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#### Bluejay Mining plc / Ticker: JAY / Market: AIM / Sector: Mining

# Results of the 2022 Field Programme at the Disko-Nuussuag Ni-Cu-Co-PGE-Au Project, Central West Greenland

Bluejay Mining plc (AIM: JAY) ('**Bluejay**', the '**Group**', or the '**Company**'), the AIM, FSE-listed and OTCQB traded exploration and development company with projects in Greenland and Finland, is pleased to announce the results of the 2022 field programme (the '**Programme**') at its Disko-Nuussuaq nickel-copper-cobalt-platinum group elements-gold ('**Ni-Cu-Co-PGE-Au**') Project ('**Disko-Nuussuaq**' or the '**Project**'), on behalf of Nikkeli Greenland A/S ('**Nikkeli**'), the Greenland registered Joint Venture ('**JV**') company created by Bluejay and its JV partner <u>KoBold Metals</u> ('**KoBold**').

The geochemical, geophysical, and geological data from the 2022 exploration campaign (see Bluejay RNS dated: <u>10 October 2022</u>) has now been fully integrated with existing data and interpreted by KoBold's technical team utilising their proprietary artificial intelligence ('**AI**') and machine learning ('**ML**') platforms. Significantly more data was gathered during 2022 than originally expected which has prolonged the time required to analyse the new datasets and incorporate these with historical data and observations. The resulting interpretation has allowed the JV to rank and prioritise targets and will form a strong basis for decisions on future field and drilling programmes.

### **Highlights**

#### Geophysical surveys support existing targets and have identified new areas of interest:

- In addition to known targets, the Falcon<sup>®</sup> Airborne Gravity Gradiometer ('AGG') surveys have identified an additional 9 strong gravity (± magnetic) anomalies that may represent previously unrecognised mafic-ultramafic intrusions of comparable size to the host intrusions of many world-class magmatic Ni-Cu sulphide deposits.
- o A strong early-time SAMSON and HeliSAM electromagnetic ('EM') anomaly, c. 600 x 900 metres ('m') in size has been identified within the Qullissat intrusion at shallow depth. A mid-time HeliSAM EM anomaly has been identified in the Aaffarsuaq Valley at a modelled depth of 400 to 800m. A modest late-time SAMSON anomaly, c. 600m in length has been identified at the Igdlukunguaq target along strike of the 28-tonne Igdlukunguaq massive sulphide bounder (grading)

6.86% Ni, 3.71% Cu, 0.55% Co and 2.0 grams per tonne ('g/t') combined Pt and Pd).

#### Geochemical surveys have provided independent verification of geophysical targets:

- Anomalous Mobile Metal Ions ('MMI') soil geochemistry for nickel ('Ni'), copper ('Cu'), cobalt ('Co'), platinum ('Pt') palladium ('Pd'), gold ('Au'), selenium ('Se'), tellurium ('Te') and chromium ('Cr') at Aaffarsuaq Valley, Qullissat and Igdlukunguaq, support the presence of magmatic sulphide mineralisation and provide further independent validation of geophysical drill targets at these localities.
- Rock samples from the Qullissat intrusion provide geochemical evidence that this partially outcropping intrusion reached sulphur saturation, further increasing the Company's ranking of existing geophysical drill targets associated with this locality.

#### • Operational highlights, expenditure, and new licence application:

- Under Stage I of the JV agreement, KoBold had a commitment to solefund a minimum of US\$3.4 million in exploration expenditure during 2022. KoBold opted to increase their 2022 expenditure substantially beyond their earn-in commitments. The additional expenditure by KoBold allowed the JV to collect significantly more geophysical and geochemical data than was originally planned.
- Total exploration expenditures for Nikkeli's Disko-Nuussuaq licences during 2022 have been approved by the Mineral Licencing and Safety Authority ('**MLSA**'), Government of Greenland. The approved expenditures cover both the 2022 and 2023 licence commitments.
- Bluejay fulfilled the role of Field Operations Manager during the 2022 field programme and for this role received a JV expenditure-based management fee as well as reimbursement of Bluejay employee salaries. Bluejay also receive an additional income from Nikkeli for the rental of its purpose-built modular exploration camp at Qullissat, Disko Island.
- o As the majority partner of the JV, KoBold has elected not to proceed with any field programme at Disko-Nuussuaq in 2023. Desktop studies and modelling of existing datasets is ongoing.
- Under Stage II of the JV, KoBold is required to spend US\$11.6 million on drilling related expenditure or drill 15 pre-agreed diamond drill holes within the licence areas by 31 December 2024 (see Bluejay RNS dated: <u>9 August 2021</u>). Should KoBold not complete its Stage II commitments, 2.0% of the JV company and thereby control will revert to Bluejay with both parties subject to continuing standard dilution methodology.
- An application for a new Mineral Exploration Licence ('MEL') totalling 116.6 square kilometres ('sq-km') has been submitted by Nikkeli to the MLSA, Government of Greenland. The new MEL will provide Nikkeli with a buffer around its existing licences and secures a continuous land position along the drill accessible north coast of Disko Island where the Company has several high-priority drill targets.

# Chief Executive Officer of Bluejay Mining plc, Dr Bo Møller Stensgaard, commented:

"We're delighted to report the results of our first JV exploration campaign with KoBold, which has considerably advanced our understanding of several key targets at Disko-Nuussuaq, most notably at Qullissat, within the Aaffarsuaq Valley and along the northern coats of Disko Island. The large volume of new data collected in 2022 represents one of the most aggressive and extensive data-gathering campaigns ever completed at Disko-Nuussuaq.

"Results from the in-depth analysis of the 2022 data continue to excite us and when integrated with historical data and observations, provide us with a very strong

foundation for planning future campaigns. Not only has it presented us with a greater ability to evaluate our degree of confidence on already identified drill targets - it has also generated new targets and areas of interest. We now have a high degree of confidence in several of our drill targets and look forward to testing these. At the same time, it should be emphasised that our Disko-Nuussuaq Project truly represents a district-scale opportunity of significant magnitude and that there are undoubtably still new targets to be found within our licences, as well as known prospective areas that have not yet been fully assessed or covered with new data.

"The analysis and interpretation of the extensive 2022 datasets by KoBold's team of geologists and data scientists is largely complete. We acknowledge the desire of our JV partner to access, in its entirety, the district-scale play and the need to rank and prioritise targets ahead of future work. We continue to progress the Project in line with the JV Agreement under which KoBold must spend US\$11.6 million in drilling related expenditure or 15 pre-agreed drill holes by the end of 2024.

"The results presented in this press release are testimonial to the scale, number of potential targets and opportunity for discovery that the Disko-Nuussuaq Project represents. Discovering the next Noril'sk remains the holy grail for nickel explorers - we're confident that we are well positioned with the right licence areas, in the right district, to make a globally significant Ni-Cu-Co discovery at Disko-Nuussuaq."

# Vice President Exploration of Bluejay Mining plc, Joshua Hughes, commented:

"One of the primary challenges in targeting magmatic sulphide deposits is the absence of a footprint beyond their host intrusions. Exploring for this style of deposit therefore requires diligent and systematic geophysical and geochemical evaluation, especially when exploring beneath cover. Building upon more than 35 years of legacy commercial data, a wealth of scientific knowledge for the region and applying a minerals systems framework to our exploration, we continue to strengthen and upgrade the geological model for Disko-Nuussuaq. Our targeting is becoming ever more refined and focussed ahead of future drilling campaigns. With c. 50 personnel on-site last summer, 2022 was the largest field campaign we have conducted at Disko-Nuussuaq to-date.

"Work at Qullissat has further validated the intrusion as a high-priority drill target. We have now demonstrated the presence of a shallow early-time EM anomaly in the HeliSAM and SAMSON surveys that exactly matches the location of historical EM and magnetotelluric ('**MT**') anomalies. These anomalies are bound by a large gravity high

identified in the Falcon<sup>®</sup> AGG survey that indicates that we may be dealing with a substantial mafic intrusion (modelled up to 8 kilometres ('**km**') long, 450m wide and up to 400m thick), comparable in size to intrusions known to host major magmatic sulphide deposits globally. The new geochemical data for Qullissat intrusion provides another layer of confidence to this target: rock samples clearly show that the intrusion reached sulphide saturation, a critical geological process in the formation of magmatic sulphide deposits, and soil geochemistry by two separate analytical methods has revealed consistent geochemical anomalies in the soils surrounding this partially outcropping intrusion. Minor drilling by Falconbridge in the early 1990's did not test these EM and MT anomalies but did encounter a gold mineralised native iron cumulate at the base of the intrusion, which returned up to 38.3 g/t gold in a

magnetic concentrate<sup>[1]</sup>. We know from other locations on Disko-Nuussuaq that magmatic sulphides and mineralised native iron cumulates can occur within the same intrusions and within individual lava flows. The widespread occurrence of native iron cumulates is unique to Disko-Nuussuaq and provides us with an additional exploration target, particularly for gold and PGE.

