

Customer  
**Capella Minerals Ltd**  
Project  
**Hessjøgruva 43-101 Technical Report**

Date  
**2022-08-31**  
GeoVista No.  
**GVR22016**

Authors  
**Thomas Lindholm M.Sc., FAusIMM**

Customer No.



# **Capella Minerals Ltd**

## **Hessjøgruva Copper Project**

### **Trøndelag County, Norway**

#### **NI43-101 Technical Report**

**August 2022**



*Mine shaft at Hessjøgruva*



# Table of contents

<b>1</b>	<b>Summary</b>	<b>1</b>
1.1	Property Description and Ownership .....	1
1.2	Geology and Mineralization .....	2
1.3	Status of Exploration .....	2
1.4	Interpretation and Conclusions .....	2
1.5	Recommendations .....	3
<b>2</b>	<b>INTRODUCTION AND TERMS OF REFERENCE</b>	<b>4</b>
2.1	Sources of Information .....	4
2.2	Site Visits and Scopes of Personal Inspections .....	4
2.3	Abbreviations .....	4
<b>3</b>	<b>RELIANCE ON OTHER EXPERTS</b>	<b>5</b>
<b>4</b>	<b>PROPERTY DESCRIPTION AND LOCATION</b>	<b>6</b>
4.1	Property Ownership and Land Tenure .....	6
4.1.1	Mining Inspectorate & Minerals Act.....	7
4.1.2	Exploration and Mining Permits .....	8
4.2	Surface Usage and Land Lease.....	9
4.3	Environmental Liabilities and Permitting .....	9
4.4	Royalties, Back-in Rights, Payments, or Other Encumbrances .....	9
4.5	Permitting Required to Undertake Work Programs .....	10
4.6	Other Significant Factors.....	10
<b>5</b>	<b>ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY</b>	<b>11</b>
5.1	Accessibility .....	11
5.2	Climate .....	12
5.3	Topography, Elevation and Vegetation .....	12
5.4	Local Resources and Infrastructure .....	13
5.4.1	Power.....	14
5.4.2	Water .....	14
5.4.3	Communications.....	14
5.4.4	Surface Rights .....	14
<b>6</b>	<b>HISTORY</b>	<b>15</b>
6.1	Prior Ownership.....	15
6.2	Exploration history .....	15
6.3	Previous Production.....	15
<b>7</b>	<b>GEOLOGICAL SETTING AND MINERALIZATION</b>	<b>16</b>
7.1	Regional Geology .....	16
7.2	Property Geology.....	18
7.3	Property Mineralization.....	19
<b>8</b>	<b>DEPOSIT TYPE</b>	<b>22</b>
<b>9</b>	<b>EXPLORATION</b>	<b>23</b>

9.1	Data Compilation.....	23
9.2	Geological Mapping .....	23
9.3	Geophysical Surveys .....	23
<b>10</b>	<b>DRILLING</b>	<b>24</b>
<b>11</b>	<b>SAMPLE PREPARATION, ANALYZES AND, SECURITY</b>	<b>25</b>
<b>12</b>	<b>DATA VERIFICATION</b>	<b>27</b>
12.1	Verification of Drill Hole Collars.....	27
12.2	Rock Samples .....	27
12.3	Verification of Historical Drill Hole Data.....	27
12.3.1	Quality Assurance / Quality Control Review .....	27
12.3.2	Verification Sampling .....	28
12.3.3	Density determinations .....	30
12.4	Database Audit .....	33
<b>13</b>	<b>MINERAL PROCESSING AND METALLURGICAL TESTING</b>	<b>34</b>
<b>14</b>	<b>MINERAL RESOURCE ESTIMATE</b>	<b>35</b>
<b>23</b>	<b>ADJACENT PROPERTIES</b>	<b>36</b>
<b>24</b>	<b>OTHER RELEVANT DATA AND INFORMATION</b>	<b>37</b>
<b>25</b>	<b>INTERPRETATION AND CONCLUSIONS</b>	<b>38</b>
<b>26</b>	<b>RECOMMENDATIONS</b>	<b>39</b>
<b>27</b>	<b>REFERENCES</b>	<b>41</b>
<b>28</b>	<b>CERTIFICATE OF AUTHOR</b>	<b>43</b>

***Appendix 1. Drillhole collars***

## List of figures

Figure 1-1. Location of the Røros mining district.....	2
Figure 4-1. Permit location map for the Hessjøgruva property. Claim data map sourced from the Norwegian Geological Survey ( <a href="https://geo.ngu.no/kart/bergrettigheter_mobil/">https://geo.ngu.no/kart/bergrettigheter_mobil/</a> ) .....	7
Figure 5-1. Access and physiography in the Hessjøgruva area. Image: Google Earth. ....	11
Figure 5-2. Site visit to the Hessjøgruva project on June 27, 2022, with participation from Capella geological staff, the principals of Hessjøgruva AS, and local authorities. ....	13
Figure 7-1. Tectonostratigraphic map of the southern part of the Trondheim Region (modified from Nilsen 1988), with the Hersjø deposit indicated.....	17
Figure 7-2. Regional geology surrounding the Hessjø deposit. Map from Norwegian Geological Society's online ore database (NGU, 2011), lithological names from Norwegian Geological Society's national bedrock database (NGU, 2009).....	19
Figure 7-3. Geological map of the Hessjø deposit area. Hersjøformasjonen corresponds to the Fundsjø Group, while Gulgruppen denotes the Gula Group. The line adjacent to Profile 2600N refers to the placement of the geological profile shown in Figure 7-4. The outcrop of lens A is situated in the bottom right corner. Original format of the map is A1. (Bakke, 1975). .....	20
Figure 7-4. Geological profile of the Hessjø deposit area, looking from the south-south-west. Original format of map is A2. See Figure 7-3 for exact placement of profile. (Bakke, 1975). 21	21
Figure 11-1. Overview of NGU's drill core repository in Løkken. ....	25
Figure 11-2. Example of archived quarter-core of massive sulphide mineralization from Capella's resampling / assay verification program. Drill hole HER240, 381–383m (approximately). ....	26
Figure 12-1. Repeat assays for Cu for OREAS 621.....	28
Figure 12-2. Historical assays for Cu versus re-assays by ALS Global.....	29
Figure 12-3. Historical assays for Zn versus re-assays by ALS Global.....	29
Figure 12-4. Historical assays for S versus re-assays by ALS Global. ....	30
Figure 12-5. Historical assays for Fe versus re-assays by ALS Global. ....	30
Figure 12-6. Density versus grade of iron, Fe [%]. The two samples marked in red have been eliminated from the regression calculation. ....	32
Figure 12-7. Density measurements being undertaken on Hessjøgruva drill core (July, 2022). .....	32
Figure 23-1. Adjacent properties to the Hessjøgruva project. Source: NGU mineral claim database on August 28, 2022 ( <a href="https://geo.ngu.no/kart/bergrettigheter_mobil/">https://geo.ngu.no/kart/bergrettigheter_mobil/</a> ).....	36
Figure 26-1. Hypothetical design for an adit into Lens A from the Hessdalen Valley. ....	40

## List of tables

Table 4-1. Granted mining claims at the Hessjøgruva project.	6
Table 7-1. The division in tectonostratigraphy, terranes and lithological units in the Southern Trondheim Region (from Bjerkgård & Bjørlykke 1994).	18
Table 26-1. Budget for next phase of exploration work recommended.	39

# 1 Summary

Capella Minerals Ltd. (Capella) (TSX-V:CMIL) is a junior mineral exploration stage company developing several base metal projects in the Røros region of Norway. This report covers the most advanced property, the Hessjøgruva project.

Capella commissioned GeoVista AB to prepare a National Instrument 43-101 - Standards of Disclosure for Mineral Projects (NI 43-101) compliant Technical Report on the property, titled Hessjøgruva – NI43-101 Technical Report.

## 1.1 Property Description and Ownership

Capella Minerals Limited Limited acquired a 100% interest in three mining claims in Central Norway, Hersjø 1-3, from local company Hessjøgruva AS in April, 2022. The Hersjø 1-3 claims are located within the former Røros mining district.

The properties are accessible via paved and unpaved roads.

According to the Köppen climate classification, the Hessjøgruva project area lies near the transition from a subpolar oceanic climate (Cfc) to a subpolar or boreal climate (Dfc). The weather in the region is characterized by long cold winters and short cool to warm summers. Local weather is also dependent of the direction of the wind; southerly and easterly winds generally bring sunny weather, while westerly winds bring precipitation with mild weather in winter and cool rainy weather in summer. North-westerly winds tend to bring the worst weather with snow in winter.

The Hessjøgruva project sits on a plateau at an approximate altitude of 1,025 metres above sea level (“m.a.s.l”). Immediately to the east of the project lies the Kjølidalen valley, a broadly N-S-trending valley with a floor located at about 780 m.a.s.l. On the eastern flank of the Kjølidalen valley lies the forming copper mining / mineral processing district of Kongensgruve. The Hessjøgruva project lies above the tree line and is therefore covered entirely by alpine grasses (Figure 1-1).



*Figure 1-1. Location of the Røros mining district.*

## 1.2 Geology and Mineralization

The Hessjøgruva deposit Cu-Zn-(Co) type VMS deposit, of a likely bimodal-mafic subclassification, that shows signs of characteristic zonation patterns inherent to VMS deposits. It is located within the Fundsjø group, which is proposed to have been deposited in an immature arc/marginal basin setting.

The mineralization of lens A is ruler shaped and lies conformally in greenstones, which consists of dark green hornblende and feldspar with subordinate chlorite, epidote and calcite. The rocks surrounding the lens generally have a north-south strike and dip from 40° to 65°, with the main dip angle being 50° towards the west.

The strike length of lens A is approximately 150 m in north-south direction, it has an average thickness of 10-12 m in the central zone but tapers out towards the edges.

The mineralogy varies from coarse grained pyrite, partly rich in sphalerite and poor in chalcopyrite to pyrrhotite, rich in chalcopyrite and poor in sphalerite.

## 1.3 Status of Exploration

There is no modern exploration carried out within the concession area, the exception being the field control of drill hole collars carried out by Capella during the summer of 2022. In addition, the company has done confirmatory sampling and assays on existing core as well as density determinations on the same. The information presented in this report is thus almost entirely consisting of historical material.

## 1.4 Interpretation and Conclusions

The Hessjøgruva property hosts a robust Cu-Zn-(Co) VMS deposit with characteristics similar to other known deposits in the northern Røros mining district. Previous exploration undertaken at Hessjøgruva includes both ground and airborne geophysical surveys and 12,035m / 67 holes of diamond drilling completed during the 1970's. Three main lenses of high-grade Cu-Zn-(Co)

mineralization have been identified to date at Hessjøgruva (Lenses A-C), with drilling confirming the geometry and continuity of mineralization in the highest-grade Lens A.

Recent work by Capella has confirmed the validity of the historical assays, the collar location of 60 out of the 67 diamond drillholes as well as established a density formula as a function of Fe grade. However, the company has not yet been able to verify the historical deviation survey records. With the lack of confidence in the latter, it is difficult to motivate the classification of any potential mineral resources to any other class than inferred.

A better understanding of the distribution of cobalt within the Hessjøgruva VMS deposit should also be addressed with future work programs. Capella's re-sampling program has indicated locally elevated concentrations of cobalt together with the high-grade copper and zinc mineralization.

## **1.5 Recommendations**

Based on the results of the author's inspection of the Hessjøgruva property and the review of available data, the following work recommendations are presented:

- i) Continue trying to re-enter the historical drill holes in order to obtain reliable down-hole survey (dip/orientation) data.
- ii) Undertake a follow-up drill program (3,000m in 6 holes) with larger diameter core for both step-out and infill drill holes. The larger diameter drill core could provide sample for metallurgical testwork.

Evaluate the possibility of constructing an adit from the Hessdalen Valley in to the Hessjøgruva deposit. An adit would provide direct access to the Hessjøgruva mineralization (bulk sampling for metallurgical testwork), in addition to providing the option for drilling the deeper parts of the Hessjøgruva deposit from underground.

With the confirmation of geological logs and the historical assays having been declared usable, the next logical step would be to carry out a mineral resource estimate, using modern methods and software. The newly developed density function will contribute to this.

Since the new assays indicate a possible economic contribution from the element Co, a mineralogical study to determine the deportment of that element should be carried out.

A tentative budget for the above can be found in section 26 of this report.

## 2 INTRODUCTION AND TERMS OF REFERENCE

This report has been prepared by GeoVista AB for Capella Minerals Ltd (Capella), (TSX-V:CMIL), (OTCQB:CMILF) and (FRA:N7D2), a Canadian based mineral exploration company.

The scope of the report is to present the information compiled to date, the conclusions drawn and a set of recommendations for future work.

### 2.1 Sources of Information

The authors have had access to material compiled by the client such as historical assays, previous (non code compliant) estimations of mineral resources, reports etc.

See Section 27 for a complete list of references.

### 2.2 Site Visits and Scopes of Personal Inspections

The author, Mr. Thomas Lindholm, visited the property on June 29, 2022. The scope of the visits was to check the property for accessibility, physiography, and nearby infrastructure, and to check the location of some selected drill hole collars. The author has not visited the Norwegian Geological Surveys (NGU) core archive in Løkken and inspected the historical cores available at this time.

### 2.3 Abbreviations

Units of measurement used in this report conform to the International System of Units (SI) or are given with translations to these units. All currency in this report is in US dollars (US\$) unless otherwise noted.

The following abbreviations are used frequently in the text.

