing.
5. Further consideration in the form of Prairie equity securities to GEX as follows:
 - a. 3 million Prairie shares on completion (subject to 12 months voluntarily escrow from date of issue);
 - b. 5 million class A performance rights which vest and convert into Prairie Shares (which will be subject to 6 months voluntary escrow from the date of issue of the Prairie Shares upon conversion of the Performance Rights) upon the announcement of an independently assessed JORC Code inferred resource of at least 250,000 tonnes of copper equivalent at a minimum resource grade of 1% Cu Equivalent** (or equivalent, with a cut-off grade of 0.5% Cu equivalent) at ARC and expire 5 years from date of issue; and
 - c. 6 million class B performance rights which vest and convert into Prairie Shares (which will be subject to 6 months voluntary escrow from the date of issue of the Prairie Shares upon conversion of the Performance Rights) upon the announcement of an independently assessed JORC Code inferred resource of at least 500,000 tonnes of copper equivalent at a minimum resource grade of 1% Cu Equivalent** (or equivalent, with a cut-off grade of 0.5% Cu equivalent) at ARC and expire 5 years from date of issue.

CHANGE OF DIRECTOR

Ms Carmel Daniele, founder and Chief Executive Officer of CD Capital, will be stepping down as CD Capital's nominee to the Prairie Board as a non-executive Director and will be replaced by Mr Garry Hemming, a highly experienced exploration geologist, effective immediately. Mr Hemming is a senior resource geologist at CD Capital and brings over 40 years experience in exploration and as a mining executive of public companies.

Mr Hemming has been involved in all aspects of discovering projects and taking them from detailed exploration and through feasibility study. Mr Hemming has lead teams that have discovered, acquired and/or developed ore-bodies including the Yilgarn Star Gold deposit in Western Australia, Hadleigh Castle/Rishton in Queensland and the Acoje Nickel PGE deposit in the Philippines.

Mr Hemming joins the Prairie Board as a non-executive Director. Fees for non-executive Directors are presently set an annual fee of A\$20,000. In addition, Mr Hemming will provide specialist geological and exploration consulting services to Prairie by way of a separate consultancy contract with an annual consulting fee of A\$40,000.

ENTITLEMENTS ISSUE

The Company will undertake a one (1) for ten (10) pro rata non-renounceable Entitlements Issue at \$0.25 (£0.16/€0.15/PLN0.72) per share to raise up to \$5.8 million before costs.

Eligible shareholders will be entitled to acquire one (1) New Share for ten (10) ordinary shares held at the record date (5 November 2021). New Shares under the Entitlements Issue will be offered at \$0.25 (£0.16/€0.15/PLN0.72) per share.

Directors will reserve the right to offer any shortfall shares from the Entitlements Issue at their discretion (subject to applicable regulatory requirements).

Further details of the Entitlements Issue and the timetable will be announced separately in an Appendix 3B.

OPTIONS

Long-Term Employee Equity Incentive Plan

The Company advises that it will implement a new long-term incentive employee equity incentive plan (**LTIP**), to attract and retain directors and other key employees and consultants who will be involved with the Project going forward.

Subject to shareholder approval the Company will issue incentive options to the following Company directors (and others):

Director	\$0.45 options expiring 30 November 2025	\$0.55 options expiring 30 November 2026
Mr Benjamin Stoikovich	1,500,000	1,500,000
Mr Mark Pearce	500,000	500,000
Other key employees and consultants	3,375,000	3,375,000

RISK FACTORS

Whilst Prairie has undertaken a due diligence process (including title and other risks) with respect to the Project, it should be noted that the usual risks associated with companies undertaking exploration and development activities of projects in Greenland will remain at completion of the acquisition.

A number of additional risk factors specific to the Project and associated activities have also been identified, including, but not limited to:

- (a) The Project is located in Greenland, and as such, the operations of the Company will be exposed to related risks and uncertainties associated with the country, regional and local jurisdictions. Opposition to the Project, or changes in local community support for the Project, along with any changes in mining or investment policies or in political attitude in Greenland and, in particular to the mining, processing or use of copper, may adversely affect the operations, delay or impact the approval process or conditions imposed, increase exploration and development costs, or reduce profitability of the Company.
- (b) The project is remotely located in an area that has an Arctic Climate and that is categorised as an Arctic Desert, and as such, the operations of the Company will be exposed to related risks and uncertainties of Arctic exploration.
- (c) The Company's exploration and any future mining activities are dependent upon the grant, maintenance and/or renewal from time to time of the appropriate title interests, licences, concessions, leases, claims, permits and regulatory consents which may be withdrawn or made subject to new limitations. Transferring title interests, maintaining title interests or obtaining renewals of or getting the grant of title interests often depends on the Company being successful in obtaining and maintaining required statutory approvals for its proposed activities (including a licence for mining operations) and that the title interests, licences, concessions leases, claims, permits or regulatory consents it holds will be maintained and when required renewed.

There is no assurance that such title interests, licences, concessions, leases, claims, permits or regulatory consents will be granted, or even if granted, not be revoked, significantly altered or granted on terms or with conditions not acceptable to the Company, or not renewed to the detriment of the Company or that the renewals thereof will be successful.

Shareholders should note that some of the risks may be mitigated by the use of appropriate safeguards and systems, whilst others are outside the control of the Company and cannot be mitigated. Should any of the risks eventuate, then it may have a material adverse impact on the financial performance of the Project, the Company and the value of the Company's securities.