"We're also excited about our deeper targets in the Aaffarsuaq Valley, where the HeliSAM surveys again support the presence of a conductive body that corresponds spatially to historical EM and MT anomalies. As well as progressing our existing targets, we continue to identify new targets within our licence areas through cutting-

edge exploration technologies. For example, the 2022 Falcon<sup>®</sup>AGG surveys identified a suite previously unknown gravity ( $\pm$  magnetic) anomalies along the northern coast of Disko Island, the inner parts of the Kuugannguaq Valley and at Serfat that are of sufficient dimensions to be considered of commercial interest as probable maficultramafic intrusions. These new anomalies warrant further characterisation through additional UAV-borne magnetics, ground electromagnetic and/or gravity surveys and geochemical sampling during future field campaigns. Related to this, there are still highly prospective areas, e.g., in Hammer Dal, Kuugannguaq Valley and Stordal on Disko Island and the Itilli and Serfat areas at Nuussuaq, which were not able to be assessed in detail during the 2022 programme - all of which justify further exploration. The abundance of robust targets speaks to the district-scale potential that we recognise within our 2,903 sq-km Disko-Nuussuaq Project."

#### **Overview of the 2022 Field Programme and Contractors**

2022 field activities at Disko-Nuussuaq targeted numerous areas for massive Ni-Cu-Co-PGE-Au bearing sulphides using advanced geophysical and geochemical exploration technologies, including:

- 3,030 line-kilometres ('line-km') of high-sensitivity fixed-wing Falcon<sup>®</sup> AGG, magnetic and LIDAR survey flown by <u>Xcalibur Multiphysics</u>, Canada.
- o 2,115 line-km of high-resolution UAV magnetics surveys undertaken by <u>EarthEx Geophysical Solutions Inc</u>, Canada.
- 699 SAMSON deep-penetrating ground EM stations undertaken by <u>Discovery International Geophysics</u>, Canada in collaboration with <u>Gap</u> <u>Geophysics</u>, Australia.
- o 1,068 line-km of HeliSAM airborne EM undertaken by Discovery International Geophysics, Canada in collaboration with Gap Geophysics, Australia.
- o Three multibeam hydrographic bathymetry surveys totalling 37.25 sq km were undertaken by <u>HydroCharting ApS</u>, Denmark.
- o 3,572 geochemical samples (comprising rock, soil, and stream sediment and heavy mineral concentrate samples).
- o 60 rock samples collected for petrological studies.
- o 134 rock samples collected for petrophysical analysis by <u>EarthEx</u> <u>Geophysical Solutions Inc.</u>, Canada.

## **Results of the Geophysical Surveys:**

# Falcon<sup>®</sup> AGG Surveys

Xcalibur Multiphysics's proprietary Falcon<sup>®</sup> AGG system has been jointly developed by Xcalibur Multiphysics, BHP, and Lockheed Martin over the last 20 years. This has led to the only commercial AGG system that is specifically designed to deal with the rigours of high-resolution data collection in the dynamic airborne environment. The state-of-the-art system uses extremely sensitive accelerometers to produce lownoise, high-resolution gravity data from an airborne platform, providing several key advantages over other standard Full Tensor Gradiometer ('**FTG**') systems. The resulting gravity data provides an image of the geology based on density variations in the underlying rocks. It therefore provides a useful geophysical tool to explore for the mafic-ultramafic intrusions that may host massive sulphide mineralisation within Nikkeli's licence areas.

A total of 3,030 line-km was completed over nine survey areas on Disko Island and the Nuussuaq Peninsula (Figure 2). Eight of the surveys were flown with a flight line spacing of 200m and one with a 150m line spacing, with a nominal 100m terrain clearance height on all surveys. Geophysical instruments installed in the Cessna

C209B turbo prop aircraft used to conduct the surveys included the Falcon<sup>®</sup> AGG Kepler system and caesium Scintrex CS-3 magnetometer.

Detailed modelling of the AGG and magnetic data was completed in-house by KoBold.

Several positive gravity anomalies have been identified associated with known targets (e.g., at Qullissat and within the Aaffarsuaq Valley). Significantly a number of these are coincident with conductive bodies identified in earlier EM surveys and now further supported by independent geochemical proxies.

Outside of the existing targets, the Falcon<sup>®</sup> AGG surveys have also identified nine previously unrecognised large gravity highs (at Serfat, the inner parts of the Kuugannguaq Valley and along the northern coast of Disko Island) that have sufficient dimensions to be of interest as intrusions which could host magmatic sulphide mineralisation. Several of the gravity highs are coincident with a strong magnetic response. However, none of these new gravity anomalies currently have EM coverage. Follow up work including detailed ground gravity and EM surveys are planned as part of future programmes to refine and better characterise the gravity anomalies.

#### HeliSAM and SAMSON EM Surveys

The dual ground and airborne EM programme, provided by Discovery International Geophysics in collaboration with Gap Geophysics comprised of 699 SAMSON deeppenetrating ground EM stations and 1,068 line-km of HeliSAM airborne EM. HeliSAM is a Hybrid Transient Electromagnetic ('**TEM**') technique that uses an inductive ground-based transmitter loop in conjunction with a helicopter towed caesium vapour total field magnetic sensor.

SAMSON uses a TM-7 receiver system to perform time-domain EM surveys using a total field cesium vapor sensor. This allows the system to operate at very low base frequencies needed for determining the true late-time decay constant of a highly conductive or deep target. During the Programme, Nikkeli switched focus from HeliSAM to SAMSON to guarantee sufficient depth penetration for the targets of interest. As SAMSON is a ground-based technique it has a slower production rate compared to HeliSAM. Therefore, planned EM surveys over Hammers Dal and the Kuugannguaq Valley were not undertaken but are planned during future field campaigns.

Results of the HeliSAM and SAMSON surveys:

 HeliSAM and SAMSON loops QU02: clear and discrete early-time (channels 1-10 in HeliSAM and SAMSON) EM anomaly has been identified
[2]

within the Qullissat intrusion on the northern coast of Disko Island. Simulated response models indicate that the conductive body is shallow (110m  $\pm$  100m), c. 600 x 900m in dimension and c. 25 m thick. The current working model is coincident with the modelled depth of an EM anomaly identified in a GeoTEM airborne survey flown in 1992.

An Titan24 direct current resistivity and induced polarisation ('**DCIP**') and MT survey carried out by Quantec Geoscience in 2003 for earlier operator, Vismand Exploration, indicates a strong conductivity anomaly at around 570m directly below the shallower EM anomaly identified in the HeliSAM and SAMSON surveys in 2022. Both this target and the aforementioned shallower target remain undrilltested.

(2) <u>HeliSAM loops AF03 and AF04:</u> broad, smooth mid-time (channels 15-20 in HeliSAM) EM anomaly has been identified in the Aaffarsuaq Valley on the Nuussuaq Peninsula. Modelling of this anomaly indicates a deep (c. 800m to centre and c. 400m to the top) and weakly conductive body.

Notably this is spatially coincident with anomalies identified in several other geophysical datasets including the aforementioned Titan24 DCIP and MT survey by Vismand Exploration and an audio frequency magneto-variational ('**AFMAG**') survey using the Z-Axis Tipper electromagnetics ('**ZTEM**') system flown in 2012 by Avannaa Resources. These anomalies occur within a large gravity high identified a historical Carson gravity survey flown in 1996 for GrønArctic as part of a hydrocarbon exploration programme. Vismand Exploration attempted to drill test the EM and MT targets in the Aaffarsuaq Valley but failed due to geotechnical and gas related issues. Therefore, these targets remain undrilltested.

(3) Other HeliSAM and SAMSON loops: As earlier reported (see Bluejay's press release dated: <u>10 October 2022</u>), a modest late-time EM anomaly, c. 600 m in length was identified in the SAMSON data over the Igdlukunguaq target. However, the EM response at this locality is just above noise levels. Therefore, removal of noise from the data in collaboration with GAP Geophysics and further parametric modelling of this target by KoBold is ongoing. Significantly, the anomaly is located along strike of the 28-tonne Igdlukunguaq high-grade massive sulphide bounder (see "About the Disko-Nuussuaq Project" section later in this press release).

No significant EM anomalies have been identified in the remaining loops. The EM responses in these loops is well-explained by simple background geological models with no conductive bodies in the subsurface.