DMF = Direktoratet for mineralforvaltning, the Directorate of Mining

NGU = Norges Geologiske Undersøkelse, the Geological Survey of Norway

### **3 RELIANCE ON OTHER EXPERTS**

The author has not relied on any report, opinion, or statement of another expert, or on information provided by the issuer, concerning legal, political, environmental or tax matters relevant to this report.

The author has limited his review of the legal aspects of the ownership of the Hessjøgruva mining permits to a check of the 2022 annual land holding payment certificates which identify both the titleholder's name and fees paid. The information provided in these certificates matches the information provided by the office of the DMF (<https://dirmin.no>). Also, the author has relied exclusively on information provided by Capella for providing a description of the purchase and sale agreement for the properties (which is also summarized in a Company News Release dated April 6, 2022).

## 4 PROPERTY DESCRIPTION AND LOCATION

The Hessjøgruva copper-zinc cobalt property consist of three mining claims (Hersjø 1-3) located in the Holtålen Municipality of Trøndelag County, Kingdom of Norway. The property is centered at Latitude 62.68° N / Longitude 11.12° E (EU89 Zone UTM33 301,390E / 6,956.205N). The property is located approximately 420 km N of the capital city of Oslo, 140 km SE of the regional administrative centre of Trondheim, and 15km NW of the former mining centre of Røros.

### 4.1 Property Ownership and Land Tenure

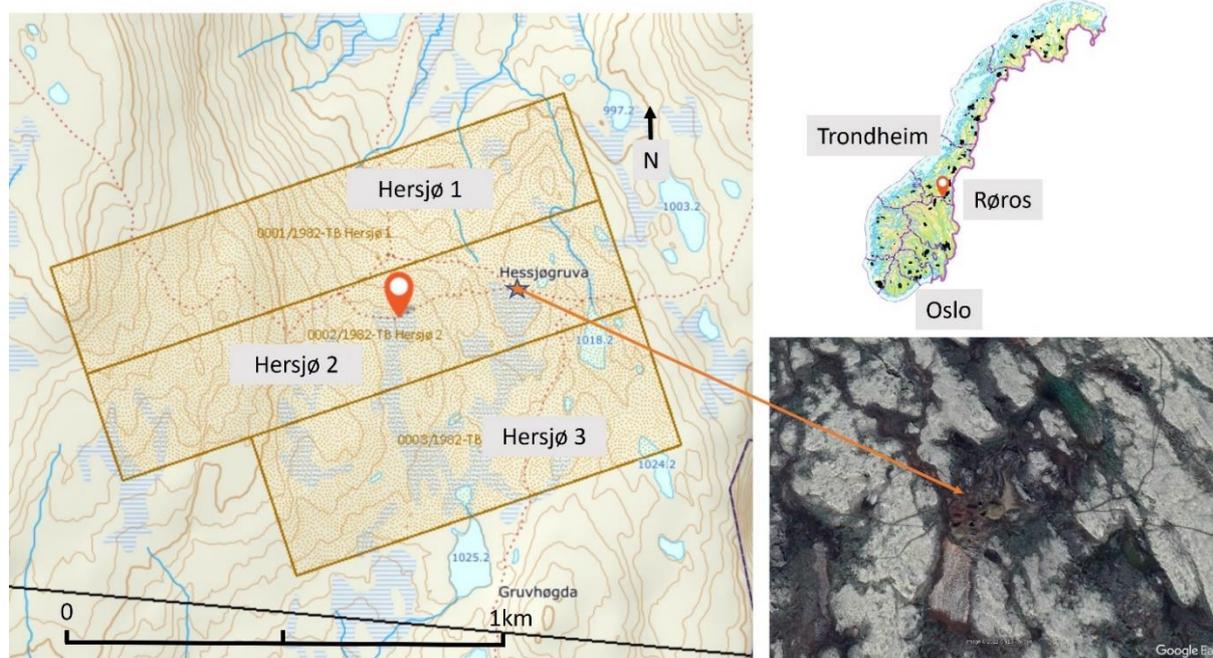
Capella is a public Canadian exploration company with head offices in Mission, British Columbia (TSXV: CMIL), and operates in Norway through its 100%-owned subsidiary Capella Minerals Norway AS. On April 6, 2022, Capella announced that it had acquired a 100% interest in the Hessjøgruva project (mining claims Hersjø 1-3; Table 4-1 and Figure 4-1) from the local company Hessjøgruva AS. Key terms of the agreement include:

- i) Capella sole funding future exploration / development work on the project
- ii) ii) Capella paying Hessjøgruva AS a one-time amount of Euro 500,000 upon the completion of a positive feasibility study, and
- iii) a 2.5% Net Smelter Royalty (“NSR”) on all future metal production from the Hessjøgruva project (with 0.5% of the NSR being purchasable for Euro 1,000,000).

The combined total area of the Hessjøgruva property is approximately 90 hectares (0.9 sq km) and as of the effective date of this report, ownership of the mining permits is held by Hessjøgruva AS. Upon completion of a positive feasibility study, Hessjøgruva AS will transfer title of the Hersjø permits to Capella.

**Table 4-1. Granted mining claims at the Hessjøgruva project.**

Permit Name	Permit No	Area (ha)	Grant Date	Expiry Date	Owner
<b>Hersjø 1</b>	0001/1982-TB	30	07/09/1982	02/11/2022	Hessjøgruva AS
<b>Hersjø 2</b>	0002/1982-TB	30	07/09/1982	02/11/2022	Hessjøgruva AS
<b>Hersjø 3</b>	0003/1982-TB	30	07/09/1982	02/11/2022	Hessjøgruva AS



**Figure 4-1. Permit location map for the Hessjøgruva property. Claim data map sourced from the Norwegian Geological Survey ([https://geo.ngu.no/kart/bergrettigheter mobil/](https://geo.ngu.no/kart/bergrettigheter_mobil/))**

The Hersjø 1-3 mining claims are overlain by two exploration claims – Hessjø 1 (held by Capella Minerals Norway AS) and Hessjø N (held by private company North Atlantic Minerals). However, the older Hersjø 1-3 mining claims take ownership precedence over the younger exploration claims.

#### 4.1.1 Mining Inspectorate & Minerals Act

The Norwegian Direktoratet for Mineralforvaltning (DMF) is a state administrative body under the Nærings-og fiskeridepartementet (NFD) or Ministry of Trade and Industry. DMF administers the Norwegian Act on the Acquisition and Extraction of Mineral Resources (Minerals Act) and the Mining Scheme. Among other things, DMF is also responsible for securing and reducing environmental consequences from old mines that have fallen back to the state, where the Ministry of Trade and Industry has ownership or managerial responsibility.

The Norwegian government has developed a national strategy for the minerals industry, in which the document states that the government’s objective is that “growth in the industry shall be strengthened by means of a continued commitment to mapping of mineral deposits, access to information about mineral resources in Norway, better resource planning, a continued development of the mineral agencies and access to knowledge and a competent workforce” (NFD, 2013). The strategy includes over fifty measures, focused around the following strategic areas: mapping mineral resources; investment and access to capital; education and expertise; research and development; safeguarding environmental concerns; reputation, social responsibility and the local community; a predictable framework for mineral operations in Norway; subsea mineral resources, and mineral activities in areas where there are Sami interests.

The Minerals Act was adopted in 2009, replacing five earlier laws. The current Minerals Act was evaluated in 2018 and showed that there is a need to assess changes in several areas of the Act. Work on these changes has begun following a two-stage process;

- i. The preparation of a consultation note to put in place quickly simplifications and improvements in more limited areas of the Act;
- ii. The establishment of a committee that will study some of the larger, complex and more fundamental issues with the Act;

Norwegian parliament will consider these, and other potential further changes, to the Mining Act in discussions currently scheduled for October/November 2022.

Norway is not a member of the European Union (EU) but is closely associated through membership of the European Free Trade Association (EFTA) and thereby the European Economic Area (EEA). Norwegian environmental legislation is, however, very much influenced by the EU.

#### **4.1.2 Exploration and Mining Permits**

An exploration permit is defined by the Norwegian government as a right to explore for state-owned minerals within a defined area for the validity of the permit; state-owned minerals are defined as:

- i. metals with a specific gravity of 5 grammes/cm<sup>3</sup> or greater, including chromium, manganese, molybdenum, niobium, vanadium, iron, nickel, copper, zinc, silver, gold, cobalt, lead, platinum, tin, zinc, zirconium, tungsten, uranium, cadmium and thorium, and ores of such metals. Alluvial gold, however, does not fall within the definition;
- ii. the metals titanium and arsenic, and ores of these;
- iii. pyrrhotite and pyrite.

An exploration permit is subject to an annual renewal fee of 10NOK per hectare (ha) for the second and third calendar years of ownership, 30NOK per ha per year for the fourth and fifth years and 50NOK per ha per year for the sixth and seventh years of ownership. The permit expires at the end of the seventh year of ownership unless a specific exemption is granted by the Norwegian government. An exploration permit also gives priority to an extraction permit. In order to be granted an extraction permit for state-owned minerals, the applicant needs to show that there is a reliable chance that extraction can be done in an economically feasible manner. An extraction permit costs 10,000NOK, cannot be larger than 1km<sup>2</sup> and can be extended in 10-year intervals. The annual permit fee is 100NOK per ha per year.

Non-disturbing exploration (basic prospecting, fossicking, chip sampling etc.) does not require a specific work permit; exceptions to this rule explicitly mentioned in the Act are the protected nature areas around Oslo, cultivated lands, industrial or military areas, areas close to temporary or permanent residences or to public facilities, and abandoned mining areas. Exploration in these areas may be allowed upon agreement with the landowner, land user or relevant authority.

Disturbing exploration does however, require consent from the landowner and land user and a specific work permit to be obtained. The work permit application needs to include details of the applicant, details of the geographic area to be sampled, and reason and methodology of sampling; additional details of the work permit requirements can be found at on the DMF website at: <https://dirmin.no/soknad-om-tillatelse-til-proveuttak>. Notification to the DMF of specific work plans are required no later than three weeks before work initiates. In addition to the work permit notifications, exploration companies are required to obtain an ‘off-road’ permit if the proposed exploration work requires equipment, machinery or vehicles to travel ‘off-road’. The ‘off-road’ permits are applied for through the local municipality who subsequently notifies and obtains approval from the affected landowners; this permit process normally take 6-8

weeks. If objections to the ‘off-road’ permit are made by landowners, the exploration company can seek to have the DMF settle the matter to obtain access to the area to be explored.

## **4.2 Surface Usage and Land Lease**

The Hessjøgruva property lies on the eastern margin of the Forollhogna National Park, which was established in 2001 (post the granting of the Hersjø 1-3 mining claims). According to the regulations of the Forollhogna National Park, the following exploration/mining activities are permitted: i) the undertaking of diamond drilling from surface on the Hessjøgruva deposit; ii) underground mining is permitted if the entrance to the mine is located outside of the park, and iii) ventilation shafts for an underground mining operation are also permitted to be located within the park.

## **4.3 Environmental Liabilities and Permitting**

Historic mining operations at Hessjøgruva have been minimal, although several adits and small waste dumps remain on the property. The Norwegian State's responsibility for the rehabilitation of historic mines and mining activities has its background in the provisions of the ‘right of recourse’ legislation (Hjemfallsretten) within the previous Industrial Licensing Act (Industrikonsesjonsloven) whereby the mines and associated plots were transferred to the state at the end of the licence period. NFD is currently responsible for reclaimed properties with discontinued mining operations that are still owned by the state (<https://dirmin.no/tema/miljotiltak>).

For privately owned properties with discontinued mining operations, the environmental liability is first and foremost borne by the owner and/or operator of the business that operated the mine, in the case where the mines are so old as to be no liable business owner or operator, the environmental liability is borne by the owner of the property, not the mineral rights’ holder. In order for the landowner not to be held liable, it must be considered unreasonably burdensome for the landowner to implement measures (Pollution Control Act (Forurensningslove), §7).

## **4.4 Royalties, Back-in Rights, Payments, or Other Encumbrances**

Mining companies (limited companies) pay corporation tax under the same rules as every other company. Accordingly, there are no special taxation rules for such companies. Corporate tax rates are currently 22% (2022).

Companies conducting mining activities are required to pay an annual fee of 0.5% of the sales value of that which is extracted to the landowner. The fee for each year shall fall due for payment on 31 March of the following year. If there are several landowners in the extraction area, the fee shall be divided among them in proportion to the land owned by each of them in the extraction area.

One notable tax in Norway is the municipal property tax. It is voluntary for municipalities to adopt the tax, and they enjoy a certain degree of freedom in design. It may cover all real estate in the municipality or be limited to business premises. Annual tax levels may vary between 0.2 and 0.7% of the taxable fiscal value of the property.

Capella acquired a 100% interest in the Hessjøgruva property in April 2022 from local company Hessjøgruva AS. Key terms of the acquisition agreement include:

- i. Capella to sole fund future exploration / development work on the project
- ii. Capella to pay Hessjøgruva AS a one-time amount of Euro 500,000 upon the completion of a positive feasibility study, and
- iii. Capella to pay Hessjøgruva AS a 2.5% Net Smelter Royalty (“NSR”) on all future metal production from the Hessjøgruva project (with 0.5% of the NSR being purchasable for Euro 1,000,000).

#### **4.5 Permitting Required to Undertake Work Programs**

No formal work permits are required in Norway for non-disturbing exploration activities (e.g., basic prospecting, mapping, rock chip sampling, etc) on uncultivated lands under the concept of “Allemannsretten” (“every man’s right”). However, exploration activities which will result in surficial disturbance (e.g., diamond drill programs) do require a specific work permit to be issued by the Norwegian Directorate of Mining (DMF) and also consent being obtained from relevant landowners. The minimum notification period required to be given to landowners for any proposed work program in Norway is 60 days. In addition, an “off-road” permit must be applied for through the local municipality to cover motorized vehicle support for the exploration program; this process normally takes 6-8 weeks until approval is obtained.