Competent Persons Statement

Information in this announcement that relates to Exploration Results is based on information compiled by Dr Jonathan Bell, a Competent Person who is a member of the Australian Institute of Geoscientists (AIG). Dr Bell is the Managing Director of Greenfields Exploration Limited and holds an indirect interest in performance rights in Prairie. Dr Bell has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken, 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'. Dr Bell consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

This announcement has been authorised for release by Mr Ben Stoikovich, CEO

References

Technical Assessment Report: Arctic Rift Copper - Part of world's newest metallogenic province: Kiffaangissuseq – Greenfields Exploration Ltd – November 2020
https://www.researchgate.net/publication/346029727_ARCTIC_RIFT_COPPER_Part_of_world%27s_newest_metallogenic_province_Kiffaangissuseq

**Cu Equivalent means any combination of Cu, Ag, Ni, Co, Cr, Pt, Pd, Au, Rh, Ru, Ir, Os, Zn and/or Pb.

Appendix A: Summary of Significant Historical Sample Results

Sample ID	Type	Latitude	Longitude	ASL (m)	Cu (%)	Ag (ppm)	Description
3705	Float	not recorded	not recorded	-	100	0	Native copper, not assayed
3620	Float	512529	9099902	127	53.8	2,480	Massive chunk of bn + cpy. The largest mass of Cu sulphides found to date
3594	Grab	513826	9101136	99	20.7	488	Lenses of bn + cc in mineralised shear zone. Lenses are 1cm thick and 13cm long
3540	Grab	512253	9099628	138	12.5	385	Chunks of heavy mineralised sandstones taken from black pit. Malachite + primary Cu-sulphides. Clay coating. Appears to be mineralised fault zone
3533	Chip line	512359	9099583	175	8.99	112	Chip line #2: only 0.2m. Quartzite with stratabound Cu-sulphide mineralisation. 0.5m long chip lines. White to light red quartzite/arenite with planar bedding features - containing rounded elongated chunks and blebs of cc + bn - up to 20cm long. Chunks are black with rims of malachite
3704	Grab	512177	9099668	146	7.85	53	Sandstone with stratiform bn, in situ
3609	Trench	512470	9099914	125	5.28	112	Trench #1. 3m long trench. Chunks of quartzites from trench containing mud laminas with mud cracks + up to 2cm thick dark lenses of bn with disseminated native copper + malachite + cpy + pyrite +/- cc
3604	Pit	512468	9099926	137	4.98	304	Pit #5. Black and black-greenish dirt
3596	Grab	511631	9099924	210	4.03	82	Stratiform cc + bn blebs 1x5cm
3567	Pit	513263	9101410	150	3.60	106	Pit #3. Black Earth - weathering product of mineralised fault
3608	Trench	512470	9099914	125	3.55	263	Trench #1. Black Earth mixed with olive-green earth. From 3m long trench
3633	Chip line	512181	9099672	140	3.42	34	Chip line #7: Disseminated malachite throughout. 1cm bands of cc
3597	Grab	511631	9099924	210	3.35	71	Stockwork veins on mineralised breccia. Blebs of cc + bn
3526	Float	511973	9099762	175	3.19	73	Decomposed/crumbled block of black dirt. Crushed zone - extensive jointing 1-3m wide area. Malachite grains within
3631	Chip line	512179	9099670	140	3.12	77	Chip line #7: Malachite + stratiform and blebs of bn +/- pyrite
3605	Pit	512468	9099926	137	2.94	151	Pit #5. Crushed up quartzite fragments (5-20cm large). Malachite + bn + pyrite + cc. Interbedded clay sheets few mm thick
3621	Float	512497	9099902	127	2.35	59	Medium-grained sandstone with bn cement
3629	Chip line	512177	9099668	140	2.22	79	Chip line #7: across 1.5m brecciated shear zone and 1m into above normal bedded mineralised sandstone
3626	Float	502496	9069442	600	2.02	4	Calcite + prehnite + native Cu
3665	Grab	511937	9099778	185	2.01	40	Composite grab of Black Earth
3601	Float	510567	9098866	307	1.89	13	Qtz-calcite, radiating white minerals? Grains of native copper. GEX note: The original description is not clear, but it is likely to be a basalt sample
3635	Chip line	512099	9099706	153	1.85	53	Chip line #8: 0.5m chip lines. Mineralised bedding low-angle sheared block with blebs of bn + cc
3501	Grab	512333	9099910	150	1.64	72	Quartzite of Jyske Ås with diffuse bedding plane bn mineralisation crosscut by thin veins
3578	Chip line	513811	9101141	115	1.42	17	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand-size black sulphide grains. Disseminated malachite throughout
3569	Pit	513838	9101130	150	1.41	35	Pit #4. Black Earth with small malachite grains - Taken from 45cm depth in the pit
3714	Grab	512330	9099580	135	1.34	51	Brecciated sandstone with bn, in situ
3630	Chip line	512178	9099669	140	1.33	37	Chip line #7: Grab from pit of quartzite with malachite + bn + cpy

Sample ID	Type	Latitude	Longitude	ASL (m)	Cu (%)	Ag (ppm)	Description
3656	Chip line	511974	9099763	179	1.18	60	Chip line #10: 1m chip line. Black Earth
3616	Float	512486	9099914	133	1.14	39	Quartzite breccia filled with bn + cc
3570	Pit	513838	9101130	150	1.14	27	Pit #4. Crushed up fist-sized quartzites. Taken from Black Earth pit. Heavily copper-stained. Heavy density
3577	Chip line	513810	9101140	114	1.10	15	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Most sulphides + malachite staining occurs between samples 3575 – 3583
3706	Grab	513831	9101138	107	1.07	15	Cu-mineralised sandstone from 125°-striking breccia zone
3636	Chip line	512100	9099707	153	1.07	46	Chip line #8: Mineralised bedding. Dipping 20°/north?
3703	Grab	512360	9099574	122	1.02	19	Sandstone with stratiform Cu-mineralisation, in situ
3576	Chip line	513810	9101139	114	0.94	10	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Most sulphides + malachite staining occurs between sample 3575 – 3583
3664	Composite grab	511937	9099778	185	0.92	28	Black Earth shear zone. Sample of near rotated block of grey sandstone with Cu sulphides and malachite. Mineralised thin veins. Small (1-2mm) in diameter blebs of cc / bn
3580	Chip line	513812	9101143	116	0.91	14	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand-size black sulphide grains
3595	Grab	513826	9101136	95	0.89	22	Grab sample of detached block in shear zone near chip line sample 3580. Stockwork of malachite + cc + bn mineralised qtz veins
3579	Chip line	513811	9101142	115	0.81	15	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand-size black sulphide grains
3634	Chip line	512182	9099673	140	0.79	33	Chip line #7: Stratiform bn / cc - 1mm layers.
3532	Chip line	512358	9099582	175	0.76	13	Chip line #2: Quartzite with stratabound Cu-sulphide mineralisation. 0.5m long chip lines. White to light red quartzite/arenite with planar bedding features - containing rounded elongated chunks and blebs of cc + bn - up to 20 cm long. Chunks are black with rims of malachite
3619	Float	52514	9099904	127	0.74	16	Coarse-grained quartzite with interstitial Cu-sulphide mineralisation - but minor cpy + bn
3581	Chip line	513812	9101144	116	0.74	16	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand-size black sulphide grains.
3712	Float	512547	9099808	135	0.72	9	Sandstone with disseminated bn, scree block 5m below 3710
3649	Chip line	512007	9099774	172	0.68	28	Chip line #9: 1m chip lines. North of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3632	Chip line	512180	9099671	140	0.66	9	Chip line #7: Less mineralised than 3631. Still bn blebs
3561	Grab	513259	9101420	150	0.62	22	Medium-grained quartzite. Rust and malachite staining. Many black greasy spots (clay?). Sulphides found
3562	Pit	513259	9101420	150	0.62	77	Pit #2. Black clay/dirt. Very greasy and wet. Picked up from 20cm depth
3566	Float	513263	9101410	150	0.62	15	Loose block in fault zone. Grey quartzite with bn + cc mineralisation
3618	Float	512512	9099910	125	0.61	24	Coarse-grained quartzite with interstitial Cu-sulphide mineralisation
3560	Pit	513259	9101420	150	0.61	17	Pit #9. Medium-grained quartzite. Rust and malachite staining. Black greasy spots (clay?). Sulphides found
3650	Chip line	511998	9099773	172	0.51	16	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3575	Chip line	513809	9101138	113	0.48	3.5	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Most sulphides +