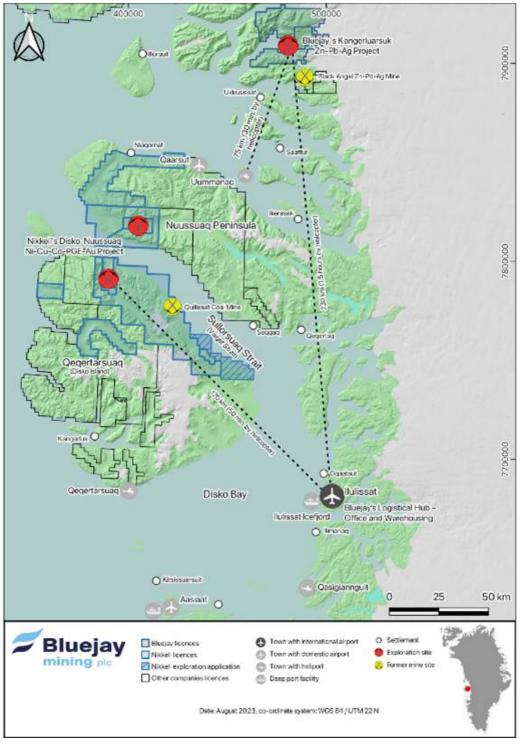
#### **UAV-borne Magnetics Surveys**

2,115 line-km of high-resolution UAV magnetics surveys undertaken by by EarthEx Geophysical Solutions over four survey areas on Disko Island and the Nuussuaq Peninsula (Figure 3). The surveys were flown with a target terrain clearance of 25 m and 50 m line spacing. To conduct the survey, a cesium vapor magnetometer and necessary navigation instruments were mounted on the DJI Matrice Pro 600 UAV platform.

#### Hydrographic Bathymetric Surveys and Photogrammetric Survey

To optimise forward looking logistics, Nikkeli undertook three multibeam hydrographic bathymetric surveys totalling 37.25 sq-km (Figure 4) covering key marine access points on Disko Island and the Nuussuaq Peninsula. This will provide a safe approach for ocean-going vessels and barges to mobilise and demobilise drilling and exploration equipment during future field seasons. A Sonic 2024 multibeam echosounder and sidescan sonar were used. The surveys meet IHO Standards for Hydrographic Surveys (S-44).

To potentially reduce Nikkeli's dependency on helicopters and overall fuel consumption, a photogrammetric survey of a historical 25 km long gravel road located in the Aaffarsuaq Valley on the Nuussuaq Peninsula was undertaken. Minor repairs to this road would allow vehicle access to several high-priority drill targets within the Aaffarsuaq Valley and therefore improve exploration efficiency and reduce related costs.



**Figure 1.** Map of Central West Greenland showing all active Mineral Exploration Licences and applications. Also shown are cities and settlements, deep water port facilities, airports, heliports and former mine sites in the region. Approximate helicopter flight times from Ilulissat to Bluejay's projects are also indicated. Bluejay has a modular exploration camp for up to 40 personnel at the former coal mining town of Qullissat on Disko Island. Bluejay's logistical hub (comprising of an in-country office, accommodation, and warehousing facilities) is located in the city of Ilulissat where an international airport is currently under construction. Bluejay are a wellknown and trusted customer, partner, and employer in the region.

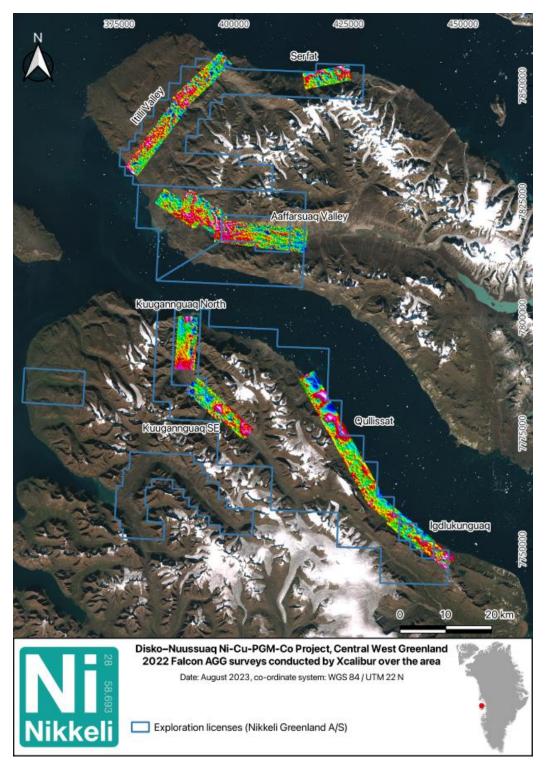


Figure 2. 2022 Falcon® AGG surveys flown over Disko-Nuussuaq

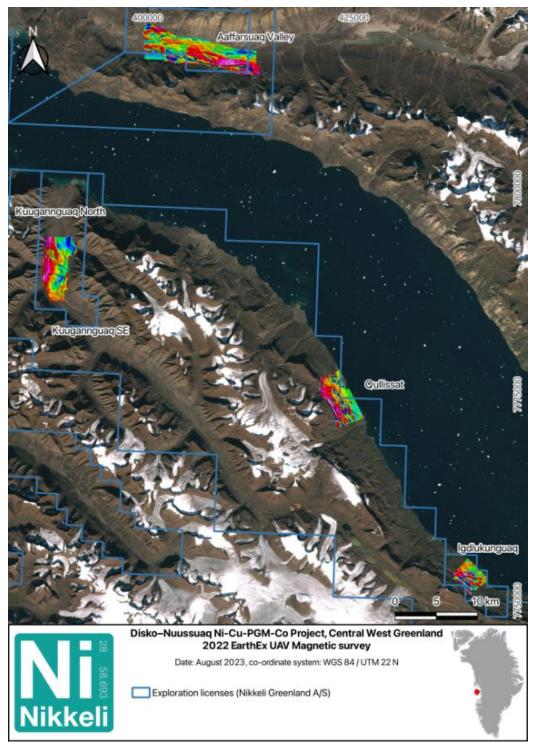
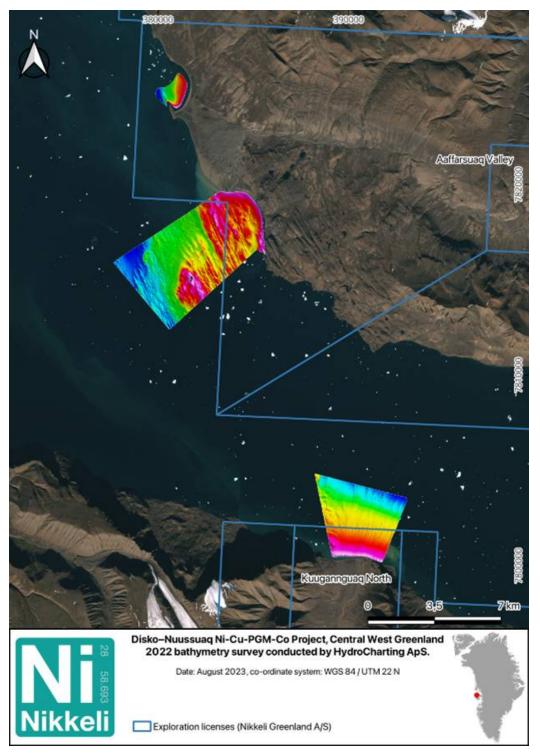
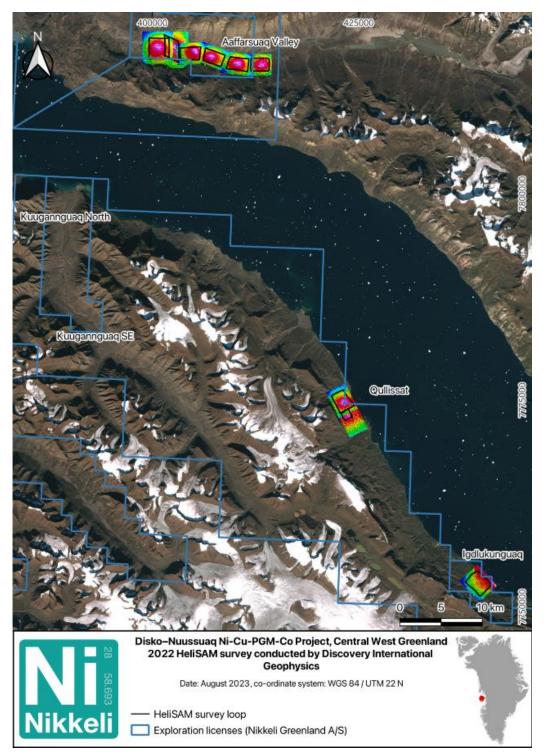


Figure 3. 2022 UAV magnetics surveys flown over Disko-Nuussuaq.



**Figure 4.** Three multibeam hydrographic bathymetric surveys completed in 2022 over key marine access points to assist in future logistical planning.