Future drill programs at Hessjøgruva will require Capella to apply to the DMF for a formal drill approval / permit. However, as the surface rights are held by the state, no specific landowner approvals will be required. An off-road permit to cover vehicular support will also need to be issued by the local Holtålen municipality. Capella will commence the process of applying for all permits required for any proposed future work programs approximately 60 days in advance. The Company does not foresee any issues with obtaining the required approvals.

#### **4.6 Other Significant Factors**

The author is not aware of any other royalties, back-in rights, payments or other agreements and encumbrances to which the property is subject other than royalty to the previous owner and the compulsory royalties on possible future mineral production due to the affected landowner/s, both described in Section 4.4. The author is also not aware of any other factors which may affect access, title, or the right or ability to perform work on the property.

## 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

### 5.1 Accessibility

The Hessjøgruva project is located approximately 140km SE of Trøndelag County's main regional centre, Trondheim (population 200,000 approx.). The project has excellent road access through a combination of paved regional highways (the national E6 highway from Trondheim to Støren, followed by the paved regional highway from Støren to Ålen/Rørros) with the last 20km from Ålen being undertaken on local paved and gravels roads. Travel time from Trondheim is approximately 2 hours.

In addition to excellent road connections, the Hessjøgruva project also benefits from proximity to quality rail and airport services. The project sits adjacent to the Trondheim-Rørros-Hamar-Oslo rail line which offers daily passenger services between Trondheim and Oslo (via Hamar) in both directions. Prior to the closure of copper mining operations in the broader Rørros district in the 1980's, this railway line was also used for the transportation of copper concentrates from local mineral processing facilities to ports in Trondheim and Orkanger. Air services to the region are provided through both Trondheim's airport at Stjørdal/Vaernes (both international and domestic services) and also Rørros's airport (small passenger aircraft services to Oslo) (Figure 5-1).

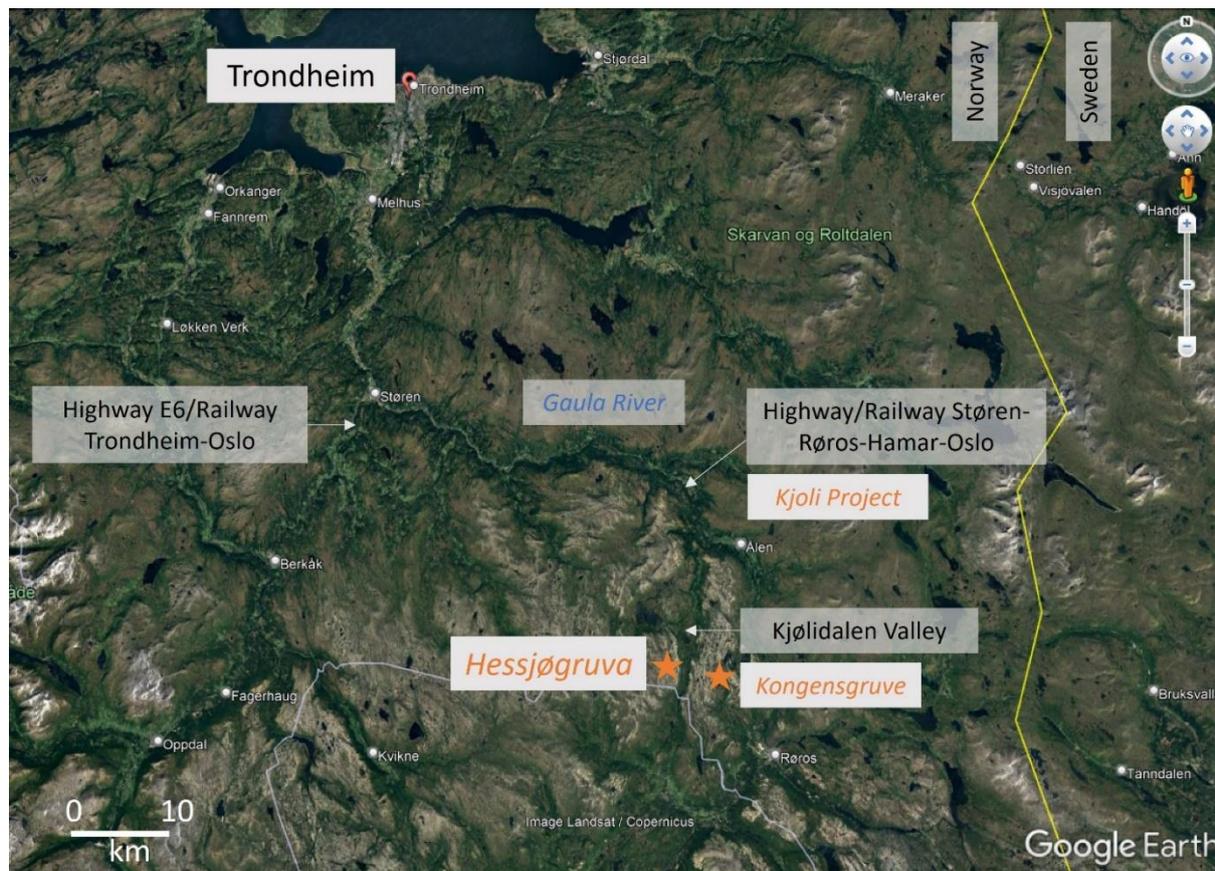


Figure 5-1. Access and physiography in the Hessjøgruva area. Image: Google Earth.

## 5.2 Climate

According to the Köppen climate classification, the Hessjøgruva project area lies near the transition from a subpolar oceanic climate (Cfc) to a subpolar or boreal climate (Dfc). The weather in the region is characterized by long cold winters and short cool to warm summers. Local weather is also dependent of the direction of the wind; southerly and easterly winds generally bring sunny weather, while westerly winds bring precipitation with mild weather in winter and cool rainy weather in summer. North-westerly winds tend to bring the worst weather with snow in winter.

In nearby Røros, average maximum/minimum temperatures range from 18°C/7°C in July to -4°C / -14°C in January. Precipitation averages around 525mm per year, with precipitation being highest in the summer months (Jun-Sep) and the wettest month being August (80mm). The region experiences snowfall through the winter months with snow often covering the ground from November to April.

Due to the project's high latitude (62.6°N), daylight hours are long in the summer and short in the winter. On the longest day of the year (June 21), sunrise occurs at 3.15am and sunset at 11.20pm (with incomplete darkness, or so-called "white nights", occurring overnight). On the shortest day of the year (December 21), sunrise occurs at 9.45am and sunset at 2.40pm.

## 5.3 Topography, Elevation and Vegetation

The Trøndelag region of central Norway is relatively mountainous with only small strips of lowlands along the coast, fjords, and interior river valleys. The coastline is rugged and cut by many fjords, the main one being Trondheim Fjord, which extends about 130km inland. Much of the coast is protected by offshore islands, and many lakes dot the interior mountains.

The Hessjøgruva project sits on a plateau at an approximate altitude of 1,025 metres above sea level ("m.a.s.l"). Immediately to the east of the project lies the Kjølidalen valley, a broadly N-S-trending valley with a floor located at about 780 m.a.s.l. On the eastern flank of the Kjølidalen valley lies the forming copper mining / mineral processing district of Kongensgruve. The Hessjøgruva project lies above the tree line and is therefore covered entirely by alpine grasses (Figure 5-1 and Figure 5-2).



*Figure 5-2. Site visit to the Hessjøgruva project on June 27, 2022, with participation from Capella geological staff, the principals of Hessjøgruva AS, and local authorities.*

## 5.4 Local Resources and Infrastructure

The city of Trondheim is located approximately 140km NW of Hessjøgruva and is the regional administrative centre for Trøndelag County. Trondheim offers a full range of services including hotels, fuel, freight, a port, groceries, and transport to elsewhere in Norway and Europe. Trondheim airport has multiple domestic and international flights daily, and the city is well integrated in to both the national rail and highway networks. The Norwegian Geological Survey (NGU) is also headquartered here.

Local communities to the Hessjøgruva project include Ålen (located 20km to the N) and the former mining centre of Røros (located 15km to the SE). The town of Ålen offers a limited range of services, including fuel, groceries, restaurants, and some accommodation. Røros also offers a similar range of services (albeit at a larger scale due to the importance of tourism) in addition to a small regional airport with daily air services to the Norwegian capital Oslo. Both Ålen and Røros lie on a major inter-regional railway line and paved highway which connects Trondheim to Oslo via the city of Hamar.

It is expected that a pool of both unskilled and skilled labour relating to the mining industry may be sourced between Trondheim, Ålen, and Røros.

### **5.4.1 Power**

Norway enjoys high security of electricity supply (continuity of supply is close to 99% in years without extreme weather events), and the country has the highest share of electricity produced from renewable sources in Europe and therefore the lowest emissions from the power sector. Approximately 92% of Norway's electricity supply is currently estimated to be derived from hydroelectric power, with a further 6% from wind power. The state transmission operator is Statnett, who is responsible for operating the national grid system in Norway. Trønder Energi AS is responsible for local power production in the Trøndelag region and recently created the second largest grid company in Norway through the establishment of Tensio AS.

Energy transmission in Norway is undertaken through three levels of grids: i) transmission grids (carrying voltages between 300kV and 420kV, but locally as low as 132kV); ii) regional grids (carrying voltages of between 33kV and 132kV) and distribution grids (carrying voltages up to 22kV). The author estimates that the power needs of any future mining operations can easily be supplied by this existing infrastructure.

### **5.4.2 Water**

An ample supply of water is available on the property.

### **5.4.3 Communications**

Telecommunications in that part of Norway are excellent.

### **5.4.4 Surface Rights**

Surface rights within, and immediately adjacent to, the Hessjøgruva project are held by the Norwegian state. The Hessjøgruva mining licences (described in Chapter 4.1) cover the currently known extent of copper-zinc-cobalt mineralization and are covered by state-held surface rights. However, additional mining concessions may be required in the future to cover potential down-dip extensions of the mineralization to the SW; these potential extensions would also lie within state-held land.

Existing permitting regulations for the Hessjøgruva project would require the development of any potential future mining operation via an underground and not open-cut type operation. In addition, the access to any potential underground mine would need to be from the adjacent Hessdalen Valley. Whilst mining level studies have not yet been undertaken, Capella currently envisages that any potential future mineral processing plant would be placed on the Company's 100% owned Kongensgruve property, located approximately 5km E of the Hessjøgruva property. Kongensgruve was the site of a former mineral processing facility and tailings dam, with surface rights also being held by the state.

## 6 HISTORY

The Røros mining district has a long history of mining and smelting, going back to the middle of the 17<sup>th</sup> century, however, mining ceased 1977. Some 40 mines in the district have been worked for copper and zinc.

### 6.1 Prior Ownership

The northern part of the deposit, known as the old Hersjø mine, was claimed by Henning Irgens as early as c. 1670. The mine was handed over to Røros Kobberverk in 1687, which produced some 4000 tonnes of copper ore until 1893. The production was not profitable, and the mine was handed over to Irgens again. Since copper production was not economic, Irgens started producing copper vitriol and later ochre. The mine was closed when Irgens died in 1899. Some sporadic mining of pyrite was done in the late 1800s, after investigations by Røros Kobberverk in 1873 and 1881.

The southernmost part of the Hersjø deposit, about 1.5 km to the south of the old Hersjø mine, is known as Nygruva. It was claimed and mined by Røros Kobberverk around 1830, but only some 70 tonnes of copper ore were extracted from a small excavation into the hillside and two small waterfilled shafts. According to reports the deepest shaft is about 13 m deep.

### 6.2 Exploration history

After the production ceased in the late 1800's, the property lay dormant until the late 1940's, when geophysical surveys were conducted, revealing 5 sulphide lenses, A-E. Lenses B and C were known since earlier, lenses A, D and F were previously unknown. The largest of these lenses, lens A, is the subject of this report.

Several campaigns of geophysical surveys were completed in the 1960's and 1970's, followed by diamond drilling in the 1970's.

### 6.3 Previous Production

The mine produced some 4000 tonnes of copper from 1670 to 1893. A small production of copper vitriole and ochre continued until 1899. Small amounts of pyrite were produced in the late 1800's.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

The Caledonides of the southern Trondheim Region comprise tectonic and lithological units derived from several different environments, thrust upon a Precambrian basement with a thin, mostly Cambrian, sedimentary cover. According to Gee et al. (1985), the tectonostratigraphy of this region can be divided into three major allochthonous complexes; namely the Lower, Middle and Upper Allochthons (table 1, fig. 1). A division of units has been proposed for the Scandinavian Caledonides based on the terrane concept (e.g. Roberts 1988, Stephens 1988). Terranes are defined on the basis of their overall geological features and histories, which are distinctive from those of neighbouring terranes. In the Scandinavian Caledonides, outside of the tectonically shortened shelf and miogeoclinal sequences related to Baltica, there are several suspect and exotic terranes of uncertain palaeogeographic origin (table 1).

Rocks of the Gula Group, which consist mainly of metasediments, occupy the central part of the Caledonides in the Trondheim Region (fig.1). The stratigraphic and tectono-stratigraphic position of this group, in relation to the volcanic and sedimentary rocks of the Meråker and Støren Nappes, is important to any tectonic model of the Caledonides and has therefore been debated (see Gee et al. 1985 for a review).