Sample ID	Type	Latitude	Longitude	ASL (m)	Cu (%)	Ag (ppm)	Description
							malachite staining occurs between sample 3575 – 3583
3651	Chip line	511994	9099772	173	0.48	19.8	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3582	Chip line	513813	9101145	117	0.48	8.3	Chip line #4: Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand-size black sulphide grains
3598	Grab	511631	9099924	210	0.47	2.6	Dissiminated sulphides in quartzite
3654	Chip line	511982	9099768	175	0.46	4.7	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3652	Chip line	511990	9099771	174	0.46	10.3	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3653	Chip line	511986	9099770	174	0.45	6	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3568	Float	513863	9101114	150	0.44	2.1	Light quartzite with significant malachite
3565	Grab	513259	9101420	150	0.43	10.2	Medium-grained quartzite. Rust and malachite staining. Black greasy spots (clay?). Sulphides found
3647	Chip line	512017	9099778	167	0.40	18.7	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3648	Chip line	512012	9099776	170	0.40	24.1	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3613	Chip	512502	9099910	126	0.37	14.6	Brecciated quartzite at base of cliff. 3m wide. Cu sulphides. Chip sample of 2m ² area.
3606	Chip line	512488	9099908	131	0.36	19.1	Chip line #5: 0.5cm long sections. Fine-grained reddish sandstone with laminated mud cracks. Bn along apparent vein
3622	Grab	512528	9099902	123	0.34	23.1	Sandstone with disseminated interstitial bn + cc and 1mm blebs of cc
3614	Chip	512490	9099914	132	0.33	21.1	Brecciated quartzite. Open space breccia. Cu sulphides. Chip sample of 2 m ² area
3617	Float	512506	9099896	125	0.32	13.9	Quartzite with bn + qtz filling veins
3882	Float	510756	9101073	275	0.32	0.12	Shale with disseminated pyrite/cc
3646	Chip line	512022	9099780	164	0.31	11.9	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3628	Float	513848	9099350	130	0.31	4.5	Grab sample of two float samples with malachite mineralisation. Stockwork veins. Other side of Neergaard valley
3518	Chip line	512336	9099927	136	0.30	19.9	Chip line #1: 0.5m long chip lines. Trending 60°. Small thrust faults trending 290°. Dip of slope ~10° - 150° SE
3515	Chip line	512333	9099924	136	0.30	14.4	Chip line #1: 0.5m long chip lines. Trending 60°. Small thrust faults trending 290°. Dip of slope ~10° - 150° SE
3607	Chip line	512489	9099909	131	0.30	16.8	Chip line #5: 0.5 cm long sections. Fine-grained reddish sandstone with laminated mud cracks. Bn along apparent vein
3531	Chip line	512357	9099581	175	0.29	8.1	Chip line #2: Quartzite with stratabound Cu-sulphide mineralisation. 0.5m long chip lines. White to light red quartzite/arenite with planar bedding features - containing rounded elongated chunks and blebs of cc + bn - up to 20cm long. Chunks are black with rims of malachite
3527	Grab	511973	9099762	175	0.27	611	Mineralised quartzite
3713	Float	512547	9099808	135	0.26	12.6	Sandstone with blebs of bn, scree block 5m below 3710
3534	Chip line	512360	9099584	175	0.25	3.4	Chip line #2: Quartzite with stratabound Cu-sulphide mineralisation. 0.5m long chip lines

Sample ID	Type	Latitude	Longitude	ASL (m)	Cu (%)	Ag (ppm)	Description
							White to light red quartzite/arenite with planar bedding features - containing rounded elongated chunks and blebs of cc + bn - up to 20cm long. Chunks are black with rims of malachite
3514	Chip line	512332	9099923	136	0.23	11.9	Chip line #1: 0.5m long chip lines. Trending 60°. Small thrust faults trending 290°. Dip of slope ~10° - 150° SE
3519	Chip line	512337	9099928	136	0.22	10.5	Chip line #1: 0.5m long chip lines. Trending 60°. Small thrust faults trending 290°. Dip of slope ~10° - 150° SE
3655	Chip line	511975	9099764	179	0.21	10.2	Chip line #10: 1m chip lines across 9m breccia zone with Black Earth. Brecciated zone trending 120°
3645	Chip line	512027	9099782	161	0.20	3.9	Chip line #9: 1m chip lines north of 9m-wide breccia zone. Malachite stained yellow-grey sandstones. Few mm-thick discordant veins and veinlets of qtz
3513	Chip line	512331	9099922	136	0.20	15.8	Chip line #1: 0.5m long chip lines. Trending 60°. Small thrust faults trending 290°. Dip of slope ~10° - 150° SE
3535	Chip line	512361	9099585	175	0.20	4.2	Chip line #2: Quartzite with stratabound Cu-sulphide mineralisation. 0.5m long chip lines. White to light red quartzite/arenite with planar bedding features - containing rounded elongated chunks and blebs of cc + bn - up to 20cm long. Chunks are black with rims of malachite

