

Mahvie Minerals

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Mofjell Project, Norway

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- Appendix 3 Tenement Coordinate Summary

1 SUMMARY

This report summarises the historical information available and the work undertaken by Mahvie Minerals on its Mofjell Project area in the Mo i Rana district Northern Norway.

A resource estimate on the Mofjell project was completed in February 2024. The inferred resources were estimated at 8.9 Mt at 3.8% ZnEq and an additional exploration target of 0.58-0.71 Mt at 3.5-4.28% ZnEq. This resource estimate was the culmination of 18 months of validating, compiling and modelling the resource from historical and current data to build a 3D wireframe model of the mineralisation and underground workings.

In 2023 Mahvie Minerals drilled 11 diamond drillholes from the old train tunnel with positive results. The drilling confirmed the current fold theory and opened up potential for additional undiscovered resources in interpreted fold structures.

2 INTRODUCTION AND TERMS OF REFERENCE

2.1 Scope of Work

In March 2024, the authors of this report were requested by Mahvie Minerals AB to prepare and update a document summarising the Mofjell Project and the work completed to date. This report therefore summarises the area, the historical information available and the work undertaken by Mahvie on its Mofjell Project in the Mo i Rana district Northern Norway.

The report is prepared with the intent that the summarised information would be available in one report.

2.2 Principal Sources of Information

Information used in this report has been gathered from a variety of sources including;

- Field observations and reports gathered during field trips in 2022 & 2023 by the Authors.
- Internal company information available to Mahvie Minerals AB,
- Information available through open file sources from NGU and Norwegian Directorate of Mining with the Commissioner of Mines at Svalbard
- Various published historical, technical and scientific papers and reports.
- Digital exploration data
- Published information relevant to the Project area and the region in general.

A full listing of the principal sources of information is included in Section 20 of this document.

2.3 Authors and Independence

Mahvie Minerals AB was responsible for preparation of all portions of this report. The following personnel took part in the compilation of the report:

 Ms Louise Lindskog – Exploration Manager of Mahvie Minerals AB. The details in the report were coordinated and written by Louise. As a consulting geologist of Mahvie Minerals AB. Ms Lindskog is not considered independent

The authors of this report are not qualified to provide extensive comment on tenement, legal, metallurgical, hydrological or environmental issues associated with the Mofjell Project referred to in this report.

2.4 Abbreviations

All monetary amounts expressed in this report are in Norwegian crowns (NOK) unless otherwise stated. Quantities are generally stated in SI (International System of Units) metric units, including metric tons (tonnes, t), kilograms (kg) or grams (g) for weight; kilometres (km), metres (m), centimetres (cm) and millimetres (mm) for distance; square kilometres (km²) or hectares (ha) for area; and parts per million (ppm) or percent (%) for copper, iron, sulphur and zinc grades.

	Table 2.4_1				
	Mofjell Project				
	List of A	Abbreviations			
	Description		Description		
NOK	Norwegian Crowns	MC	Mining Concession		
%	Percent	Mg	Magnesium		
"	Inches	ml	millilitre		
μ	microns	mm	millimetres		
3D	three dimensional	Mtpa	million tonnes per annum		
bcm	bank cubic metres	N (Y)	northing		
cm	Centimetre	Ni	nickel		
Cu	Copper	NGU	Norwegian Geological Survey		
°C	degrees centigrade	NSR	Net smelter royalty		
DDH	diamond drill hole	NQ ₂	size of diamond drill rod/bit/core		
DMF	Norwegian Directorate for Mineral Management	ppb	parts per billion		
DTM	digital terrain model	ppm	parts per million		
EP	Exploration Permit	QC	quality control		
g	gram	RAB	Rotary Air Blast		
g/m³	grams per cubic metre	RC	Reverse Circulation		
g/t	grams per tonne	RL (Z)	reduced level		
NQ	size of diamond drill rod/bit/core	RQD	rock quality designation		
hr	hours	SG	Specific gravity		
kg	kilogram	Si	silica		
kg/t	kilogram per tonne	SMU	selective mining unit		
km	kilometres	t	tonne		
km ²	square kilometres	t/m ³	tonnes per cubic metre		
l/hr/m ²	litres per hour per square metre	tpa	tonnes per annum		
м	million	Zn	Zinc		
m	metres	W:O	waste to ore ratio		
Ma	thousand years				

A listing of abbreviations used in this report is provided in Table 2.4_1 below.

2.5 Reliance on Other Experts

This report relies on data and information gathered by Mahvie Minerals AB. It has been compiled by the author and the information within Section 13 and Section 16 was provided by Per Storm Managind Director of Mahvie Minerals and Section 14 (Mineral Resource Estimates) was provided by Thomas Lindholm at Thomas Lindholm Konsult AB that completed the resource estimate.