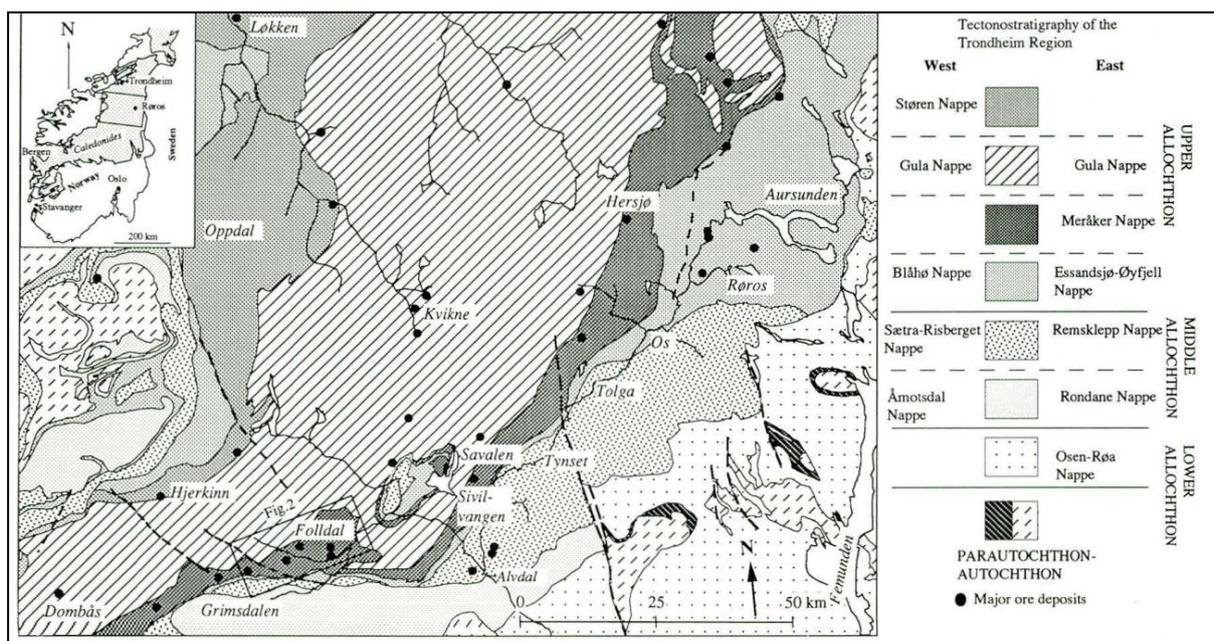
The Seve/Blåhø nappes (fig. 1, table 1) are tectonically overlain by rocks with an oceanic affinity; ophiolites, arc rocks and cover successions mainly assigned to the Køli Nappe Complex and correlatives which are preserved in a large structural depression (e.g. Gee 1975; Gee et al. 1985). In the Trondheim region, these rocks are separated into three main units, from east to west: the Meråker, Gula and Støren nappes (fig. 1), collectively known as the Trondheim Nappe Complex (TNC; Gee et al. 1985). Both the Støren and Meråker nappes contain Early Ordovician ophiolite and arc complexes, which are unconformably overlain by Late Ordovician to early Silurian sedimentary successions with subordinate volcanic rocks. The Gula Nappe consists of continental and oceanic clastic rocks of unknown depositional age and has variable metamorphic grade (Engvik et al. 2014), though generally higher than to the Meråker and Støren nappes. The relation between these nappes is still unresolved and the structural position of the Gula Nappe relative to the Meråker and Støren nappes is enigmatic; it may represent a klippe above, a thrust sheet between, or a mushroom-shaped antiformal unit below the Støren and Meråker nappes (e.g. Gee et al. 1985).

The Meråker and Støren nappes both contain Early Ordovician ophiolite and island arc complexes, unconformably overlain by Late Ordovician to Early Silurian sedimentary and volcanic successions, but their origin relative to each other is debated (e.g. Gee 1975; Grenne & Roberts 1998; Grenne et al. 1999; Roberts et al. 2002; Slagstad 2003; Slagstad et al. 2013). Faunal evidence indicates an origin of the Støren nappe on the Laurentian side of Iapetus (Pedersen et al. 1992), whereas a Baltican origin has been proposed for the Meråker nappe based on the presence of Early Ordovician black shales chemically similar to shales in the Oslo region (Gee 1981).

The map pattern suggests, however, that the Støren and Meråker nappes may be part of the same unit (Hollocher et al. 2012), and further work is needed to resolve this issue.

The Hersjø deposit is hosted in the Meråker Nappe (Fundsjø Group), which consists of basaltic to intermediate volcanic rocks with a geochemical signature transitional between island arc tholeiite (IAT) and Mid-Oceanic Ridge Basalt (MORB), overlain by sediments and pyroclastic/volcaniclastic rocks (Grenne & Lagerblad 1985).

The Fundsjø Group is characterized by a bimodal composition dominated by mafic rocks, with minor intermediate rock types. It has a high content of volcanoclastics with interlayered mafic and felsic units, as well as thick, relatively homogenous greenstone units, and locally tectonically elongated pillows. The group also contains amphibolites. The Fundsjø Group is intensely deformed, commonly finely banded with mm- to dm-thick individual layers and shows a metamorphic grade varying from greenschist facies to upper amphibolite facies (Nørsett 2016). At least parts of the Fundsjø Group rocks have been inverted, even though the Hersjø rocks have not (Grenne & Lagerblad 1985).



**Figure 7-1. Tectonostratigraphic map of the southern part of the Trondheim Region (modified from Nilsen 1988), with the Hersjø deposit indicated.**

**Table 7-1. The division in tectonostratigraphy, terranes and lithological units in the Southern Trondheim Region (from Bjerkgård & Bjørlykke 1994).**

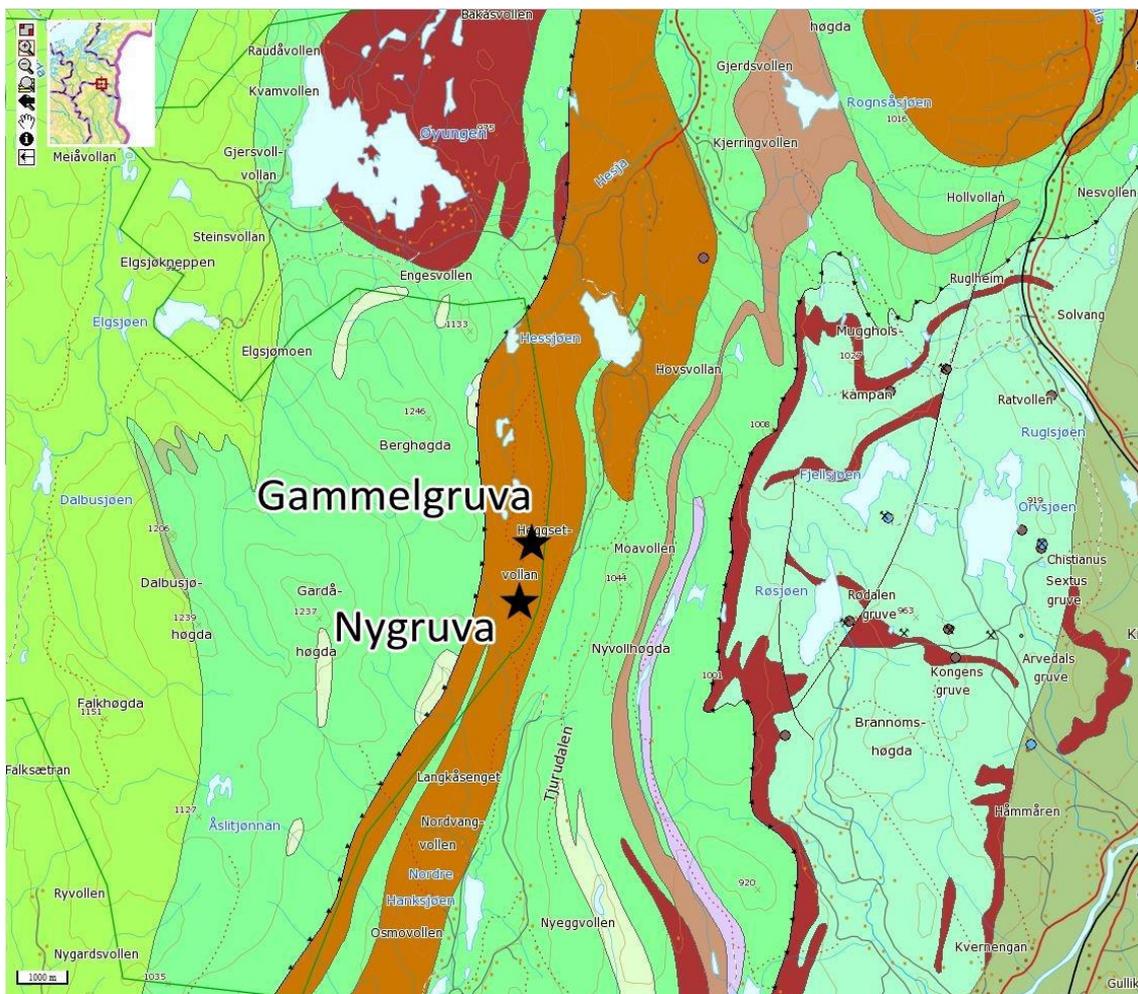
Terrane (Stephens & Gee 1989)		Tectonic Complex (Gee et al. 1985)	Tectonostratigraphy and Lithological Units (Modified from Nilsen 1988)
Exotic terranes derived from outboard of Baltica	Metamorphic complexes	UPPER ALLOCHTHON	Gula Nappe; <i>Gula Group</i>
	Oceanic sequences		Meråker Nappe; <i>Fundsjø Group, Sulåmo Group</i>
Suspect terranes; probably outer tect. shortened margin of Baltica	Seve Nappes		Essandsjø-Øyfjell Nappe; <i>Aursund Group</i>
Tectonically shortened margin of Baltica	Platformal and miogeoclinal sediments and Precambrian crystalline rocks	MIDDLE ALLOCHTHON	Remskepp Nappe; <i>Augen Gneiss Unit, Tynset Group</i>
			Rondane Nappe
		LOWER ALLOCHTHON	Osen-Røa Nappe
Cratonic Baltica	Platformal sediments	PARAUTOCHTHON/AUTOCHTHON	
	Prec. cryst. basement	PRECAMBRIAN CRYST. BASEMENT	

## 7.2 Property Geology

The central Scandinavian Caledonides hosts several large and numerous smaller Cu–Zn deposits, where the abandoned Løkken, Tverrfjellet, Røros and Follidal mines were the most important, and all the deposits are interpreted to have been formed in back-arc settings or associated with mafic intrusions during initial collision (Grenne et al. 1999).

Massive sulphides are frequent along the more than 300 km long Fundsjø volcanic unit, and there is a tendency to clustering of the sulphide deposits, e.g. in the Meråker, Ålen, Follidal districts. The deposits are generally Zn-rich, with the exception of the Hersjø deposit, having a comparably low Zn-content. In addition, the Pb-contents are low, while the gold and silver contents are variable.

The deposits occur as strongly deformed sheets or rulers, conformable to the layering of host rocks, and structurally controlled by tectonic deformation. It is common with sulphide dissemination in association with chlorite-quartz and quartz-sericite alteration in footwall volcanic (Grenne et al. 1999). See also Figure 7-2.



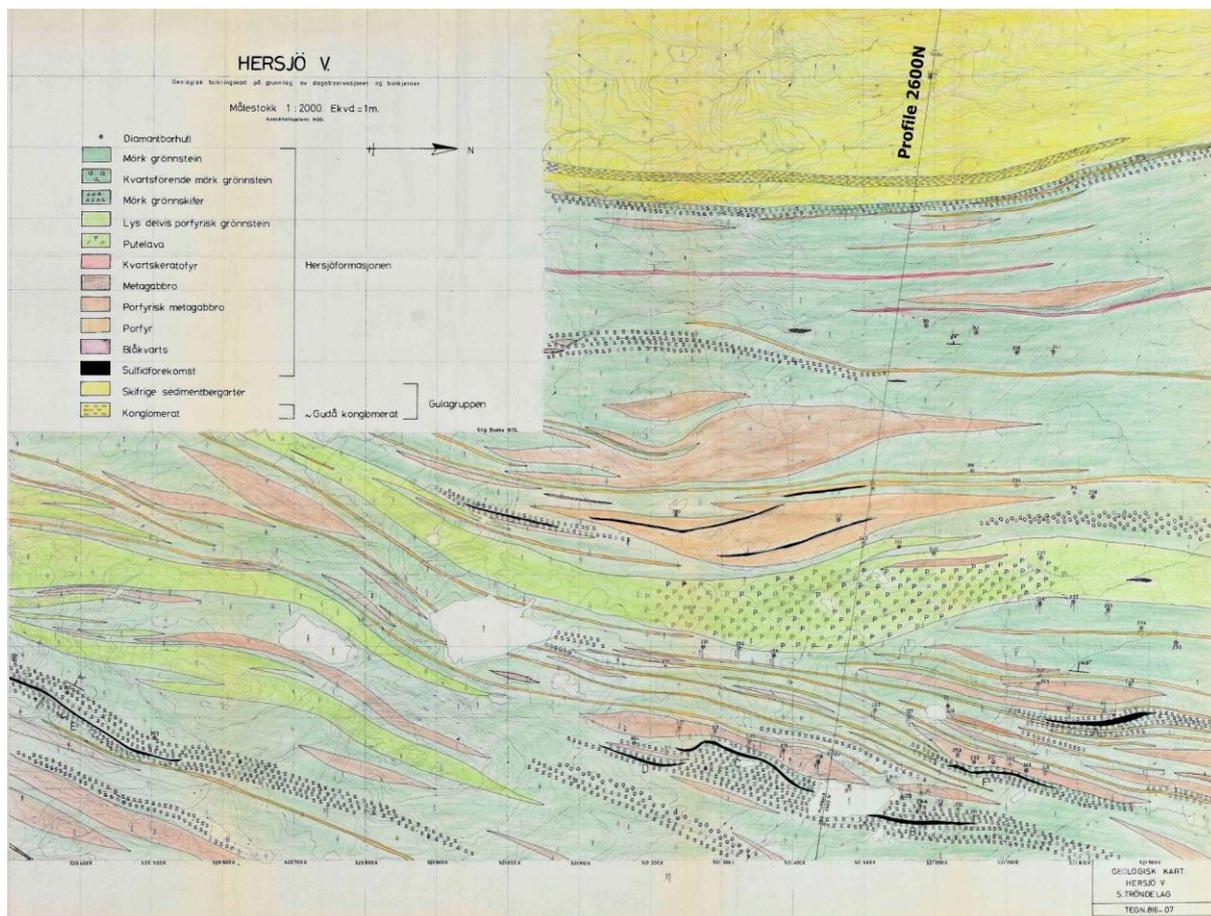
	quartzitic mica schist with calcite
	grey and black phyllite
	conglomerate
	diorite, gabbro, and metagabbro
	greenstone and amphibolite
	grey-green metatuffite
	quartz keratophyre
	calcitic meta-greywacke
	schist varieties

**Figure 7-2. Regional geology surrounding the Hessjø deposit.** Map from Norwegian Geological Society's online ore database (NGU, 2011), lithological names from Norwegian Geological Society's national bedrock database (NGU, 2009).