**Figure 5.** HeliSAM helicopter-borne electromagnetics surveys over Aaffarsuaq Valley, Qullissat and Igdlukunguaq.

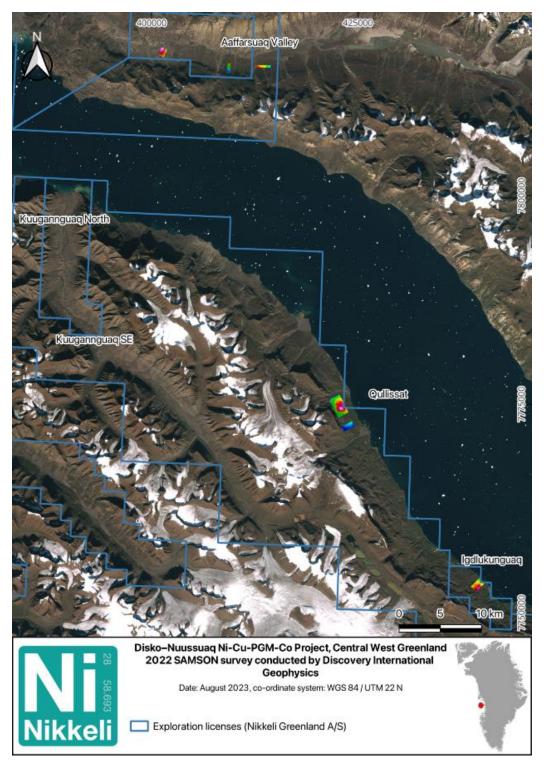
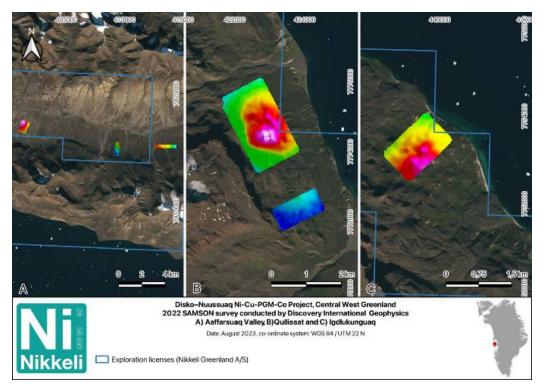


Figure 6. 2022 SAMSON ground electromagnetics surveys.



**Figure 7.** SAMSON ground electromagnetics surveys, as shown in the previous figure. (A) Aaffarsuaq Valley; (B) Qullissat; and (C) Igdlukunguaq.

# **Results of the Geochemical Sampling Programmes:**

#### Soil Geochemistry

The soil sampling programme was carried out at Qullissat and Igdlukunguaq on the northeast coast of Disko Island and in the Aaffarsuaq Valley in the southern part of the Nuussuaq Peninsula (Figure 8). A total of 1437 sample sites located along 45 profiles were sampled over three key target areas.

Soil sampling is a fast and cost-effective method for identifying anomalous areas and refining drillable targets especially in the early stages of exploration. From each soil sampling site, the sample was split into two identical samples that were submitted to commercial laboratories for analysis; one sample was submitted for MMI<sup>™</sup> analysis, and the second sample was submitted for bulk geochemistry using a four-acid digest. The sampling and analytical procedures are described in detail at the end of this press release.

MMI<sup>™</sup> is a soil geochemical exploration tool that has been repeatedly proven to be efficient for drill hole targeting and has been successfully applied to find buried mineral deposits. SGS is the owner and sole provider of MMI<sup>™</sup> Technology. MMI<sup>™</sup> is an innovative analytical process that uses a unique analysis of metals in soils and weathered materials. Target elements (e.g., Ni, Cu, Co, Au, Pt, Pd) are extracted using weak solutions of organic and inorganic compounds rather than conventional aggressive acid-based digests. MMI<sup>™</sup> solutions contain strong ligands, which detach and hold the metal ions that were loosely bound to soil particles by weak atomic forces. The extraction does not dissolve the bound forms of metal ions. Thus, metal ions in MMI<sup>™</sup> solutions are the chemically active or 'mobile' component of the sample. This mobile component may derive from the upwards migration of metal ions from buried sulphide mineralisation, which accumulates in the unconsolidated surface materials (e.g., soil or glacial till). As these mobile, loosely bound complexes occur in very low concentrations (i.e., parts per billion ('ppb'), elemental determinations are made by conventional or cell-based Inductively Coupled Plasma Mass Spectrometry ('ICP-MS'). The 2022 MMI<sup>™</sup> data builds upon an detailed orientation study of using MMI<sup>™</sup> and SGH (Spatiotemporal Geochemical Hydrocarbons), completed by Bluejay at Disko-Nuussuag in 2019 (see Bluejay RNS dated: 04 February 2020).

Anomalous MMI<sup>™</sup> soil geochemistry for Ni, Cu, Co, Pt, Pd, Au, Te, Se, and Cr in both the 2019 and 2022 datasets (Figures 9 to 17) at Aaffarsuaq Valley, Qullissat and

Igdlukunguaq support the presence of magmatic sulphide mineralisation and provide further independent validation of Nikkeli's geophysical drill targets at these localities. Note that the MMI<sup>™</sup> in Figures 9 to 17 are plotted as response ratios relative to a median value. Localised median values are used to reflect differences in local geology between survey areas. Given the wide spacing of sampling profiles, further MMI<sup>™</sup> sampling is planned as in-fill between anomalous profiles in the Aaffarsuaq Valley as part of future campaigns.

Soils surrounding the Qullissat intrusion on the northern coast of Disko Island, returned consistent geochemical anomalies in both the MMI<sup>™</sup> and four acid digest soil geochemistry. The soils surrounding the historical 28-tonne Igdlukunguaq massive sulphide boulder (see "About the Disko-Nuussuaq Project" section later in this press release) did not return any significant anomalism, supporting Bluejay's earlier interpretation that the boulder is not in-situ. The boulder, which was discovered adjacent to an outcropping mafic dyke was assumed by earlier operators to be in-situ, leading to Falconbridge drill testing the dyke. Several anomalies in historical geophysical datasets up hill of the Igdlukunguaq boulder are considered by the Company as good candidates for the original source of the mineralisation.

#### **Stream Sediment Geochemistry**

The stream sediment sampling programme was carried out at throughout Nikkeli's 2,903 sq-km licence areas with the densest sampling in the Kuugannguaq and Aaffarsuaq valleys (Figure 8). A total of 337 sample sites were sampled. For each sample site, two separate samples were collected - one sample of panned heavy mineral concentrate ('**HMC**') and one sample of the fine fraction of mm'). The sampling and analytical procedures are described in detail at the end of this press release.

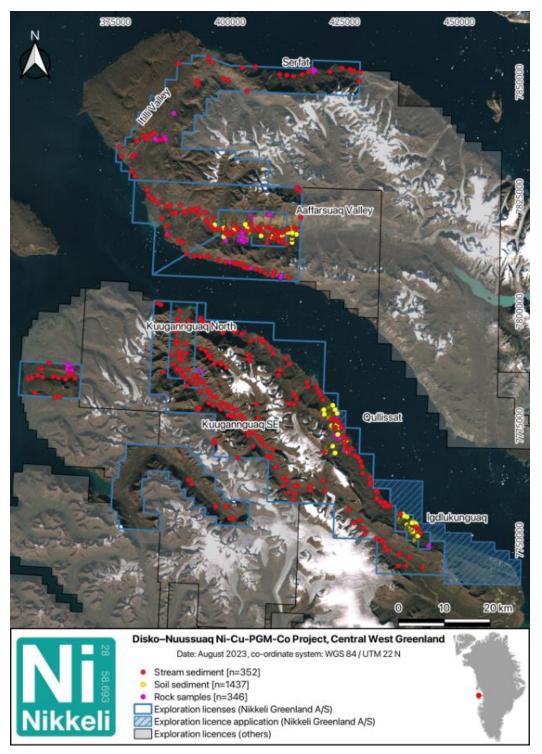
Whilst anomalous Ni values (i.e., elevated above the magmatic trend) were identified at several localities, no coincident Ni and Cu anomalism were identified. This suggests that there is only minor potential for sub-cropping or outcropping magmatic sulphide mineralisation at Disko-Nuussuaq - targets are almost certainly blind and located at depth as indicated by numerous geophysical datasets.

#### **Rock Geochemistry**

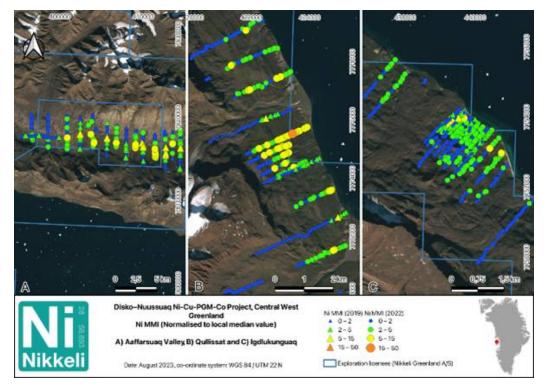
Rock sampling was primarily carried out as part of the geological mapping programme, as well as from the logging of five geological stratigraphic sections; a smaller number of rock samples were collected during regional prospecting (Figure 8). A total of 347 rock samples were collected. The sampling and analytical procedures are described in detail at the end of this press release.