Legend:

Cu – copper, cc – chalcocite, cpy – chalcopyrite, bn – bornite, qtz – quartz

Notes:

1. Co-ordinates are in UTM Zone 26N (WGS 84) and have been measured by hand-held GPS
2. Positional measurements (northing, easting, and RL) that are calculated by GEX are in *italics*

For personal use only

Appendix B: Historical Full Trench, Pit, and Chip Line Sampling Results

Sample ID	Sample type or Line #	Northing (m)	Easting (m)	ASL (m)	Cu (%)	Ag (ppm)	Description
Trench #1							
3608	Trench	512470	9099914	125	3.55	263	Black Earth mixed with olive-green earth. From 3m long Trench #1.
3609	Trench	512470	9099914	125	5.28	112	Chunks of quartzites from trench containing mud laminas with mud cracks + up to 2cm thick dark lenses of bn with disseminated native copper + malachite + cpy + pyrite +/- cc. From 3m long Trench #1.
Pit #1							
3540	Grab	512253	9099628	138	12.5	385	Chunks of heavy mineralised sandstones taken from black pit. Malachite + primary Cu-sulphides. Clay coating. Appears to be mineralised fault zone
Pit #2							
3562	Grab	513259	9101420	150	0.62	77	Black clay/dirt. Very greasy and wet. Picked up from 20cm depth
3567	Grab	513263	9101410	150	3.60	106	Black Earth - weathering product of mineralised fault
Pit #3							
3569	Grab	513838	9101130	150	1.41	35	Black Earth with small malachite grains - Taken from 45cm depth in the pit
3570	Grab	513838	9101130	150	1.14	27	Crushed up fist-sized quartzites. Taken from Black Earth pit. Heavily copper-stained. Heavy density
Pit #4							
3604	Grab	512468	9099926	137	4.98	304	Black and black-greenish dirt.
3605	Grab	512468	9099926	137	2.94	151	Crushed up quartzite fragments (5-20cm large). Malachite + bn + pyrite + cc. Interbedded clay sheets few mm thick
Pit #5							
3665	Pit	511937	9099778	185	2.01	40	Composite grab of Black Earth
Pit #6							
3560	Grab	513259	9101420	150	0.61	17	Medium-grained quartzite. Rust and malachite staining. Black greasy spots (clay?). Sulphides found
Chip line #1							
3502	1	512321	9099912	136	0.01	9.2	0.5m long chip lines. Trending 60°. Small thrust faults trending 290°. Dip of slope ~10° - 150° SE
3503	1	512322	9099913	136	0.04	5	"
3504	1	512323	9099914	136	0.03	6.3	"
3505	1	512323	9099914	136	0.03	4.8	"
3506	1	512324	9099915	136	0.06	3.2	"
3507	1	512325	9099916	136	0.05	8.1	"
3508	1	512326	9099917	136	0.03	7.7	"
3509	1	512327	9099918	136	0.02	8	"
3510	1	512328	9099919	136	0.08	10.7	"
3511	1	512329	9099920	136	0.07	13.5	"
3512	1	512330	9099921	136	0.05	6.9	"
3513	1	512331	9099922	136	0.20	15.8	"
3514	1	512332	9099923	136	0.23	11.9	"
3515	1	512333	9099924	136	0.30	14.4	"
3516	1	512334	9099925	136	0.01	0.7	"
3517	1	512335	9099926	136	0.02	0.5	"
3518	1	512336	9099927	136	0.30	19.9	"
3519	1	512337	9099928	136	0.22	10.5	"
3520	1	512338	9099929	136	0.19	13.1	"
3521	1	512339	9099930	136	0.03	8.3	"
3522	1	512340	9099931	136	0.01	6.7	"
3523	1	512341	9099932	136	0.00	1.4	"
3524	1	512342	9099933	136	0.00	1.6	"

For personal use only

Sample ID	Sample type or Line #	Northing (m)	Easting (m)	ASL (m)	Cu (%)	Ag (ppm)	Description
3525	1	512343	9099934	136	0.00	1.3	"
Chip line #2							
3528	2	512354	9099578	175	0.02	2	0.5m long chip lines. Quartzite with stratabound Cu-sulphide mineralisation. 0.5m long chip lines. White to light red quartzite/arenite with planar bedding features - containing rounded elongated chunks and blebs of cc + bn - up to 20cm long. Chunks are black with rims of malachite
3529	2	512355	9099579	175	0.02	16	"
3530	2	512356	9099580	175	0.01	1.1	"
3531	2	512357	9099581	175	0.29	8.1	"
3532	2	512358	9099582	175	0.76	13	"
3533	2	512359	9099583	175	8.99	112	Chip line only 0.2m
3534	2	512360	9099584	175	0.25	3.4	Same as 3528
3535	2	512361	9099585	175	0.20	4.2	"
3536	2	512362	9099586	175	0.04	0.7	"
3537	2	512363	9099587	175	0.04	1.1	"
3538	2	512364	9099588	175	0.10	2	"
3539	2	512365	9099589	175	0.01	2.2	"
Chip line #3							
3542	3	513269	9101416	143	0.06	1	0.5m long chip lines. Massive brecciated. No malachite. No primary bedding features
3543	3	513269	9101418	143	0.03	0.6	"
3544	3	513269	9101420	143	0.04	0.4	0.5m long chip lines. Malachite. Stockwork qtz-veins
3545	3	513269	9101422	144	0.01	0.3	"
3546	3	513269	9101424	144	0.01	1	0.5m long chip lines. Minor malachite. Bedding features
3547	3	513269	9101426	144	0.11	3.4	0.5m chip lines. Malachite. Stockwork qtz-veins
3548	3	513269	9101428	145	0.09	2.3	"
3549	3	513269	9101430	145	0.04	0.8	0.5m long chip lines. Variable malachite. Discordant sulphide veins. Minor qtz Stockwork qtz-veins
3550	3	513269	9101432	146	0.04	0.3	"
3551	3	513269	9101434	146	0.10	0.9	"
3552	3	513269	9101436	147	0.02	0.3	"
3553	3	513269	9101438	147	0.06	0.6	"
3554	3	513269	9101440	148	0.00	0.3	"
3555	3	513269	9101442	148	0.01	0.3	"
3556	3	513269	9101444	149	0.03	0.3	"
3557	3	513269	9101446	149	0.03	0.3	"
3558	3	513269	9101448	150	0.01	0.3	"
3559	3	513269	9101458	150	0.00	0.3	"
Chip line #4							
3571	4	513808	9101132	112	0.01	0.3	1 m long chip line sections across shear zone. Dip 20-25°/SW
3572	4	513808	9101135	112	0.01	0.4	Same as 3571
3573	4	513808	9101136	112	0.01	0.4	"
3574	4	513809	9101137	113	0.01	0.4	"
3575	4	513809	9101138	113	0.48	3.5	1m long chip line. Brecciated with stockwork of qtz + sulphide veins. Most sulphides + malachite staining occurs between sample 3575 - 3583
3576	4	513810	9101139	114	0.94	10	"
3577	4	513810	9101140	114	1.10	15	1m long chip line. Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand-size black sulphide grains
3578	4	513811	9101141	115	1.42	17	1m long chip line. Brecciated with stockwork of qtz + sulphide veins. Cc + bn in veins and distinct sand size black sulphide grains. Disseminated malachite throughout
3579	4	513811	9101142	115	0.81	15	Same as 3577
3580	4	513812	9101143	116	0.91	14	"