### 7.3 Property Mineralization

The mineralized lenses at the Hessjøgruva are generally lens or ruler shaped and lie conformably in massive greenstone, which consists of dark green hornblende and feldspar with subordinate

chlorite, epidote and calcite. Originally, the greenstone was probably basaltic meta-volcanites, but has been altered to dark chloritic schist or greenschist, commonly containing smaller lenses and layers enriched in quartz and/or feldspar, around the mineralizations. Subordinate lithologies in the proximal area include felsic volcanic rock (quartz keratophyre); gabbro and pillow basalt. In between the mineralized lenses, thin stripes or lenses of metagabbro and porphyritic layers occur. Generally, the rocks surrounding the sulfide mineralizations have a north-south strike, and dip varying from 40° to 65°, with the main dip being 50° to the west.



**Figure 7-3. Geological map of the Hessjø deposit area. Hersjøformasjonen corresponds to the Fundsjø Group, while Gulgruppen denotes the Gula Group. The line adjacent to Profile 2600N refers to the placement of the geological profile shown in Figure 7-4. The outcrop of lens A is situated in the bottom right corner. Original format of the map is A1. (Bakke, 1975).**



## 8 DEPOSIT TYPE

The Hessjøgruva deposit Cu-Zn-(Co) type VMS deposit is a likely bimodal-mafic subclassification, that shows signs of characteristic zonation patterns inherent to VMS deposits. It is located within the Fundsjø group, which is proposed to have been deposited in an immature arc/marginal basin setting.

The mineralization of lens A is ruler shaped and lies conformally in greenstones, which consists of dark green hornblende and feldspar with subordinate chlorite, epidote and calcite. The rocks surrounding the lens generally have a north-south strike and dip from 40° to 65°, with the main dip angle being 50° towards the west.

The strike length of lens A is approximately 150 m in north-south direction, it has an average thickness of 10-12 m in the central zone but tapers out towards the edges. It can be followed down plunge for approximately 750 m.

The mineralogy varies from coarse grained pyrite, partly rich in sphalerite and poor in chalcopyrite to pyrrhotite, rich in chalcopyrite and poor in sphalerite. Magnetite also appears to quite some extent.

## **9 EXPLORATION**

### **9.1 Data Compilation**

The data compiled for this report consist to a large extent of historical material, sourced from the Geological Survey of Norway, NGU and summarized in Bjerkgård (2007). Other than the data verification programs outlined in Chapter 12, Capella has yet to undertake any formal exploration programs on the property.

### **9.2 Geological Mapping**

Geological mapping has been carried out in several campaigns within the properties. The most complete being the one by Stig Bakke of the Norwegian Institute of Technology, NTH, in 1975. No recent mapping has been carried out.

### **9.3 Geophysical Surveys**

In 1948 a TURAM electromagnetic survey was carried out over the area. The outline of six mineralized lenses were identified (Singsaas & Brækken, 1949).

The presence of strong conductors in the area was confirmed by airborne geophysics in 1959 by the Swedish company ABEM (Rui, 1990). After the drilling campaign in 1970-71 more TURAM measurements were carried out, this time with electrodes placed in the ore lenses (Singsaas 1975, 1976). The results restricted the A-zone horizontally in the north and south direction to a depth of about 300 m, as well as the direction of the dip (c. 45° to the SW).

Helicopter measurements were carried out in 1974, and the three major ore lenses A, B and C, were easily picked up by the EM (Håbrekke, 1975). The other three ore lenses (D, E, F) could not be distinguished from the background, indicating that these are less conductive and probably of smaller dimensions.

In 1974-75 SP and VLF measurements were carried out in the area, confirming the picture of the A, B and C ores as the most conductive and most extensive ore lenses (Logn, 1974). In addition some thin pyrrhotite mineralizations were found to the west of the main ores. Because shallow graphite horizons overlie the deeper part of the ore lenses in the west (particularly the A lens), VLF could not be used to delimit the ore at depth or along strike.

After the diamond drilling in 1975, CP and SP measurements were carried out in nearly all holes (see Rui, 1990). These measurements showed the continuity of the ore lenses towards depth and also that there are no connections between the individual ore lenses.

## 10 DRILLING

A total of 67 diamond drill holes for 12,035m were drilled at Hessjøgruva between 1970 and 1977. These holes are distributed on all the six known mineralized lenses, with most holes targeting the three most promising (the interpreted highest grade) ones, the A, B and C lenses (Gvein, 1976, Rui, 1990). A complete list of drill hole collars for Hessjøgruva is provided in Appendix 1.

Of the 67 holes drilled, core from 42 holes (9,710 m) are still in storage at the NGU national core repository in Løkken.

The A lens was intersected by 26 drillholes, distributed in 6 profiles, down to a vertical depth of 415 m and a length of about 600 m along the plunge of the lens. In addition, two holes (no.317 and 318) intersected the lens at depths of c.700 and 800 m along the plunge, respectively. These holes probably intersected the eastern edge of the lens but indicate that the mineralized lens extends deeper. The ruler shaped lens has a length of 100-150 m along strike. The plunge is about 35° for the first 300 m from the surface and about 45° further down. The lens has a thickness of 10-12 m in the central part (along the axis), and tapers and diverges into thinner lenses towards its limits. The best intersection was in hole 312 in profile A-5, which yielded 4.35% Cu and 1.33% Zn over 14.5 m.

All historical drill holes in Lens A were terminated immediately below (<10m vertically) the targeted massive sulphide horizon. Massive sulphide deposits often also have either high-grade feeder and/or stockworks zones underlying the main mineralized zone; future drill programs should also test the possibility of delineating additional copper-zinc-cobalt mineralization beneath the main massive sulphide horizon.

No drilling has yet been undertaken by Capella Minerals at the Hessjøgruva project. However, future work programs at the project are expected to include additional diamond drilling (see also Chapter 26 Recommendations).

## 11 SAMPLE PREPARATION, ANALYZES AND, SECURITY

There is no available documentation detailing the sample preparation and analytical methods utilized for the historical work.

For Capella's drill core resampling / assay verification program, quarter-core intervals were cut from half-core intervals stored at the NGU's national drill core repository at Løkken (Figure 11-1 and Figure 11-2). Samples were cut on-site using a diamond saw and placed in sealed bags and sent to ALS Global's sample preparation facility located in Malå, Sweden. The resulting sample pulps were then sent to ALS Global's laboratory in Loughrea, Ireland for chemical analysis. ALS Global is an ISO 9001:2015 and ISO17025:2017 compliant laboratory. Results derived from both the Quality Assurance / Quality Control ("QA/QC") and assay verification programs are discussed in Chapter 12.



*Figure 11-1. Overview of NGU's drill core repository in Løkken.*



***Figure 11-2. Example of archived quarter-core of massive sulphide mineralization from Capella's resampling / assay verification program. Drill hole HER240, 381–383m (approximately).***

As described in section 12, the data verification shows good correlation with modern assays. The author's opinion is that sampling, sample preparation and assaying was done to a high standard at the time it was done.

## **12 DATA VERIFICATION**

### **12.1 Verification of Drill Hole Collars**

During the author's site visit to the Hessjøgruva project, drill collars in the Lenses A and B area were visited together with Capella field staff and correct procedures for measuring collar coordinates / altitudes were defined. Subsequently, Capella's field teams were able to locate and resurvey the coordinates / altitudes of most of the remaining historical drill hole collars. The author is satisfied that this work has been carried out in accordance with established procedures.

The survey results show small deviations from expected location, mostly within the accuracy of the handheld GPS receiver used (2-5 m). This level of precision would be considered adequate for use in an Inferred-Category Mineral Resource Estimate ("MRE") but not likely for a higher-level mineral resource category.

### **12.2 Rock Samples**

As the massive sulphide mineralization at Hessjøgruva has only limited surface expressions along its eastern margin, very few rock samples have historically been taken from the project area. Consequently, no verification of historical rock samples has been carried out to date.

### **12.3 Verification of Historical Drill Hole Data**

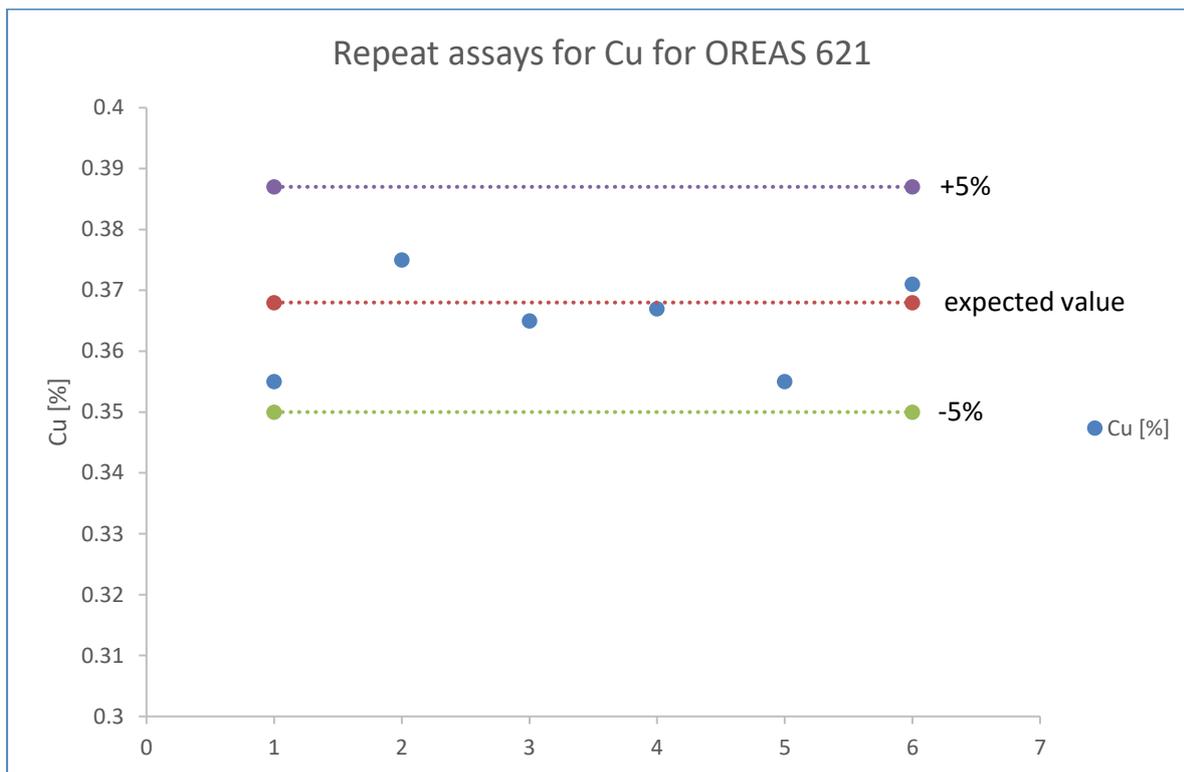
Verification of historical drill hole data by the author has been limited to reviewing the results derived from the resampling and reanalysis of mineralized intervals in stored drill holes (see also Sections 12.3.1 and 12.3.2). No twin hole drilling has been carried out to date.

It has not been possible to confirm the historical deviation survey data. A contractor has now been located that will attempt to re-enter the holes and collect new survey data. However, there is no guarantee that this is successful considering that the holes are fifty years old. If the new surveys are not successful, then new drilling will be required.

#### **12.3.1 Quality Assurance / Quality Control Review**

There are no records of historical assays having been done using duplicates or standards.

The author has reviewed both Capella's in-house sampling protocols and internal laboratory QA/QC protocols at ALS Global. Recent assays carried out by Capella have been done using both certified reference material and blanks. An example showing repeat assays of Cu in CRM OREAS 621 is shown in Figure 12-1. Repeat assays for other element show similar results.