Most rock samples were unmineralised samples collected for lithogeochemical studies. For 60 of the rock samples petrographic polished thin sections were prepared. A detailed petrological study by KoBold is ongoing. 134 rock samples collected for petrophysical analysis (including magnetic susceptibility, Koenigsberger ratio (for remanent magnetisation), nduced polarisation, resistivity (galvanic), conductivity (inductive), density and porosity) by EarthEx Geophysical Solutions Inc., Canada. These petrophysical measurements build upon Nikkeli's existing petrophysical database for Disko-Nuussuaq which is used to better constrain parameters used in the modelling of geophysical datasets by KoBold's geophysicists and data scientists.

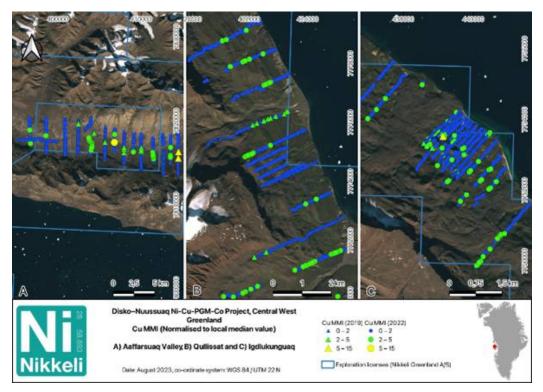
Mineralised rock samples from the spoil heaps of the former Igdlukunguaq boulder were collected for lithogeochemical characterisation and returned maximum values of **5.78% Ni, 3.15% Cu and 0.48% Co**, hosted in massive sulphides. Rock samples from the Qullissat sill on the northern coast of Disko Island, provide geochemical evidence that this partially outcropping intrusion reached sulphur saturation, which along with the surrounding soil anomalism described above, further increasing the Company's ranking of existing geophysical drill targets associated with this intrusion.



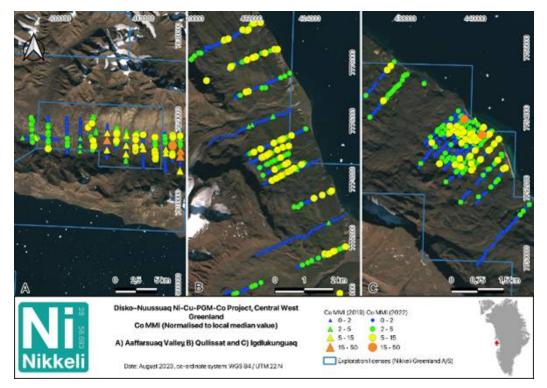
**Figure 8.** Stream sediment, soil, and rock sample coverage from the 2022 Programme at Disko-Nuussuaq.



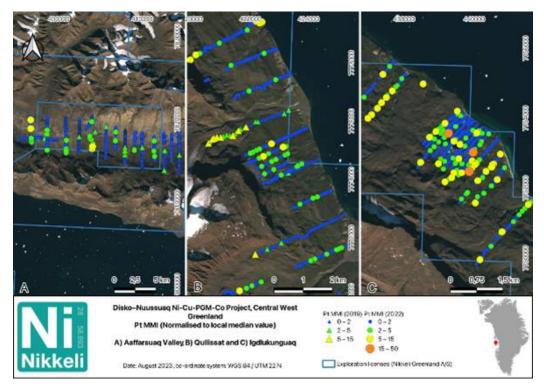
**Figure 9.** MMI soil geochemistry results (response ratios for nickel, Ni). Showing combined 2019 and 2022 datasets.



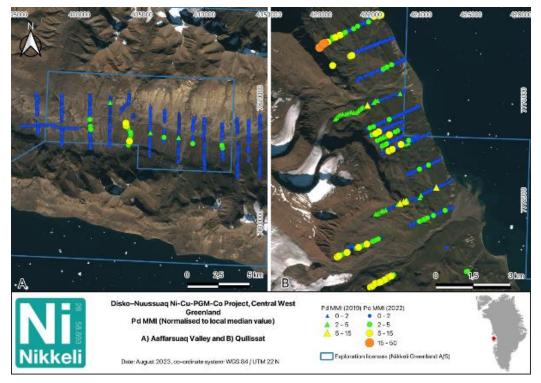
**Figure 10.** MMI soil geochemistry results (response ratios for copper, Cu). Showing combined 2019 and 2022 datasets.



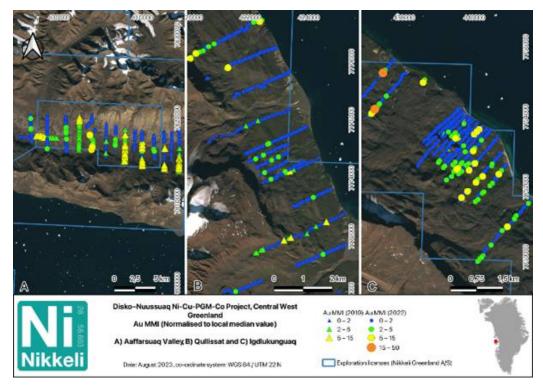
**Figure 11.** MMI soil geochemistry results (response ratios for cobalt, Co). Showing combined 2019 and 2022 datasets.



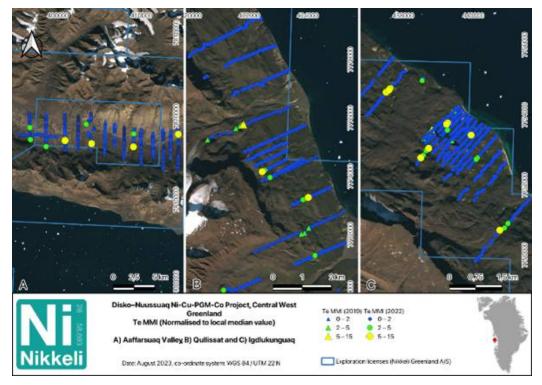
**Figure 12.** MMI soil geochemistry results (response ratios for platinum, Pt). Showing combined 2019 and 2022 datasets.



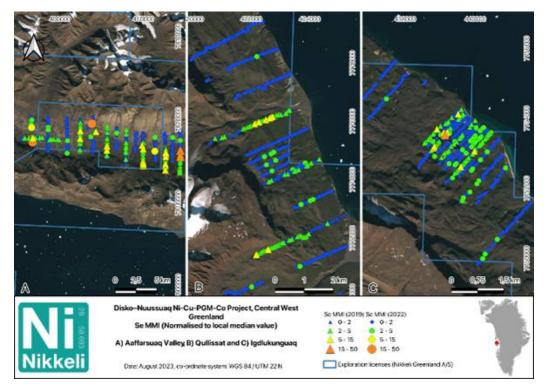
**Figure 13.** MMI soil geochemistry results (response ratios for palladium, Pd). Showing combined 2019 and 2022 datasets.



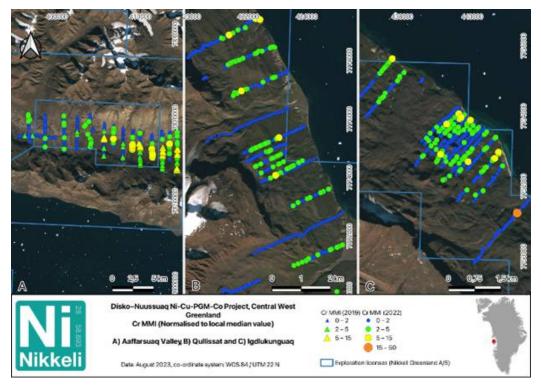
**Figure 14.** MMI soil geochemistry results (response ratios for gold, Au). Showing combined 2019 and 2022 datasets.



**Figure 15.** MMI soil geochemistry results (response ratios for tellurium, Te). Showing combined 2019 and 2022 datasets.



**Figure 16.** MMI soil geochemistry results (response ratios for selenium, Se). Showing combined 2019 and 2022 datasets.

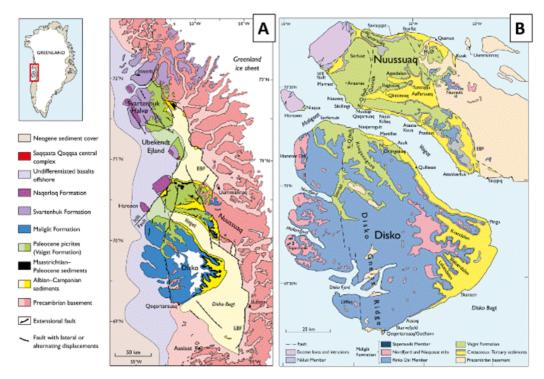


**Figure 17.** MMI soil geochemistry results (response ratios for chromium, Cr). Showing combined 2019 and 2022 datasets.

# About the Disko-Nuussuaq Project:

Disko-Nuussuaq Project comprises of five MEL's covering a total of 2,903 sq-km located on the Nuussuaq Peninsula and Disko Island in Central West Greenland. Nikkeli currently have an application in progress for a new MEL on the north-east coast of Disko Island, totalling 116.6 sq-km. The Project is located approximately 120 km northwest of Ilulissat, the third largest city in Greenland (with population of approximately 4700) and the educational, business and administrative centre of Central West Greenland. The city benefits from an airport, deep-water port facilities and a wide selection of service providers. A new international airport is currently being constructed and is scheduled for completion in 2025. Bluejay has had a logistical hub comprising of an exploration office, accommodation, and warehousing facilities in Ilulissat since 2016 that supports activities at its Disko-Nuussuaq and Kangerluarsuk projects (Figure 1). The Company also has a modular exploration camp for up to 40 personnel located at the abandoned coal mining town of Qullissat on Disko Island.