For personal use only

Sample ID	Sample type or Line #	Northing (m)	Easting (m)	ASL (m)	Cu (%)	Ag (ppm)	Description
3581	4	513812	9101144	116	0.74	16	"
3582	4	513813	9101145	117	0.48	8.3	"
3583	4	513813	9101146	117	0.02	0.4	"
3584	4	513814	9101147	118	0.07	0.7	"
3585	4	513814	9101148	118	0.05	0.7	1m long chip line. No malachite staining
3586	4	513815	9101149	119	0.04	0.8	"
3587	4	513815	9101150	119	0.01	0.3	"
3588	4	513816	9101151	120	0.01	0.3	"
3589	4	513816	9101152	120	0.01	0.3	"
3590	4	513817	9101153	121	0.00	0.3	1m long chip line. Sheared and brecciated
3591	4	513817	9101154	121	0.00	0.3	"
3592	4	513818	9101155	122	0.02	0.3	"
3593	4	513818	9101156	122	0.01	0.3	"
Chip line #5							
3606	5	512488	9099908	131	0.36	19.1	0.5cm long chip lines. Fine-grained reddish sandstone with laminated mud cracks. Bn along apparent vein
3607	5	512489	9099909	131	0.30	16.8	"
Chip line #6							
3610	6	512490	9099866	120	0.06	5.4	0.5m long chip lines. Homogenous quartzite with disseminated bn
3611	6	512491	9099867	120	0.11	12.5	"
3612	6	512492	9099868	120	0.05	9.3	"
Chip line #7							
3629	7	512177	9099668	140	2.22	79	Black dirt from 0.75m wide pit. Grab from pit
3630	7	512178	9099669	140	1.33	37	Representative grab from same 0.75m wide pit as above of quartzite with malachite + bn + cpy
3631	7	512179	9099670	140	3.12	77	1.5m across breccia zone. Malachite + stratiform blebs of bn +/- cpy
3632	7	512180	9099671	140	0.66	9	0.75m vertical. Less mineralised than 3631. Still bn blebs
3633	7	512181	9099672	140	3.42	34	0.75m. Disseminated malachite throughout. 1cm bands of cc
3634	7	512182	9099673	140	0.79	33	0.75m. Stratiform bn/cc - 1mm layers
Chip line #8							
3635	8	512099	9099706	153	1.85	53	0.5m long chip lines. Mineralised bedding low-angle sheared block with blebs of bn + cc
3636	8	512100	9099707	153	1.07	46	Mineralised bedding. Dipping 20°/north?
Chip line #9							
3637	9	512095	9099794	152	0.03	1.8	1m long chip line. Only minor malachite
3638	9	512082	9099793	153	0.06	1.6	"
3639	9	512073	9099792	154	0.06	1.1	"
3640	9	512064	9099791	155	0.02	1.1	"
3641	9	512055	9099790	156	0.11	2.2	"
3642	9	512046	9099789	157	0.06	3	"
3643	9	512037	9099788	158	0.09	3.9	"
3644	9	512028	9099786	158	0.02	1.1	1m long chip line. Breccia zone starts. Striking 120°
3645	9	512027	9099782	161	0.20	3.9	"
3646	9	512022	9099780	164	0.31	11.9	"
3647	9	512017	9099778	167	0.40	18.7	"
3648	9	512012	9099776	170	0.40	24.1	"
3649	9	512007	9099774	172	0.68	28	"
3650	9	511998	9099773	172	0.51	16	"
3651	9	511994	9099772	173	0.48	19.8	"
3652	9	511990	9099771	174	0.46	10.3	"
3653	9	511986	9099770	174	0.45	6	"
3654	9	511982	9099768	175	0.46	4.7	"
Chip line #10							

For personal use only

Sample ID	Sample type or Line #	Northing (m)	Easting (m)	ASL (m)	Cu (%)	Ag (ppm)	Description
3655	10	511975	9099764	179	0.21	10.2	1m long chip lines across breccia zone. The 9m brecciated zone trends 120°
3656	10	<i>511974</i>	<i>9099763</i>	<i>179</i>	1.18	60	1m long chip line. Black Earth
3657	10	<i>511973</i>	<i>9099762</i>	<i>178</i>	0.09	2.4	1m long chip line across breccia zone
3658	10	<i>511972</i>	<i>9099761</i>	<i>178</i>	0.05	2	"
3659	10	<i>511971</i>	<i>9099760</i>	<i>177</i>	0.18	4.5	"
3660	10	<i>511970</i>	<i>9099759</i>	<i>177</i>	0.18	5.1	"
3661	10	<i>511969</i>	<i>9099758</i>	<i>176</i>	0.01	0.3	"
3662	10	<i>511968</i>	<i>9099758</i>	<i>176</i>	0.01	0.3	"
3663	10	511966	9099758	175	0.01	0.5	"

Legend:

Cu – copper, cc – chalcocite, cpy – chalcopyrite, bn – bornite, qtz – quartz

Notes:

1. Co-ordinates are in UTM Zone 26N (WGS 84) and have been measured by hand-held GPS
2. Positional measurements (northing, easting, and RL) that are calculated by GEX are in *italics*

Descriptions:

Trench: A prospecting trench is used to investigate and sample the subsurface. At ARC, a 3m wide trench was dug to approximately 0.5m depth in 'Black Earth' mineralisation (extremely altered, poorly consolidated, high-grade mineralisation).