**Figure 12-1. Repeat assays for Cu for OREAS 621.**

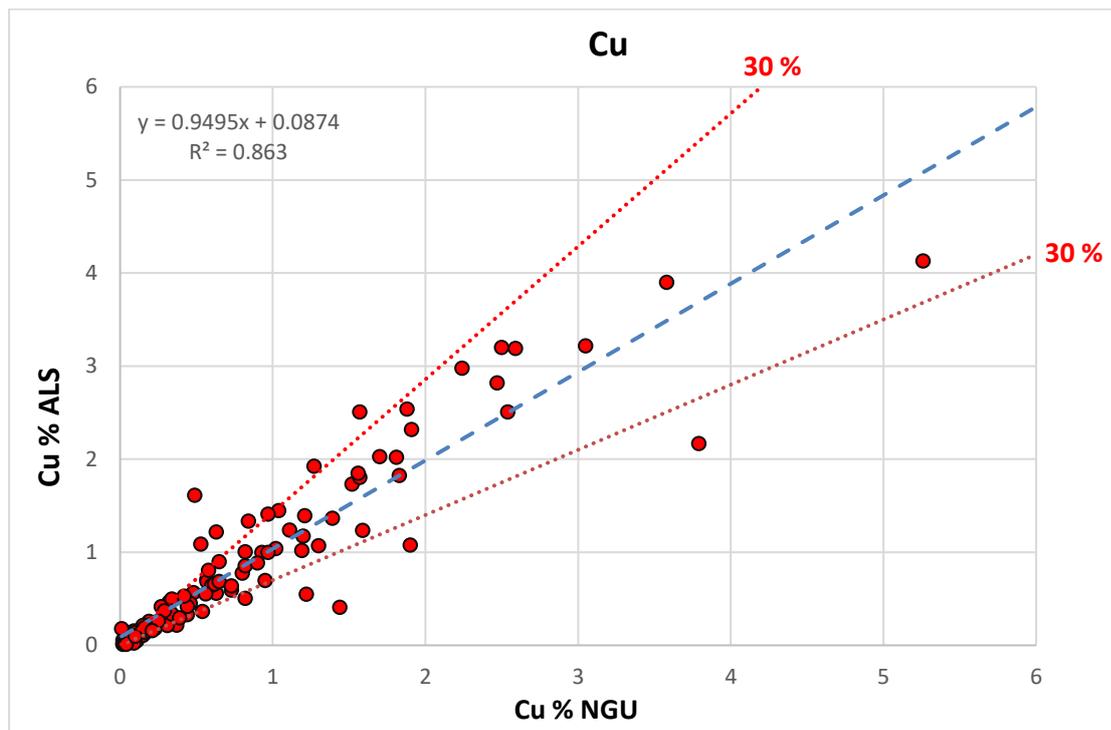
### 12.3.2 Verification Sampling

The core available at the national core repository at Løkken has been re-logged and re-sampled. The historical logs have been found to correspond to the results of the re-logging. A total of 124 historical sections were re-sampled and assayed by ALS Global. In addition, 16 previously unsampled sections were sampled and assayed. All samples were assayed with the multielement method ME-MS61, with the addition of PGM-ICP23 for precious metals and Cu-OG62, Pb-OG62, S-IR08 and Zn-OG62 for those samples that resulted in over grade assays in the first round.

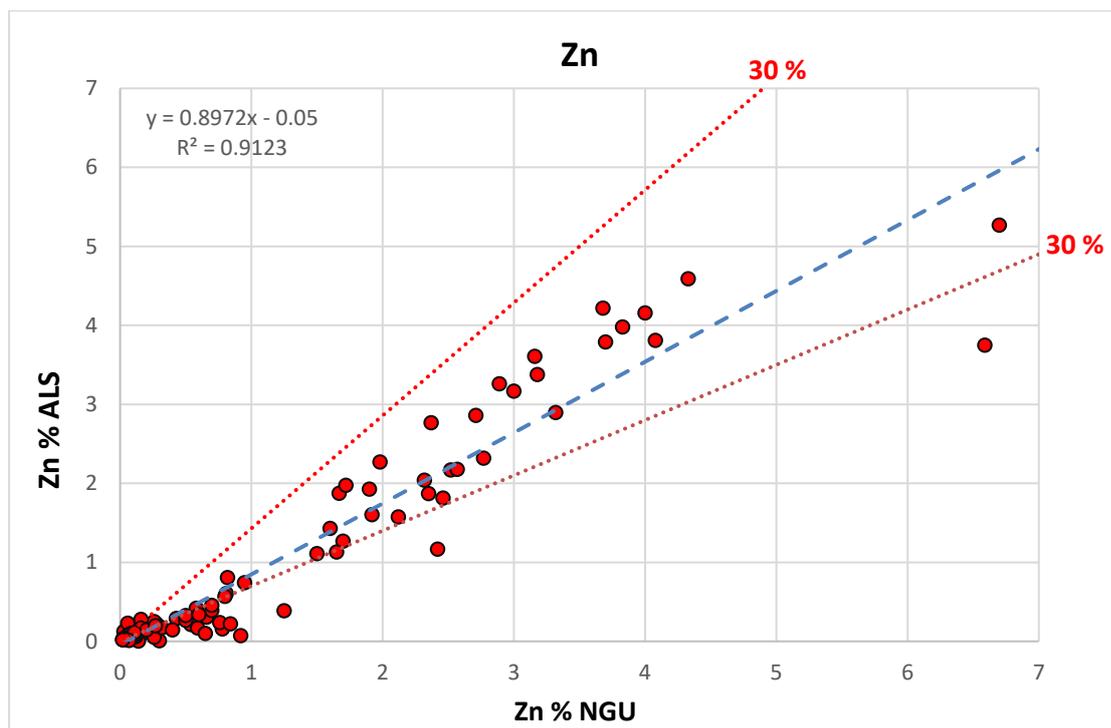
Historically, only the elements Cu, Fe, S and Zn were analyzed.

The results correspond well with those assays made by NGU in the 1970's, with  $R^2$  (showing the correlation) values ranging from 0.86 for Cu up to 0.98 for S. Plots of recent assays versus historical results are presented in Figure 12-2 to Figure 12-5.

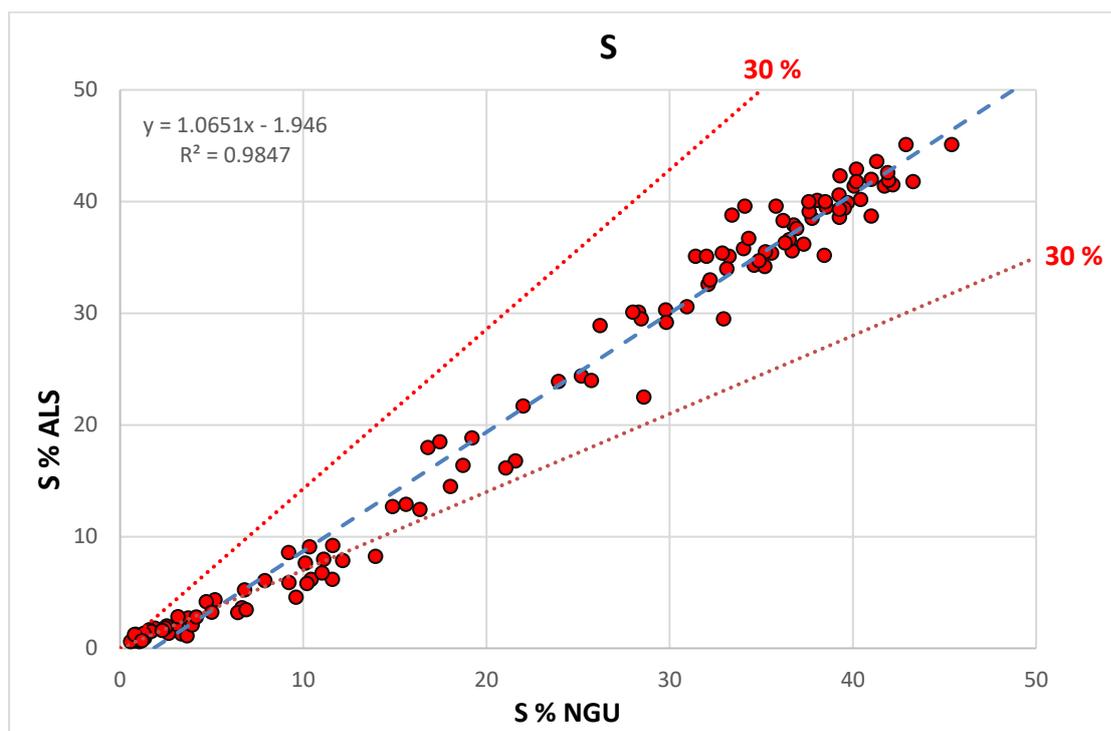
The results also showed elevated levels of Co, with many samples reporting over 200 ppm Co and the highest reported grade was 945 ppm Co.



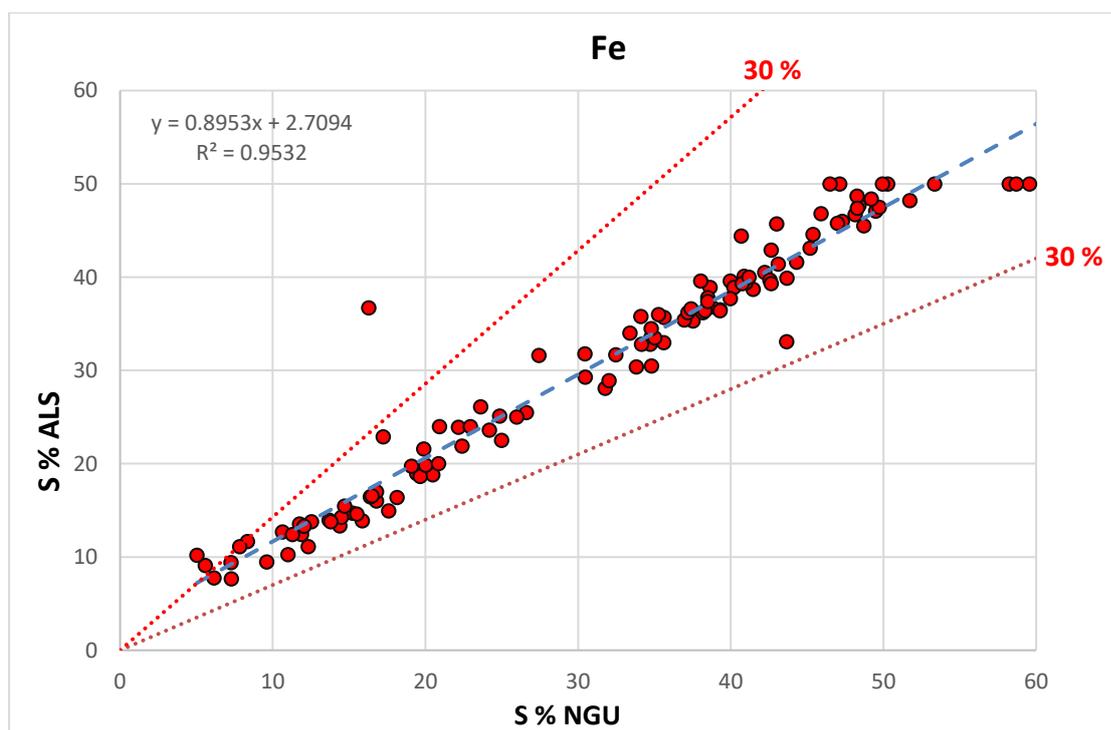
*Figure 12-2. Historical assays for Cu versus re-assays by ALS Global.*



*Figure 12-3. Historical assays for Zn versus re-assays by ALS Global.*



*Figure 12-4. Historical assays for S versus re-assays by ALS Global.*



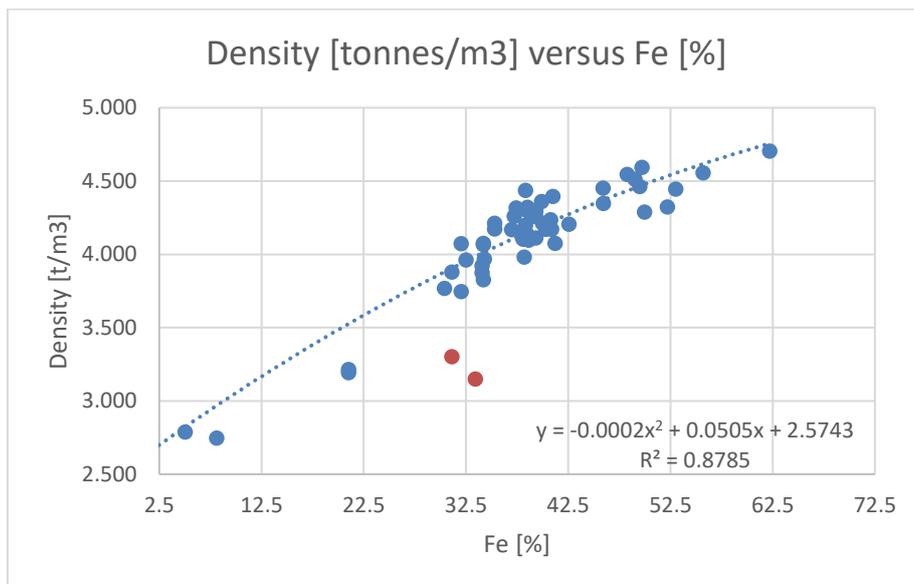
*Figure 12-5. Historical assays for Fe versus re-assays by ALS Global.*

### 12.3.3 Density determinations

Previous, non NI 43-101-compliant mineral inventory reported for the Hessjøgruva project by the NGU have been estimated using an assumed average density (Bjerkgård 2007). As part of this current report, Geovista undertook a density determination program on 56 samples from the historical core from Lens A, using Archimedes principle of first weighing the core dry, then

immersed in water. A formula for density as a function of iron has been calculated, see Figure 12-6 and Figure 12.7.