The Disko-Nuussuaq Project is hosted within the West Greenland Flood Basalt Province ('**WGFBP**'). The WGFBP is related to the initial phase of continental breakup and initiation of seafloor spreading of the Labrador Sea in the early Palaeogene. The province is a well-recognised geological analogue to the Siberian Flood Basalts of the Noril'sk Region, Siberia. This analogy was first recognised by Cominco (now Teck) and provided the exploration framework that has guided subsequent exploration. Subsequently several peer-reviewed scientific studies (e.g., Lightfoot et al., 1997; Lightfoot and Hawkesworth, 1997; Keays and Lightfoot, 2007) have highlighted the similarities between the geology of the Noril'sk region (that hosts the Noril'sk-Talnakh nickel-copper-cobalt-palladium mining district, the world's largest nickel producing district) and the Disko-Nuussuaq region. It is estimated based on the combined reserves, resources, and historic production, that the total value of the ores in the Norilsk-Talnakh district, at 2020 metal prices, exceeded US\$1.4 trillion (<u>Barnes et al., 2020</u>).



**Figure 18.** (**A**) Simplified geological map of Central West Greenland (light colours are sea covered areas); (**B**) Geological map of the Disko-Nuussuaq region. "K-Q fault" = Kuugannguaq-Qunnilik fault system. Glaciers are not shown (Figures taken from: Pedersen et al., 2017).

Geological and metallogenic similarities between Disko-Nuussuaq and Noril'sk include:

- (1) <u>Abundance of primitive, high-Mg olivine-rich magma (i.e., picrites and olivine basalts).</u>
  - a. The Vaigat Formation at Disko-Nuussuaq is recognised as the most voluminous picrite succession known on Earth, exceeding that of Noril'sk.
  - b. The Disko-Nuussuaq region contains an unusually high proportion of picrites, which constitute approximately one-third of the total erupted volume and have been shown to represent almost unmodified mantle melts (<u>Larsen and Pedersen, 2009</u>; <u>Pedersen</u> <u>et al., 2017</u>);
- (2) Fault control on magma conduits.
  - a. The three most important structures in the Disko-Nuussuaq region are the Eastern Boundary fault system, the Kuugannguaq-Qunnilik ('**K-Q**') fault system and the Itilli fault system.
  - b. A clustering of mapped volcanic eruption sites along the N-S orientated K-Q fault system, within Nikkeli's licence areas, demonstrates its deep-seated nature as a preferred pathway for magmas.
  - c. The K-Q and Itilli fault systems are largely covered by Nikkeli's exploration licences.
- (3) Sulphur-rich sedimentary wall rocks.
  - The volcanics at Disko-Nuussuaq were emplaced through and onto a substrate of 6-10 km thick sediments of the Nuussuaq sedimentary basin of Cretaceous-Palaeocene age (<u>Dam et al.</u>,

2009) and Precambrian basement. The Nuussuaq Basin includes several excellent sources of sulphur including black shales, coals, other organic-rich sediments, as well as hydrocarbons. Occurrences of basaltic ignimbrites have been attributed to the interaction of magmas with hydrocarbons. Several petroleum seeps and stains are known within Nikkeli's licence areas (e.g., <u>Christiansen and Bojesen-Koefoed, 2021</u>).

- (4) <u>Repeated episodes of assimilation of siliceous crustal rocks.</u>
  - a. Lithogeochemical modelling including isotope geochemistry reveals significant degrees of crustal assimilation within contaminated units (Larsen and Pedersen, 2009). Several of the contaminated units constitute significant volumes (e.g., the Asuk Member is known from northern Disko and southern Nuussuaq over an area of >1000 sq km and up to 150 m thick; the Kûgánguaq Member is known from northern Disko only and covers an area of >200 sq km and up to 90 m thick).
  - b. Evidenced at Disko-Nuussuaq by the presence of silica enriched volcanics including native-iron and graphite bearing basalts, andesites and dacites, and graphite-bearing rhyolites (e.g., Larsen and Pedersen, 2009; Pedersen et al., 2017).
- (5) <u>Sulphide segregation from the magmas.</u>
  - a. The 28 tonne Igdlukunguaq boulder of high-grade massive Ni-Cu-Co-PGE sulphides (see below).
  - b. Accumulation of both Ni-Cu-Co-PGE sulphides and mineralised native iron cumulates at the base of sills reported from several localities within Nikkeli's licence areas.
  - c. Petrological work by a previous operator (Avannaa Resources) identified spherical sulphide globules exsolving from silicate melt in a highly nickel depleted welded tuff of the Kûgánguaq Member, and graphitic andesites of the Asuk member (refer to Figure 19). The globules are highly enriched in Ni and Cu (up to 6% and 3% respectively) and considered to be representative of the exsolved sulphide melt that is now accumulated beneath the thick volcanic pile.
- (6) Strong chalcophile and siderophile element depletion in volcanic rocks.
  - a. Strong geochemical evidence (both whole rock lithogeochemistry and mineral geochemistry) for chalcophile and siderophile element depletion in contaminated lavas of the Vaigat Formation.
  - b. Work by a previous operator (Avannaa Resources) on the mineral chemistry of olivine and mass balance calculations for the crustally contaminated and strong chalcophile and siderophile element depleted Kûgánguaq Member (refer to Figure 19) indicates that between 12-16 million tonnes of nickel is missing from this depleted lava unit alone. This is inferred to be the result of the segregation of sulphide melts from the magmas prior to eruption within the sub-volcanic magma conduit systems.
  - c. Many other contaminated lava units exists (refer to Figure 19; <u>Pedersen et al., 2017, 2018</u>) but these have not been studied in sufficient detail to assess the amount of missing Ni, Cu and PGE.
  - d. Contaminated units within the Vaigat Formation (see Figure 19) are estimated to account for approximately 545 cubic kilometres

('**km**<sup>3</sup>') or 5.7% of the total volume (<u>Pedersen et al., 2017</u>). Nikkeli's exploration licences cover the majority of the crustally contaminated and/or metal depleted units within the Vaigat Formation, considered the most prospective units in which to find Ni-Cu-Co-PGE-Au sulphide mineralisation.

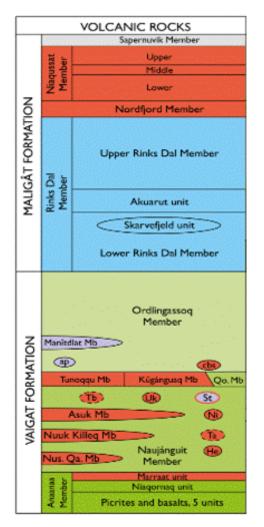
- (7) Proximity to magma conduit systems.
  - a. Outcropping mineralised sills (e.g., Qullissat) and chonoliths (e.g., Hammers Dal) are known within Nikkeli's licences areas. Similar intrusive bodies are interpreted at depth based upon various geophysical surveys - most notably within the Kuugannguag and Aaffarsuag valleys.
  - b. Large-scale conductive bodies within the Kuugannguag and Aaffarsuag valleys interpreted as intrusions, the largest being c. 10.0 km long and around 2.0 km wide and another being c. 4.8 km long and 800m wide. Both are comparable in footprint to the intrusions that host the world-class Noril'sk-Talnakh ore bodies in Siberia.
  - c. Erosion is sufficiently deep to expose the base of the volcanic pile on Disko-Nuussuag and therefore the magmatic conduit systems beneath the volcanics; positioned at a similar erosional level to Noril'sk.

The volcanic stratigraphy on Disko-Nuussuag is very well-defined owning to scientific research (e.g., photogrammetry continuous mapping, and lithogeochemistry) since the 1960's. The volcanic succession can be divided into two major formations: the Vaigat Formation and the Maligât Formation (refer to Figures 18 and 19). Nikkeli's licences are primarily focussed upon contaminated members/units of the Vaigat Formation, considered by the Company to be the most favourable lithologies in the region to host economic magmatic sulphide mineralisation.

In addition to the magmatic sulphide potential at Disko-Nuussuag, the presence of ore-grade Ni-Cu-Co-PGE-Au mineralised native iron as transported boulders up to 10 tonnes and as thin cumulates at the base of sills and chonolith-like intrusive bodies, provides Nikkeli with an additional exploration target within the region. Nikkeli's licences cover most previously recognised magmatic sulphide and native iron occurrences and boulders.