Pit: A prospecting pit is used to access fresher rock at depth. At ARC, six historical pits were set in 'Black Earth' and varied in depth from 0.45m to 0.8m.

Chip line: A line of rock chips broken off across a mineralised outcrop to provide a representative measure of width and grade of mineralisation. The chip line will cover a mineralised zone as well as the unmineralized wall rock on either side. At ARC, chip lines have intervals of 0.5m or 1m, where the rock chips from each interval making one sample. In each interval, chips of rock are broken off the outcrop along a line (i.e., a chip line) and sampled. The objective of this method is to provide a representative measure of mineralisation grade and width.

For personal use only

Appendix C: JORC Code, 2012 Edition – Table 1 Report

<i>JORC Table 1, section 1</i>	
<i>Criteria</i>	Arctic Rift Copper project
<i>Sampling techniques</i>	Assay data presented in this document largely relate to the historical geochemical sampling of trench samples, rock chips, grab samples, and stream sediments. For the 2010 work by Avannaa: "A total of 202 samples were collected during the field program. Of these, 199 samples were bagged and send to Actlabs, Ancaster Canada for chemical analyses. Some 182 of these samples represent mineralisations, whereas the rest were taken as reference samples. To access the grade of copper and silver mineralisation at J.C. Christensen Land [GEX: effectively the entire ARC licence], semicontinuous chip lines were undertaken through the most pronounced mineralised rocks. The length of individually chip line samples varies but the standard length is 0.5 m or 1.0 m. The entire chip line lengths presented in this report are all estimated as true stratigraphic thickness across the samples structure. Ten chip lines were laid out, resulting in a total of 117 chip samples. A representative hand sample of each chip line section was collected for reference". The weight of the samples sent for chemical analyses were usually in the 1.5 to 2.4kg range, and chip lines were typically taken over 0.5m to 1.0 m lengths. In 2011, Avannaa collected 249 rock samples and 227 stream sediment samples across a 4,051km ² licence package. The rock samples were submitted to ALS laboratories for wet-assay analyses, however the stream sediment samples were only subject to hand-held XRF analysis. To the best of Greenfields' knowledge, the XRF readings were never submitted to the authorities. The weight of the 2011 samples is typically in the 200g to 300g range. Standards and duplicates were used in both the 2010 and 2011 programs.
<i>Drill techniques</i>	No drilling has ever occurred within the ARC.
<i>Drill sample recovery</i>	No drilling has ever occurred within the ARC.
<i>Logging</i>	No drilling has ever occurred within the ARC, and as such no logging records exist.
<i>Sub-sampling techniques and sample preparation</i>	The Company is unaware of any sub-sampling techniques or sample preparation.
<i>Quality of assay data and laboratory tests</i>	Avannaa used commercial assay-labs that supply quality certificates as part of the deliverable. Greenfields has no concern about the wet assays. However, XRF information should be treated with caution due to the small sample window available to hand-held devices and the need for in-field calibrations depending on the order of magnitude of the element quanta. Furthermore, as stream sediments may be highly variable and elements of interest having very low levels of detection, Greenfields does not use the 2011 stream sediment XRF readings.
<i>Verification of sampling and assaying</i>	No third-party verification of the historical assay results has been undertaken.
<i>Location of data points</i>	The data locations and topographic control are based on information that is publicly disclosed by the Government. Grids are based on UTM Zones 26 and 27N using the WGS84 Datum.
<i>Data spacing and distribution</i>	The geochemical sampling is erratically distributed and based visual anomalism or physical/topographical availability. Much of the licence area is undercover which often prevents a grid approach.
<i>Orientation of data in relation to geological structure</i>	Historical assays appear to have been collected across geological features as opposed to lengthwise. The Company considers this to be an appropriate practice.
<i>Sample security</i>	Greenfields has no information on the measures taken to ensure sample security. Given the age of the sampling and the low probability of sample tampering, the Company has no cause for concern.
<i>Audits or reviews</i>	Greenfields is unaware of any audits or reviews within ARC.