After the verification described above, it is the author's opinion that data holds a sufficient quality for the estimation of mineral resources to an inferred category.



**Figure 12-6. Density versus grade of iron, Fe [%]. The two samples marked in red have been eliminated from the regression calculation.**



**Figure 12-7. Density measurements being undertaken on Hessjøgruva drill core (July, 2022).**

## **12.4 Database Audit**

No detailed audit has been performed on the database to date. However, assays were verified through re-sampling and re-assaying and drill hole collars were verified in the field (as discussed in preceding sections). These programs are considered to have been completed, from the author's perspective, in accordance with NI43-101 standards.

## **13 MINERAL PROCESSING AND METALLURGICAL TESTING**

No mineral processing or metallurgical testing analyzes have been carried out by Capella and there are no records available in respect of any prior testing.

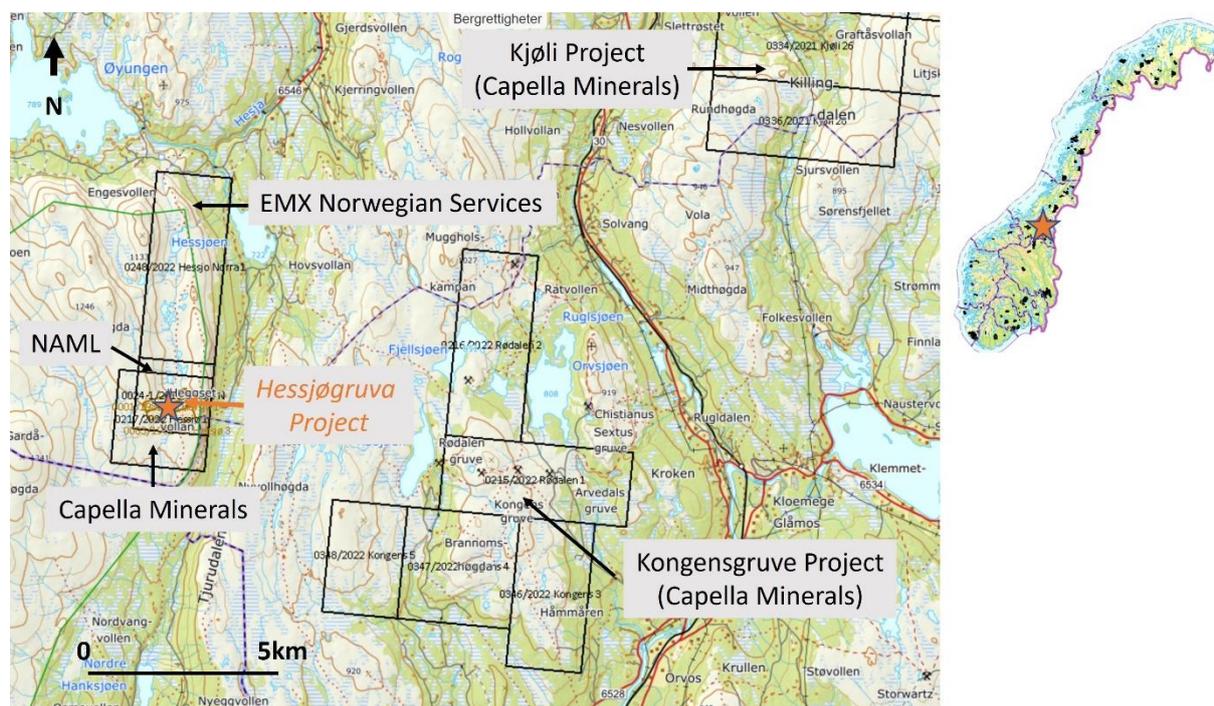
## **14 MINERAL RESOURCE ESTIMATE**

There is no current estimate of mineral resources for the Hessjøgruva properties.

## 23 ADJACENT PROPERTIES

The Hessjøgruva copper-zinc-cobalt project is comprised of the Hersjø 1-3 mining claims and has been overstaked by two later exploration claims (the Hessjo 1 claim held by Capella and the Hersjo N claim held by North Atlantic Minerals Ltd / NAML). According to the Norwegian Act on the Acquisition and Extraction of Mineral Resources, two or more parties may apply for the same ground, but priority is calculated from the time the application was received. Accordingly, the Hersjø 1-3 mining claims retain priority in this area.

Immediately to the N of the Hessjøgruva project lies an exploration claim (Hessjo Norra 1) which was staked by EMX Norwegian Services (EMX) in May, 2022. EMX is both a shareholder in Capella and also provides some technical assistance on its Norwegian projects.



**Figure 23-1. Adjacent properties to the Hessjøgruva project. Source: NGU mineral claim database on August 28, 2022 ([https://geo.ngu.no/kart/bergrettigheter\\_mobil/](https://geo.ngu.no/kart/bergrettigheter_mobil/)).**

## **24 OTHER RELEVANT DATA AND INFORMATION**

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

## 25 INTERPRETATION AND CONCLUSIONS

The Hessjøgruva property hosts a robust Cu-Zn-(Co) VMS deposit with characteristics similar to other known deposits in the northern Røros mining district. Previous exploration undertaken at Hessjøgruva includes both ground and airborne geophysical surveys and 12,035m / 67 holes of diamond drilling completed during the 1970's. Three main lenses of high-grade Cu-Zn-(Co) mineralization have been identified to date at Hessjøgruva (Lenses A-C), with drilling confirming the geometry and continuity of mineralization in the highest-grade Lens A.

Recent work completed by Capella has: i) confirmed the validity of copper and zinc assays reported from the 1970's drill program via a re-sampling program undertaken on stored drill core, ii) confirmed the drill collar coordinates for 60 of the 67 diamond drill holes completed (7 holes could not be located in the field); and iii) undertaken a program of specific gravity (density) analyses of samples of massive sulphide mineralization in Lens A. However, the validity of the original downhole survey data for the 67 diamond drill holes could not be confirmed with more drilling and modern downhole surveys of the historical holes deviation recommended. With the lack of confidence in the latter, it is difficult to motivate the classification of any potential mineral resources to any other class than inferred.

A better understanding of the distribution of cobalt within the Hessjøgruva VMS deposit should also be addressed with future work programs. Cobalt was not routinely assayed for in the 1970's drilling, however, Capella's re-sampling program has indicated locally elevated concentrations of cobalt together with the high-grade copper and zinc mineralization. Given current global demand for cobalt (primarily for use as a battery metal), cobalt has the potential to be an important by-product in any potential future development options for Hessjøgruva.

## 26 RECOMMENDATIONS

Based on the results of the author's inspection of the Hessjøgruva property and the review of available data, the following work recommendations are presented:

- i. Continue trying to re-enter the historical drill holes in order to obtain reliable down-hole survey (dip/orientation) data.
- ii. Undertake a follow-up drill program (3,000m in 6 holes) with larger diameter core for both step-out and infill drill holes. The larger diameter drill core could provide sample for metallurgical testwork.
- iii. Previous drill holes at Hessjøgruva were terminated immediately after passing through the main massive sulphide horizon. Extending drill holes further to below this horizon is recommended to test for the possible existence of underlying mineralized feeder and/or stockworks zones. This will also open up the possibility to use down-hole Transient EM methods to survey for conductors deeper down.
- iv. Evaluate the possibility of constructing an adit from the Hessdalen Valley in to the Hessjøgruva deposit. An adit would provide direct access to the Hessjøgruva mineralization (bulk sampling for metallurgical testwork), in addition to providing the option for drilling the deeper parts of the Hessjøgruva deposit from underground.

It is recommended to try to re-enter the historical holes to survey the deviations, both in azimuth and dip with modern instruments. It is likely that many of them will have been blocked over time, but with a proper dummy-logging as a first step, some of them will probably be possible to survey. Emphasis should be put on the longer holes that are likely to show the largest deviations.

With the confirmation of geological logs and the historical assays having been declared usable, the next logical step would be to carry out a mineral resource estimate, using modern methods and software. The newly developed density function will contribute to this.

Since the new assays indicate a possible economic contribution from the element Co, a mineralogical study to determine the deportment of that element should be carried out. This to verify whether it would, in fact, contribute to the value of the concentrate or result in the flotation tailings. If this study results in that Co should be considered for mineral resources, further re-assays of historical core will be necessary to be able to estimate the grade of it.

A tentative budget for the actions recommended above is presented below in Table 26-1.

**Table 26-1. Budget for next phase of exploration work recommended.**

Item	Cost (USD)
Deviation survey of historical holes	40,000
Mineral Resource Estimate	30,000
Mineralogical study of deportment of Co	15,000
Additional re-assays of historical core	30,000
Additional drilling	600,000
Down-hole TEM survey	50,000

Exploration adit	1,500,000
Metallurgical testwork	100,000
Preliminary economic assessment	100,000
<b>Total</b>	<b>2,465,000</b>

A proposal for the construction of an adit to access the Hessjøgruva A Lens should also be considered. This would provide Capella with direct access to the Hessjøgruva mineralization, in addition to provide the Company with the option to drill potential deeper extensions of the mineralization from underground. Detailed costing of such a program has yet to be undertaken, but assuming typical Scandinavian tunnel building costs of USD 3,000/m for a 5m \* 5m adit (source: Geovista internal data), then a 500m adit (see Figure 26-1) would potentially cost around USD 1.5 million.

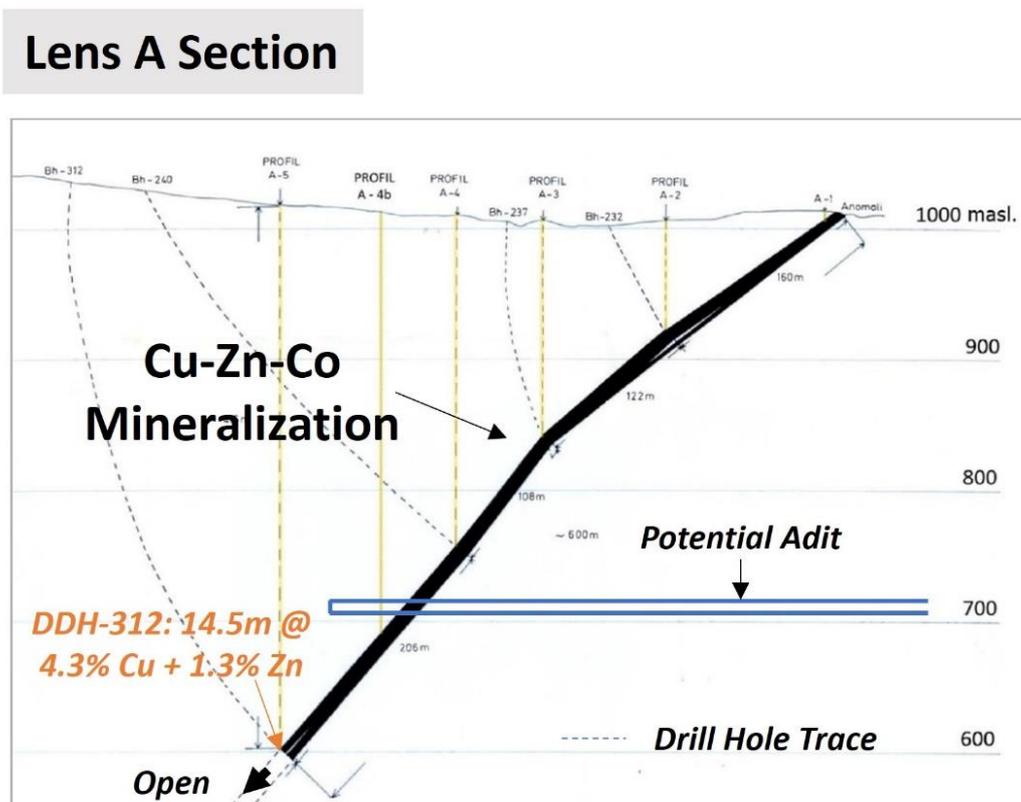


Figure 26-1. Hypothetical design for an adit into Lens A from the Hessdalen Valley.