Historical exploration at Disko-Nuussuaq dates back as far as 1870 when both native iron and Ni-Cu sulphide showings were first recognised, including the discovery of the 28 tonne Igdlukunguag boulder of massive sulphide. The high-grade boulder is reported by Falconbridge to have graded 6.86% Ni, 3.71% Cu, 0.55% Co and 2.0 g/t combined Pt and Pd (Olshefsky, 1992), and grades of up to 10.3% Ni have been

reported from smaller grab samples ( $\frac{Pauly}{1958}$ )<sup>[4]</sup>. More than 35 years of modern exploration by companies, including Cominco, Falconbridge, Vismand Exploration and Avannaa Resources, as well as extensive government funded programmes by the Geological Survey of Denmark and Greenland ('GEUS') and its predecessor the Geological Survey of Greenland ('GGU'), has resulted in a vast volume of geological, geochemical, and geophysical datasets which support the presence of a mineralising system(s) at Disko-Nuussuaq that may have resulted in a globally significant accumulation of metals. It is estimated that this multi-decade data acquisition and field work represents up to US\$50 million of historical expenditure within Nikkeli's licence areas.



**Figure 19.** Stratigraphic division of the Paleocene volcanic rocks and sediments on Disko Island and the Nuussuaq Peninsula. The units with elliptical outlines do not extend throughout the succession, and the small ones are local. Crustally contaminated units are shown in red, alkaline units in purple (with a red outline if crustally contaminated), and geochemically enriched units have dashed outlines. **Ap**: alkali picrites associated with the Manîtdlat Member. **Cbs**: contaminated basalts in Stordal. **He**: Henderson unit. **Ni**: Niiortuut unit. **Nus. Qa**.: Nuusap Qaqqarsua. **Qo. Mb**: Qordlortorssuaq Member. **St**: Stordal alkaline unit. **Ta**: Tunorsuaq a unit. **Tb**: Tunorsuaq b unit. **Uk**: Ukallit unit. (Figure taken from: Pedersen et al., 2017).

Deep conductive bodies that are interpreted to represent mineralised intrusions were identified by Vismand Exploration in 2003-04, using a deep-penetrating Titan24 DCIP and MT surveys by Quantec Geoscience, an industry leader in these geophysical methods. The conductors were found in the Kuugannguag and Aaffarssuag Valleys. Deep drilling to test one of these conductors was attempted in 2007 by Vismand Exploration but failed to reach the target depth due to geotechnical and gas related issues. Therefore, the targets remain undrilltested. Bluejay commissioned Quantec Geoscience to re-process the original Titan24 survey data from six survey areas. There have been significant improvements made to the processing and inversion streams for the Titan system that benefited the evaluation and interpretation of the original Disko surveys. The raw data from these types of surveys are suitable for new processing techniques, utilising increased computational power and interpretive techniques that have been developed since the original survey. These improvements include processing raw field data and the use of a joint inversion code for the MT resistivity and DC resistivity data. The use of the new joint inversion code can also help to improve near surface resolution. MT surveys are a geophysical method which uses natural time variations of the Earth's magnetic and electrical fields for estimating the electrical resistivity - or conductivity - of the sub-surface. Electrical conductivity is an important physical property to measure in the search for massive sulphide mineralisation. In 2012, Avannaa Resources commissioned Geotech Ltd. to fly helicopter-borne ZTEM survey to further constrain these targets.

Prior to the JV, Bluejay had undertaken several field campaigns at Disko-Nuussuaq. This included multi-sensor UAV-borne surveys (comprising magnetics, photogrammetric and hyperspectral imaging) conducted in cooperation with the Helmholtz Institute Freiberg for Resource Technology, Germany as a partner of the EU-funded EIT RawMaterials <u>MULSEDRO</u> (MULti-SEnsor DROnes) project (e.g., Jackish et al., 2022). In 2019, Bluejay carried out an MMI and SGH geochemical orientation study, which for the first time demonstrated the presence of metal anomalies coincident with previously identified geophysically and geologically defined targets. This study formed the basis for the larger MMI programme completed by Nikkeli in 2022, reported in this press release.

#### Notes - Sampling, Assay and QAQC Procedures for Geochemical Analysis

**Rock sampling procedures and analysis:** Rock samples were submitted to ALS Geochemistry in Sudbury, Ontario, Canada for sample preparation and geochemical analysis. After drying the rock samples were crushed to >70% passing below 2 millimetres (ALS method: CRU-31<sup>TM</sup>) and split using a riffle splitter (ALS method: SPL-21<sup>TM</sup>). A 1 kilogramme split (or less depending upon the original sample weight) was then pulverised to 85% passing below -75 microns (' $\mu$ m') (ALS method: PUL-32<sup>TM</sup>).

The resulting pulps were then analysed using ALS Geochemistry's complete characterisation package CCP-PKG01<sup>™</sup>. This comprised of the following analyses: major elements (namely SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, Cr2O3, TiO2, MnO, P2O5, SrO, and BaO) were analysed by Inductively Coupled Plasma Atomic Emission Spectroscopy (**'ICP-AES**') after lithium borate fusion on a 0.20 gramme (**'g'**) aliquot (ALS method: ME-ICP06<sup>™</sup>). Trace elements (namely Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Ge, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W. Y, Yb, and Zr) were analysed by Inductively Coupled Plasma Mass Spectrometry (**'ICP-MS'**) following a lithium borate fusion and acid dissolution on a 2g aliquot (ALS method: ME-MS81<sup>™</sup>). Volatile trace elements (namely As, Bi, Hg, In, Re, Sb, Se, Te, and TI)

were analysed by ICP-MS after aqua regia digestion on a 0.5g aliquot (ALS method: ME-MS42<sup>™</sup>). Base metals and select trace elements (namely Ag, Cd, Co, Cu,

Li, Mo, Ni, Pb, Sc, and Zn) were analysed by ICP-AES after four acid digestion  $\begin{bmatrix} 6 \\ 0 \end{bmatrix}$  on a 0.25g aliquot (ALS method: ME-4ACD81<sup>TM</sup>). Carbon and sulphur content were analysed by infrared ('**IR**') spectroscopy (ALS methods: C-IR07<sup>TM</sup> and S-IR08<sup>TM</sup>,

respectively). Loss on Ignition ('Lol') at 1000°C was also analysed (ALS method: OA-

GRA05<sup>™</sup>). Any samples exceeding the over-range threshold for nickel and copper were re-analysed using a 4-acid digest ICP-MS ore grade method (ALS methods: Ni-OG62<sup>™</sup> and Cu-OG62<sup>™</sup>). Precious metals were not analysed.

**Soil sampling procedures and analysis:** Sample locations were predefined and uploaded to the QField application on android field tablets, with which sample metadata were entered. In case a sample could not be collected at the exact predefined location, the sample location was moved to a suitable location nearby and the co-ordinates of this new location were entered into the QField app. The line spacing for the soil sampling programme varied between 1-2 kms and 150 m. The sample spacing along the sampling lines was generally 50m. A total of 1437 sites located on 45 sampling lines were sampled. The samples were collected with an auger drill equipment and a trowel (paint-free to avoid contamination). From each sample site two identical samples were collected, each with a preferred sample weight of 400g.

The first sub-sample was submitted to ALS Geochemistry in Sudbury, Ontario, Canada for sample preparation and geochemical analysis. After drying the sample was screened using a 180µm screen (ALS method: SCR-41<sup>™</sup>). 48 elements (namely Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, and Zr) were analysed on a 0.25g aliquot of the -180 µm fraction by ICP-MS following four-acid digestion (ALS method: ME-MS61L<sup>™</sup>). This method provides ALS's lowest detection levels from a four-acid digestion and is achieved via proprietary ICP-MS methodology. The ultralow detection limits are appropriate for the sample medium.

The second sub-sample was submitted to SGS Mineral Services in Burnaby, Canada for sample preparation and geochemical analysis. These were analysed using SGS' Mobile Metal ION enhanced package (SGS method: GE\_MMIME<sup>™</sup>). There is no sample preparation or drying. The analysis is done on a 50g sample split, and the extracted solution is analysed by ICP-MS, providing determinations for 55 elements (namely Ag, Al, As, Au, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hg, In, K, La, Li, Mg, Mn, Mo, Nb, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, U, V, W, Y, Yb, Zn, and Zr) in the ppb range.

**Stream sediment and heavy mineral concentrate sampling and analysis:** Sample locations were predefined and uploaded to the QField application on android field tablets, with which sample metadata were entered. In cases where the streams were dry and sampling was not possible, the location was not sampled, however the sample location was sometimes moved to find a suitable location for sampling and the co-ordinates of this new location were entered into the QField app. Stream sediment samples were collected preferably from suitable trap sites in the stream where material would fall out of suspension and accumulate. Sample spots varied from one to a few, depending on the availability of sediment in the stream. In cases with sparse material sampling would be carried out upstream from the first subsample, resulting in a composite sample.