For personal use only

JORC Table 1, section 2

Criteria	Arctic Rift Copper project																																						
<i>Mineral tenement and land tenure status</i>	<p>The Arctic Rift Copper project ('ARC') comprises a single Special Exploration Licence ('MEL-S' 2021-07, 'SEL'). The spatial area of the application is 5,774km², the boundary of which is defined by the points:</p> <table border="0"> <tr><td>82°3'N, 29°18'W</td><td>81°35'N, 26°8'W</td></tr> <tr><td>82°3'N, 25°41'W</td><td>81°30'N, 26°8'W</td></tr> <tr><td>82°0'N, 25°41'W</td><td>81°30'N, 26°54'W</td></tr> <tr><td>82°0'N, 25°43'W</td><td>81°25'N, 26°54'W</td></tr> <tr><td>81°59'N, 25°43'W</td><td>81°25'N, 28°20'W</td></tr> <tr><td>81°59'N, 25°44'W</td><td>81°21'N, 28°20'W</td></tr> <tr><td>81°58'N, 25°44'W</td><td>81°21'N, 29°35'W</td></tr> <tr><td>81°58'N, 25°46'W</td><td>81°19'N, 29°35'W</td></tr> <tr><td>81°56'N, 25°46'W</td><td>81°19'N, 31°0'W</td></tr> <tr><td>81°56'N, 25°48'W</td><td>81°27'N, 31°0'W</td></tr> <tr><td>81°55'N, 25°48'W</td><td>81°27'N, 31°42'W</td></tr> <tr><td>81°55'N, 25°50'W</td><td>81°34'N, 31°42'W</td></tr> <tr><td>81°53'N, 25°50'W</td><td>81°34'N, 32°7'W</td></tr> <tr><td>81°53'N, 25°52'W</td><td>81°51'N, 32°7'W</td></tr> <tr><td>81°50'N, 25°52'W</td><td>81°51'N, 31°0'W</td></tr> <tr><td>81°50'N, 25°54'W</td><td>81°54'N, 31°0'W</td></tr> <tr><td>81°46'N, 25°54'W</td><td>81°54'N, 30°18'W</td></tr> <tr><td>81°46'N, 25°55'W</td><td>81°58'N, 30°18'W</td></tr> <tr><td>81°35'N, 25°55'W</td><td>81°58'N, 29°18'W</td></tr> </table> <p>A SEL confers an exclusive right to explore for mineral for three years at a reduced holding cost, provided each licence covers more than 1,000km². After three years, the holder of Special Exploration Licence has the right to convert the area, whole or in part, to conventional Exploration Licences. Due to the Coronavirus pandemic, all licence obligation in Greenland have been paused until the end of 2021, such that the SEL can convert to a normal licence at the end of 2024.</p> <p>The minimum expenditure obligation for a SEL is DKK500/km² indexed to Danish CPI as at January 1992. Greenfields estimates the expenditure requirement will be approximately AUD1,080,000 per annum. However, the Government has waived all expenditure obligations for 2020 and 2021, and as such, no holding cost of the licence will crystallise until 31 December 2022. The obligation for 2022 will be calculated on 1 January 2023 based on the area under licence on a preceding day. Expenditure above the minimum regulatory requirement is carried forward for a maximum of three years. ARC is in good standing.</p>	82°3'N, 29°18'W	81°35'N, 26°8'W	82°3'N, 25°41'W	81°30'N, 26°8'W	82°0'N, 25°41'W	81°30'N, 26°54'W	82°0'N, 25°43'W	81°25'N, 26°54'W	81°59'N, 25°43'W	81°25'N, 28°20'W	81°59'N, 25°44'W	81°21'N, 28°20'W	81°58'N, 25°44'W	81°21'N, 29°35'W	81°58'N, 25°46'W	81°19'N, 29°35'W	81°56'N, 25°46'W	81°19'N, 31°0'W	81°56'N, 25°48'W	81°27'N, 31°0'W	81°55'N, 25°48'W	81°27'N, 31°42'W	81°55'N, 25°50'W	81°34'N, 31°42'W	81°53'N, 25°50'W	81°34'N, 32°7'W	81°53'N, 25°52'W	81°51'N, 32°7'W	81°50'N, 25°52'W	81°51'N, 31°0'W	81°50'N, 25°54'W	81°54'N, 31°0'W	81°46'N, 25°54'W	81°54'N, 30°18'W	81°46'N, 25°55'W	81°58'N, 30°18'W	81°35'N, 25°55'W	81°58'N, 29°18'W
82°3'N, 29°18'W	81°35'N, 26°8'W																																						
82°3'N, 25°41'W	81°30'N, 26°8'W																																						
82°0'N, 25°41'W	81°30'N, 26°54'W																																						
82°0'N, 25°43'W	81°25'N, 26°54'W																																						
81°59'N, 25°43'W	81°25'N, 28°20'W																																						
81°59'N, 25°44'W	81°21'N, 28°20'W																																						
81°58'N, 25°44'W	81°21'N, 29°35'W																																						
81°58'N, 25°46'W	81°19'N, 29°35'W																																						
81°56'N, 25°46'W	81°19'N, 31°0'W																																						
81°56'N, 25°48'W	81°27'N, 31°0'W																																						
81°55'N, 25°48'W	81°27'N, 31°42'W																																						
81°55'N, 25°50'W	81°34'N, 31°42'W																																						
81°53'N, 25°50'W	81°34'N, 32°7'W																																						
81°53'N, 25°52'W	81°51'N, 32°7'W																																						
81°50'N, 25°52'W	81°51'N, 31°0'W																																						
81°50'N, 25°54'W	81°54'N, 31°0'W																																						
81°46'N, 25°54'W	81°54'N, 30°18'W																																						
81°46'N, 25°55'W	81°58'N, 30°18'W																																						
81°35'N, 25°55'W	81°58'N, 29°18'W																																						
<i>Exploration done by other parties</i>	<p>There are no third-party royalties or other rights relating to ARC.</p> <p>ARC was subject to commercial exploration by Avannaa Resources Limited ('Avannaa') in 2010 and 2011. In its first year, Avannaa focussed its work in a small area in the northern part of the licence area known as Neergaard North. This work focussed on historical government and academic work that had identified highly anomalous copper mineralisation. In 2010, the work included geochemical soil sampling, rock chipping and trenching of high-grade material associated with a NW-SE trending fault breccias. Based on the success of the 2010 program, Avannaa undertook a much larger regional reconnaissance program in 2011. This program involved a heli-supported geochemical sampling program over a large area designed to test the copper prospectivity of various stratigraphic positions, as well as extending the length of the 'Discovery Zone' identified in 2010. Both aspects of this program were successful in that the Discovery Zone was shown to have a minimum strike length of 2km before disappearing undercover; and that certain stratigraphic horizons show copper anomalism over a significant lateral extent. However, much of the extended area explored by Avannaa was located to the southeast of the ARC and is now located in a Government-mandated no-go zone for mineral exploration.</p>																																						
<i>Geology</i>	<p>ARC contains a sequence of Mesoproterozoic-aged sediments sandstones belonging to the Independence Fjord Basin that have been intruded by highly-altered dolerites, and overlain by 1.2km of Mesoproterozoic-aged flood basalts ('Zig-Zag Fm' basalts). In turn, the basalts are overlain by 1.1km of Neoproterozoic-aged (1,000M to 541M years ago) clastic and carbonate sediments belonging to the Hagen Fjord Group. The lower portion of the Hagen Fjord Group is dominated by sandstones and siltstones, and the upper part</p>																																						

For personal use only

For personal use only

by limestone and dolomites. Based on stream sediment samples, the iron oxide minerals switch from magnetite to the east of ARC, to haematite within ARC, which reflects a change in fluid oxidation state (from reduced to oxidised). Fluid flow is from east to west which implies that oxidation is a component of the copper dropping out of solution. The oxidation of a reduced fluid is consistent with the chemistry required to form native copper such as that observed in ARC. The metamorphic grade of the Zig-Zag Fm basalts is of the zeolite facies, and the Hagen Fjord Group sediments show lower grade metamorphism. There is adequate preservation aside from mechanical erosion.