## 27 REFERENCES

- Bakke, S. 1975: En malmgeologisk undersøkelse av området ved Hersjø Gruber i Ålen. Thesis, NTH 1975. BV6857.pdf (dirmin.no)
- Bjerkgård, T. 2007: The Hersjø ore deposit, evaluation of ore potential. NGU rep. 2007.023. untitled (ngu.no)
- Bjerkgård, T. & Bjørlykke, A. 1994: Geology of the Folldal area, southern Trondheim Region Caledonides, Norway. *Nor. geol. unders. Bull.* 426, 53-75.
- Corfu, F., Andersen, T.B. & Gasser, D. 2014: The Scandinavian Caledonides: main features, conceptual advances and critical questions. *Geol. Soc. London, Special Publ.*, 390(1), 9-43.
- Engvik, A.K., Grenne, T., Lutro, O.J. & Meyer, G.B. 2014: Metamorphic constraints on the Caledonian Upper Allochthon of Central Norway: the Gula Complex staurolite-garnet-kyanite mica schist. *Geol. Soc. Of Lon, spec. publ.* 390, 563-581.
- Gale, G.H. & Roberts, D. 1974: Trace element geochemistry of Norwegian Lower Palaeozoic basic volcanics and its tectonic implications. *Earth Plan. Sci. Letters* 22, 380 -390 .
- Gee, D.G. 1975: A tectonic model for the central part of the Scandinavian caledonides. *American Journal of Science*, 275A, 468-515.
- Gee, D.G. 1981: The Dictyonema-bearing phyllites at Nordaunevoll, eastern Trøndelag, Norway. *Norsk Geol. Tidsskrift*, 61, 93-95.
- Gee, D.G., Guezou, J.C., Roberts, D. & Wolff, F.C. 1985 : The central-southern part of the Scandinavian Caledonides . In Gee, D.G. & Sturt, B.A. (eds.): *The Caledonide Orogen - Scandinavia and related areas*. John Wiley & Sons, Chichester, 109-133.
- Grenne, T. 1988 : Marginal basin type metavolcanites of the Hersjø Formation, eastern Trondheim district, central Norwegian Caledonides . *Nor. geol. unders. Bull.* 412, 29-42.
- Grenne, T. & Lagerblad, B. 1985: The Fundsjø Group, central Norway - a lower Palaeozoic island arc sequence: geochemistry and regional implications. In Gee, D.G. & Sturt, B.A. (eds.): *The Caledonide Orogen - Scandinavia and related areas*. John Wiley & Sons, Chichester, 745 - 760.
- Grenne, T. & Roberts, D. 1998: The Hølonda Porphyrites, Norwegian Caledonides: geochemistry and tectonic setting of Early-Mid-Ordovician shoshonitic volcanism. *Journal of Geol. Soc., London*, 155, 131-142.
- Grenne, T., Ihlen, P.M. & Vokes, F.M. 1999: Scandinavian Caledonide metallogeny in a plate tectonic perspective. *Min. Dep.*, 34, 422-471.
- Gvein, Ø., 1976: Sulfidmalmfeltet Hersjø V. Holtålen, Sør-Trøndelag. Report A/S Sydvaranger, 23 pp. and appendices. BV 1128.
- Hollocher, K., Robinson, P., Walsh, E. & Roberts, D. 2012: Geochemistry of amphibolite-facies volcanics and gabbros of the Støren nappe in extensions west and southwest of Trondheim, Western Gneiss Region, Norway: a key to correlations and paleotectonic settings. *American Journal of Science*, 312, 357-416.
- Håbrekke, H., 1975: Magnetiske og elektromagnetiske målinger fra helikopter over Harsjøfeltet som omfatter deler av kommunene Holtålen og Røros i Sør-Trøndelag og Tolga, Os i Hedmark. NGU report 1306, 8 pp.

- Logn, Ø., 1974: VLF og SP-målinger, Hersjø. Report A/S Sydvaranger.
- Nørsett, S.M. 2016: Geometric and qualimetric modelling of the Hessjø deposit. Master thesis, NTNU, Trondheim.
- Pedersen, R.-B., Bruton, D.L. & Furnes, H. 1992: Ordovician faunas, island arcs and ophiolites in the Scandinavian Caledonides. *Terra Nova*, 4, 217-222.
- Roberts, D. 1988: The terrane concept and the scandinavian Caledonides : a synthesis. *Nor. geol. unders . Bull.* 413, 93- 99.
- Roberts, D., Melezhik, V.M. & Haldal, T. 2002: Carbonate formations and early NW-directed thrusting in the highest allochthons of the Norwegian Caledonides: evidence of a Laurentian ancestry. *Journal of the Geol. Soc., London*, 159, 117-120.
- Rui, I. 1990: Hersjøfeltet. Report Prospektering A/S (Aspro). BV 4151.
- Singsaas, P., 1972: El.magn. bakkemålinger Hersjøfeltet. NGU report 1085, 5 pp.
- Singsaas, P., 1975: Turammålinger Hersjøfeltet, NGU report 1305, 5 pp.
- Singsaas, P., 1976: Turammålinger Hersjøfeltet, NGU report 1392, 6 pp.
- Singsaas P. and Brækken H., 1949: Geofysisk undersøkelse 1. Hessdalen Grube 2. Storvoll Grube 3. Rogn- gruben 4. From-gruben 5. Harsjø Grube Vest. *Geofysisk Malmleting, Report* 63, 41 pp.
- Slagstad, T. et al. 2013: Tectonomagmatic evolution of the Early Ordovician suprasubduction zone ophiolites of the Trondheim Region, Mid-Norwegian Caledonides. *Geol. Soc. London, Spec. Publ.* 390.
- Stephens, M.B. 1988: The Scandinavian Caledonides: a complexity of collisions. *Geology Today* 4, 20-26.

## 28 CERTIFICATE OF AUTHOR

I, Thomas Lindholm, MSc. Mineral Exploration, Fellow AusIMM., do hereby certify that:

1. I am an Associated Consultant of GeoVista AB, P.O.Box 276, 971 08 LULEÅ, Sweden.
2. I graduated with a M.Sc. degree in mineral exploration from the University of Luleå, Sweden, in 1982.
3. I am and have been registered as a Fellow of the Australian Institute of Mining and Metallurgy since 2011 (Fellow AusIMM) (#230476).
4. I have worked with mineral exploration and mine development for 40 years since my graduation from university and have experience with exploration for, and the evaluation of, base metal deposits of the same type as the Hessjøgruva.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my current membership level with an affiliation with a professional association (as defined in NI 43-101), I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I, as a “Qualified Person” for the purposes of NI 43-101, take responsibility for all sections of the Technical Report titled “GVR22016 Capella Minerals Hessjøgruva Copper Project, Trøndelag County, Norway NI43-101 Technical Report”, with an effective date of August 31th, 2022 (the “Technical Report”). I visited the exploration permits for one day on June 29, 2022 to check the accessibility, physiography, and nearby infrastructure, and the historical mines and pits locations’.
7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. I am independent of the issuer, the vendor and the Properties applying all of the tests in section 1.5 of both NI 43-101 and NIC 43-101CP.
10. I have not had any prior involvement with the Properties that is the subject of this Technical Report.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Signing Date: August 31<sup>th</sup>, 2022



Thomas Lindholm

Luleå, Sweden

## Appendix 1. Drillhole collars

hole_id	Database						Field control			Difference			Target lens
	x	y	z	max_depth	dip	azimuth	x	y	z	delta_x	delta_y	delta_z	
HER211	608967,9	6952000,2	1014,54	30,15	-30	102	608968	6951998	1013	0	2	2	B
HER212	608957,3	6951978,3	1016,89	40,4	-30	102	608958	6951976	1016	-1	2	1	B
HER213	608954,1	6951950,5	1018,8	34,9	-30	95							B
HER214	608938,2	6951926,2	1017,73	37	-30	95	608939	6951922	1018	-1	4	0	B
HER214A	608955,2	6951925,2	1019,71	18,8	-30	100	608957	6951925	1019	-1	0	1	B
HER215	608942,1	6951899,5	1018	21,4	-30	90	608940	6951900	1018	3	-1	0	B
HER216	608921,2	6951874,8	1020,06	55	-30	110	608919	6951874	1020	2	0	0	B
HER217	608931	6951820,3	1017,87	35,05	-30	110	608929	6951824		2	-4		B
HER218	608898	6951777,5	1024,8	40	-28	108	608897	6951771		1	7		B
HER219	608883,2	6951729,2	1025,48	40	-30	110	608881	6951736		2	-7		C
HER220	608872,6	6951681,2	1026,91	28,8	-30	110	608878	6951682		-5	-1		C
HER221	608858,7	6951631,4	1028,72	27,9	-30	110	608860	6951634		-1	-3		C
HER222	608856	6951581,4	1031,42	52,6	-30	110	608854	6951583		2	-2		C
HER223	608814,2	6952176	1016,21	30	-60	102	608819	6952176	1021	-5	0	-5	A
HER223A	608814,2	6952176	1016	13,9	-30	102	608819	6952176	1021	-5	0	-5	A
HER224	608811,4	6952126	1013,81	30	-60	102	608811	6952129	1021	0	-3	-7	A
HER225	608776,9	6952080,7	1014,37	30,9	-60	102	608779	6952082	1021	-2	-2	-7	A
HER226	608817,6	6951954,2	1016,52	133,9	-60	100	608812	6951958	1019	5	-3	-2	B
HER227	608827,8	6951902,7	1016,29	122,15	-60	102							B
HER228	608822	6951853,1	1015,9	120,6	-60	102	608823	6951856	1017	-1	-3	-1	B
HER229	608752,2	6951710,9	1021,22	172,1	-60	102	608750	6951712		2	-1		C
HER230	608741,4	6951661,1	1022,4	180,75	-60	102	608742	6951667		-1	-6		C
HER231	608740,6	6951610,9	1023,25	114,5	-60	102	608739	6951612		1	-1		C
HER232	608660,3	6952133,5	999,639	110	-60	102	608662	6952132	1006	-2	1	-6	A
HER233	608671	6952182,6	998,437	92,6	-60	102	608674	6952181	1006	-3	2	-8	A
HER234	608690,5	6952220,6	997,908	79,85	-60	102	608698	6952223	1005	-7	-2	-7	A
HER235	608705	6952264	1000	75	-60	102	608716	6952273	1005	-11	-9	-5	A
HER236	608658,6	6952075,3	1006,46	105,8	-60	102	608664	6952080	1011	-5	-5	-5	A
HER237	608598,8	6952080,2	1006,73	184,7	-90	0	608596	6952082	1025	3	-2	-18	A
HER238	608511,2	6952149,8	998,135	224,55	-60	102	608516	6952152	1005	-5	-2	-7	A
HER239	608498,7	6952041,5	1011,6	241,35	-60	102	608504	6952049	1022	-6	-7	-10	A
HER240	608310,1	6952038,2	1025,4	404,3	-60	102							A
HER241	608590,6	6951879,9	1023,81	300,9	-58	102	608590	6951878		0	1		B
HER242	608313,2	6952091,2	1018,98	398,8	-60	102	608314	6952101	1028	-1	-9	-9	A
HER243	608585,9	6951830,1	1028,25	305	-60	102	608583	6951830		3	0		B
HER244	607929,4	6951906,2	1085,85	744,9	-60	93	607929	6951913	1093	0	-7	-7	A
HER245	608599,4	6951929,2	1019,83	302,4	-60	102	608592	6951910		7	19		B
HER246	608772,9	6952211	1008,13	44,4	-60	102	608766	6952212	1014	7	-1	-6	A
HER247	608765,5	6952086,1	1014,63	54,8	-90	0	608765	6952089	1021	1	-3	-6	A
HER248	608901,7	6952094,6	1013,54	27,95	-59	96	608904	6952098	1021	-2	-3	-7	B
HER249	608898,5	6952069,5	1013,89	30,1									B
HER250	608890	6952045,6	1015,52	25,5	-54	94	608895	6952049	1017	-6	-3	-1	B
HER251	608887,8	6952020,7	1016,81	27,9	-58	100	608893	6952021	1021	-5	-1	-4	B
HER252	608889,2	6951995	1019,01	32,3	-60	102	608893	6951997	1019	-4	-2	0	B
HER253	608881,3	6951971,1	1018,25	26,1	-60	96	608884	6951974	1020	-3	-3	-2	B
HER301	608790	6950647,1	1015,9	25	-50	99							E
HER302	608833,6	6950719,5	1022,23	26,4	-50	99							E
HER303	608893,8	6950848,4	1028,21	22,4	-50	99							E
HER304	608880,7	6951517,2	1030,67	31,9	-50	104	608878	6951517		3	0		C
HER305	608889,9	6951561,4	1029,64	31,1	-48	105	608888	6951561		2	1		C
HER306	608771,6	6951557	1027,73	150	-85	76	608773	6951557		-2	0		C
HER308	608693,1	6951591,2	1025,68	210,15	-85	85	608696	6951591		-3	0		C
HER309	608557	6951563,7	1031,4	303,7	-90	0	608557	6951559		0	5		C
HER310	608555,7	6951795,4	1029,81	394,8	-90	0	608561	6951795		-5	0		B
HER311	608510,6	6951840,8	1028,88	390	-90	0	608507	6951846	1035	4	-5	-6	B
HER312	608286	6951978,6	1034,71	511	-85	284	608283	6951982	1046	3	-4	-11	A
HER313	608277	6951909,2	1041,22	515	-85	276	608274	6951913		3	-4		A
HER314	608481,1	6951977,1	1018,02	334,8	-90	0	608481	6951987	1025	0	-10	-7	A
HER315	608506,1	6952123,2	1000,9	265	-85	99	608515	6952124	1008	-9	-1	-7	A
HER316E	608573,4	6951757,1	1031,82	358,2	-70	85	608579	6951754		-6	3		B
HER317	608016,3	6951935,4	1076,88	760	-80	87	608021	6951941	1083	-5	-6	-6	A
HER318	608019,3	6951865,6	1075,83	769	-84	285	608021	6951872	1083	-2	-7	-7	A
HER318A	608019	6951866	1076	117	-80	285	608021	6951872	1083	-2	-6	-7	A
HER319	608390,1	6951990,7	1021,46	437,7	-85	78	608392	6951996	1028	-2	-5	-7	A
HER320	608389,5	6951993,8	1021,41	386,3	-84	90	608392	6951996	1028	-2	-2	-7	A
HER321	608392,1	6952033,7	1015,7	376,7	-85	86	608397	6952040	1024	-4	-6	-8	A
HER322	608390,6	6952064,1	1012,32	368,7	-84	86	608392	6952065	1020	-2	-1	-8	A