Before the start of the sampling all equipment was cleaned downstream of the first sample location. The sampled material was sieved through an 8-mesh sieve (2.5 mm aperture) and followingly a 70-mesh sieve (0.2 mm aperture). The middle fraction (0.2 to 2.5 mm) was panned in the field to a produce a HMC fraction and the fine fraction (

The HMC stream sediment samples were submitted to ALS Geochemistry in Sudbury, Ontario, Canada for sample preparation and geochemical analysis. After drying the samples were split using a riffle splitter (ALS method: SPL-21<sup>™</sup>). A split of up to 250g was then pulverised to 85% passing below -75µm (ALS method: PUL-31<sup>™</sup>). A 0.25g aliquot of the pulp was then analysed by ICP-MS following the aforementioned ALS method: ME-MS61L<sup>™</sup> (see "*soil sampling procedures and analysis*" above). A 30 aliquot of the pulp was analysed for platinum, palladium, and gold content by fire assay with an ICP-MS finish (ALS method: PGM-MS23L<sup>™</sup>).

The fine fraction (

**Preliminary chemical analyses:** An Olympus Vanta C Series Portable X-ray fluorescence device ('**pXRF**') was used to provide preliminary geochemical results of

soil and rock samples in the field base camp. After every 20<sup>th</sup> measurement a blank (glass disc provided by Olympus) and a CRM (OREAS 684) were measured to track

pXRF performance. The instrument was also calibrated at the beginning of each session.

QA/QC comments: The ALS (Sudbury) and SGS (Burnaby) preparation and analytical labs are accredited to ISO 17025:2005 UKAS ref 4028 and have internal QA/QC programs for monitoring accuracy and precision. ALS and SGS are both entirely independent of Bluejay, Nikkili and KoBold. Bluejay and its subsidiaries operate according to its rigorous internal Quality Assurance and Quality Control ('QA/QC') protocols, which are consistent with industry best practices. For rock samples taken during the Programme, this included the insertion of Certified Reference Materials ('CRMs') into the sample stream at an insertion rate of one in every 20 samples. For soil samples taken during the Programme, this included the insertion of CRMs into the sample stream at an insertion rate of one in every 20 samples and field duplicates at a rate of one in every 20 samples. For stream sediment samples taken during the Programme, this included the insertion of CRMs into the sample stream at an insertion rate of one in every 20 samples and field duplicates at a rate of one in every 20 samples. The above insertion rates are deemed by the Company to be appropriate for this stage of exploration. The CRMs were supplied by Ore Research and Exploration (OREAS), Australia. Internal OA/QC samples were also inserted by the ALS and SGS analytical laboratories and have been reviewed by the Company prior to release. No material QA/QC issues have been identified with respect to sample collection, security, and analysis for the 2022 Programme.

# Notes - Nearby and Adjacent Properties and Comparisons to Global Deposits

The mines and/or mineral deposits discussed in this news release provide context for the Disko-Nuussuaq Project, which occur in a similar geologic setting, but this is not necessarily indicative that the Project hosts similar quantities, grades, or styles of mineralisation.

#### **Qualified Person**

The scientific and technical disclosure included in this announcement has been reviewed and approved by Joshua Hughes, MESci (Hons), Vice President Exploration, and a full-time employee of Bluejay Mining plc, who is also a Member and Chartered Professional Geologist ('MAUSIMM CP(Geo)') of the Australasian Institute of Mining and Metallurgy, a Fellow of the Society of Economic Geologists ('FSEG') and a Fellow of the Geological Society of London ('FGS'). Mr. Hughes has performed data verification on all information disclosed in this news release related to sampling and analytical procedures, assay results and QA/QC. Mr Hughes has sufficient experience, relevant to the styles of mineralisation and type of deposits under consideration and to the activity that he is undertaking, to qualify as a Qualified Person ('QP') as defined by the AIM rules, and for the purposes of National Instrument 43-101 ('NI-43-101') Standards of Disclosure of Mineral Projects.

#### Market Abuse Regulation (MAR) Disclosure

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 ('MAR') which has been incorporated into UK law by the European Union (Withdrawal) Act 2018.

For further information please visit <u>http://www.bluejaymining.com</u> or contact:

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# **About Bluejay Mining plc**

Bluejay is listed on the London AIM market and Frankfurt Stock Exchange and its shares also trade on the OTCQB Market in the US. With multiple projects in Greenland

and Finland, Bluejay offers both portfolio and commodity diversification focused on base and precious metals in Tier 1 jurisdictions.

Bluejay, through its wholly owned subsidiary Disko Exploration Ltd., has signed a definitive Joint Venture Agreement with KoBold Metals to guide exploration for new deposits rich in the critical materials required for the green energy transition and electric vehicles (the Disko-Nuussuaq nickel-copper-cobalt-PGE Project).

Disko Exploration Ltd holds two additional projects in Greenland - the 692 sq km Kangerluarsuk zinc-lead- silver project, where historical work has recovered grades of up to 45.4% zinc, 9.3% lead and 596 g/t silver; and the 920 sq km Thunderstone project which has the potential to host large-scale base metal and gold deposits. Bluejay also owns 100% of the fully permitted Dundas Ilmenite Project under its subsidiary Dundas Titanium A/S in northwest Greenland for which it will seek strategic alternatives.

In Finland, Bluejay currently holds three large scale multi-metal projects through its wholly owned subsidiary FinnAust Mining Finland Oy. The Company has identified multiple drill ready targets at the Enonkoski nickel-copper-cobalt project in East Finland. Bluejay's Hammaslahti copper-zinc-gold-silver project hosts high-grade VMS mineralisation and extensions of historical ore lodes have been proven. The drill ready Outokumpu copper-nickel-cobalt-zinc-gold-silver project is located in a prolific geological belt that hosts several high-grade former mines. In August 2023, Bluejay successfully divested its Black Schist Projects in Finland to Metals One plc in a transaction worth £4.125 million (Bluejay currently owns c. 29% of the issued ordinary share capital of AIM listed Metals One plc).

AIM: JAY E: enquiry@bluejaymining.com W: www.bluejaymining.com Principal and Registered Office: 6 Heddon Street, London, W1B 4BT, United Kingdom Robert Edwards – Executive Chairman Dr Bo Møller Stensgaard – Chief Executive Officer Mike Hutchinson – Non Executive Director Peter Waugh – Non Executive Director

<sup>[1]</sup> non-verified historical assay results reported prior to Bluejay's interest in the property (source: Olshefsky et al., 1995, company report by Falconbridge; GEUS report number 21410). The assay relates to Falconbridge diamond drillhole "FP94-4-5", which drilled through both the hanging and footwall of the Qullissat intrusion. A native iron cumulate was intersected in the basal part of the intrusion from 177.4 to 190.5m. The native iron droplets were 0.5 to 2 mm in diameter and had a modal composition varying from trace amounts up to 5% over the 13m intersection. The core from the iron cumulate zone was split and 12 samples were collected for geochemical analysis (NS03214 to NS03226). Three samples (NS03214, 03217 and 03226) were processed by magnetic separation and the non-magnetic and magnetic fractions were analysed by fire assay. All samples returned anomalous gold values with the highest concentrations up to 4.83 g/t gold associated with the magnetic fraction. A second processing of sample NS03226 returned higher grades of 14.8 g/t gold. Samples NS03226 and NS03214 were then reprocessed using a finer grind, resulting in increased gold values from the finer magnetic fraction up to 38.3 g/t gold. The erratic gold values returned from the magnetic concentrates and the whole core samples suggest that the occurrence of gold in the Qullissat intrusion is sporadic.

<sup>&</sup>lt;sup>[2]</sup> Note: the sub-horizontal magmatic body at Qullissat comprises of a native-iron bearing magnesian basaltic andesite which is considered equivalent to the Asuk Member of the Vaigat Formation. The body is widely described in the literature as a high-level sill (e.g., <u>Olshefsky and Jerome, 1994</u>; Pedersen et al., 2017), however recent investigations of historical drill cores have suggested the body could alternatively be an extrusive lava flow (e.g., Dr Asger Ken Pedersen, Personal Communication as referenced in Jackisch et al., 2022) or invasive lava flow, rather than an intrusive sill. Relogging of historical drill cores is planned to help resolve this.

<sup>[3] &</sup>quot;Chonolith": A small (typically <u>Barnes et al., 2020</u> and <u>Barnes and Mungall, 2018</u>).

[4] non-verified historical assay results reported prior to Bluejay's interest in the property (data sources provided as hyperlinks within the text).

<sup>[5]</sup> 'Aqua Regia Digestion' is an acid mixture of nitric and hydrochloric acids in a 1:3 ratio providing a partial extraction.

<sup>[6]</sup> 'Four Acid Digestion' is an acid mixture of nitric, perchloric, and hydrofluoric acids with a final dissolution stage using hydrochloric acid. This digestion breaks down most silicate and oxide minerals allowing for the "near-total" recovery of most minerals.

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MSCKZGZLLGLGFZM Anonymous (not verified) Results of 2022 Field Programme at Disko-Nuussuaq http://www.DigitalLook.com 33784253 A Thu, 09/21/2023 - 07:03 LSE RNS Company Announcement - General 80M