Commercially interesting copper mineralisation occurs in both the basalts and Hagen Fjord Group sediments. The basalts are known to contain in situ native copper, and native copper is found extensively in the surrounding drainage systems. Significantly, the native copper specimens recovered by Avannaa in 2010 weigh up to 1kg. Greenfields considers that the age, setting and mineral composition makes the Zig-Zag Fm copper analogous to the copper deposits of the Michigan Upper (Keweenaw) Peninsula, and a primary source of copper for the anomalies reported in the overlying sediments. The fault breccias that transect the basalts and Neoproterozoic sediments are interpreted by the Company to represent fluid pathways as there are zones of intense potassium alteration within the surrounding quartz dominated sedimentary rocks. These breccias, which are up to 25m wide, show copper mineralisation. The chalcocite and chalcopyrite copper-bearing minerals are significant as they demonstrate that sulphur has been added into a previously sulphur-undersaturated system. A source of sulphur is generally considered an important factor in the sediment-hosted copper 'deposit model'. Other important components of the deposit model are also reported, including pseudomorphed gypsum (a source of sulphur, and copper mobilising salts), hydrogeologic seals, and contrasting oxidation states. Copper sulphides occur in the predicted geological lithological settings. The highest copper grades are close to geophysical gravity, magnetic and electromagnetic anomalies. The ~640 km² area of geophysical and geochemical anomalism is dubbed the Minik Anomaly (or 'Singularity' in the supporting Technical Assessment Report)

The age of the known mineralisation concerns at least two episodes. The Company identifies the Elzevirian Orogeny (c. 1,250Ma) as the likely event associated with the native copper mineralisation in the basalts. However, the Neoproterozoic-aged sediment-hosted copper sulphides demonstrate that there was a second mineralising event associated with the waning Caledonian Orogeny (c. 390 to 380 Ma) The Elzevirian and Caledonian orogenies have a similar orientation. The c. 385 maximum age is supported by the absence of mineralisation known to younger than the Silurian Period (443.8 Ma to 419.2 Ma). The Silurian is associated with the formation of the Citronen zinc deposit, currently licenced by Ironbark Zinc Ltd. Greenfields considers Citronen and ARC's copper sulphides to have formed due to the same event. The known copper and zinc, combined with a Greenfields interpreted geological history, geochronology and hydrothermal fluid temperatures, to define the +60,000km² Kiffaangissuseq Metallogenic Province.

The basal flows of the Zig-Zag Fm basalts show a marked depletion in nickel. Such a depletion suggests that the nickel may have been deposited into sulphides and conceptually, as nickel sulphide deposit. There has been no effective commercial work on testing the nickel sulphide potential. Pentlandite, a nickel-bearing sulphide, is observed in at least one of the intrusions beneath the basalts. There is no other evidence upon which the nickel-sulphide prospectivity can be evaluated at this stage.

An interactive Government portal that contains the geology, and supporting reports can be accessed via: <http://www.greenmin.gl/home.seam> . A fully referenced Technical Assessment Report on ARC, can be accessed at <http://dx.doi.org/10.13140/RG.2.2.18610.84161> .

<i>Drill hole information</i>	No drilling has ever occurred within the ARC or in the surrounding area.
<i>Data aggregation methods</i>	All historical results presented in this release are based on those published by third parties. Greenfields has made a point of reporting the weighted-averages and has avoided individual high-grade results that may not be representative of the mineral system. No bottom- or top-cuts have been applied. No metal equivalent calculations have been performed.
<i>Relationship between mineralisation width and intercept lengths.</i>	The reported historical trenching and channelling results are presented on both 'as is' sub-perpendicular intersection, and where available estimates are available, true-width basis. Accompanying statements accompany all true-width estimates. No sub-parallel or parallel sample intervals were collected or disclosed.

For personal use only

<i>Diagrams</i>	All relevant maps are presented in the main body of this document, with additional tables and figures available in the Technical Assessment Report.
<i>Balanced reporting</i>	Greenfields has sourced and reasonably presented the relevant results, where available. The reader is cautioned that geochemical rock chip samples, by their nature, are not representative samples. Geochemical rock chip samples are erratically collected, lack scale and design. Geochemical results must be viewed as empirical evidence of anomalism, and not as a representative indication of mineralisation. Furthermore, due to the historical nature of the samples, it is not possible at the time of publication, to perform checks and balances on the numbers quoted in the literature.
<i>Other substantive exploration data</i>	In 1998, the Government conducted an airborne electromagnetic survey in the north of the ARC. The flight lines were carried out at an altitude of 120m above ground on a 400m line spacing. The geophysical data is freely available on the Government portal. Sediment-hosted copper typically does not respond to most geophysical methods and as such, the data is not suited to direct-detection. The only exception is 3D induced polarisation methods that have not been conducted in ARC. However, Greenfields identifies that the magnetic anomaly is coincident with a gravity anomaly and interprets this signature to represent an iron-enriched hydrothermal footprint. Native copper and copper sulphides occur within this anomaly. No bulk density, geotechnical, metallurgical, rock characterisation, or groundwater analysis has been performed. Greenfields is unaware of any deleterious or contaminating substances associated with the known mineralisation.
<i>Further work</i>	Despite the highly encouraging results and strong indications of a large mineral system, the ARC is at an early stage of exploration. Greenfields has tightly constrained the main mineralising events, but currently only 2D data are available. Obtaining 3D data down to the basement of the basins will help in modelling the movement of metal rich fluids. Passive seismic is identified as a low-cost method for acquiring deep, broad 3D data. This method required around 30 days of collection, during which geochemical sampling and site visits can occur. In areas of known anomalism, such as the Discovery Zone, a 3D induced polarisation survey is recommended. The program is intended to provide enough contextual information to build a 3D model, with higher-resolution data available over the Discovery Zone. It is also recommended that geochemical in situ sampling be performed. Before a field program satellite data acquisition and historical sample analysis should be conducted.