3 PROPERTY DESCRIPTION AND LOCATION

3.1 Introduction

3.1.1 Norwegian Projects

Mahvie Minerals AB, a public listed company on the Nordic Growth Market holds, through its wholly owned Norwegian subsidiary; Mo I Rana Vms AS, 100% of twenty-three exploration licences within the Rana–Hemnes Zn-Pb-Cu metallogenic area, which covers a large area around the Okstindan mountains in Nordland (Bjerkgård & Hallberg, 2012). The Mo i Rana district is host to many base metal, alloy and some precious metal mines and prospects including Mofjell Gruvan (historical Zn/Pb/Cu mine), Rana Gruber (operating iron ore mine), and Bleikvassli as well as numerous smaller deposits like Sølvberg, Hellerfjellet, Mos Gruva and Reinfjellet.

The twenty-three licences are referred to as the Mo 5 - Mo 12, Mo 14 - Mo 16, Mo 20 - Mo 28, Mo 31, Mo 34 and Mo 36. The tenements total 171.5 km².

The Mofjell Project contains one historical zinc-lead-copper (Ag/Au) mine (Mofjell), multiple small addits and additional underexplored polymetallic prospective tenure. The area has high potential for economic zinc-copper-lead deposits containing silver and gold.

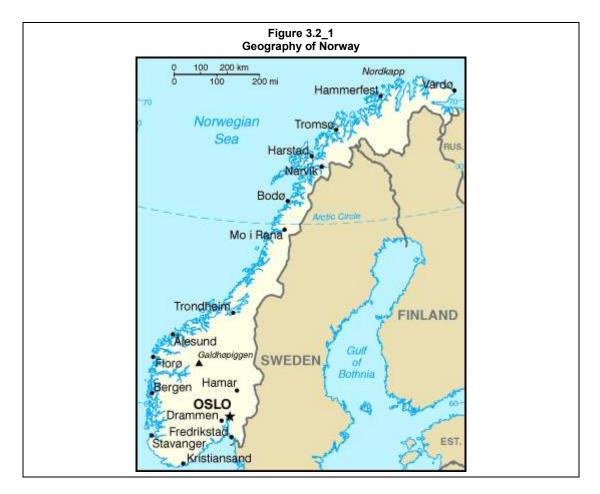
3.2 Background Information on Norway

Norway, formally the Kingdom of Norway, is a Nordic country on the western part of Scandinavian Peninsula in Northern Europe. The country shares a long eastern border with Sweden. It is bordered by Finland and Russia to the northeast and the Skagerrak strait to the south. Norway has an extensive coastline facing the North Atlantic Ocean and the Barents Sea. Norway has a total area of 385 207 km² (Figure 3.2_1).

There are about 5.5 million inhabitants in Norway (2023) and the population density is approximately 14.4 people per km². Norway's capital city is Oslo and is also the country's largest city with a metropolitan population estimated to be 1.4 million people in 2023. (Askheim, S.; Nafstad, M., 2024)

Nearly half of the inhabitants of the country live in the far south, in the region around Oslo, the capital. About two-thirds of Norway is mountainous, and off its much-indented coastline lie, carved by deep glacial fjords, some 50,000 islands. (Encyclopedia Britannica, 2024)

Harald V of the House of Glücksburg is the current King of Norway. Jonas Gahr Støre has been Prime Minister of Norway since 2021. As a unitary state with a constitutional monarchy, Norway divides state power between the parliament, the cabinet, and the supreme court, as determined by the 1814 constitution. The unified kingdom of Norway was established in 872 as a merger of petty kingdoms and has existed continuously for 1151–1152 years. From 1537 to 1814, Norway was part of Denmark–Norway, and, from 1814 to 1905, it was in a personal union with Sweden. Norway was neutral during the First World War, and in the Second World War until April 1940 when it was invaded and occupied by Nazi Germany until the end of the war.



Norway has both administrative and political subdivisions on two levels: counties and municipalities. The Sámi people have a certain amount of self-determination and influence over traditional territories through the Sámi Parliament and the Finnmark Act. Norway maintains close ties with the European Union and the United States. Norway is a founding member of the United Nations, NATO, the European Free Trade Association, the Council of Europe, the Antarctic Treaty, and the Nordic Council; a member of the European Economic Area, the WTO, and the OECD; and a part of the Schengen Area. The Norwegian dialects share mutual intelligibility with Danish and Swedish.

Norway maintains the Nordic welfare model with universal health care and a comprehensive social security system, and its values are rooted in egalitarian ideals. The Norwegian state has large ownership positions in key industrial sectors, having extensive reserves of petroleum, natural gas, minerals, lumber, seafood, and fresh water. The petroleum industry accounts for around a quarter of the country's gross domestic product (GDP). On a per-capita basis, Norway is the world's largest producer of oil and natural gas outside of the Middle East. The country has the fourth- and eight highest per-capita income in the world on the World Bank's and IMF's list, respectively. It has the world's largest sovereign wealth fund, with a value of US\$1.3 trillion. (Wikipedia, 2024)

Norway occupies part of northern Europe's Fennoscandian Shield. The extremely hard bedrock, which consists mostly of granite and other heat- and pressure-formed materials, ranges from one to two billion years in age.

Because of the Gulf Stream and prevailing westerlies, Norway experiences higher temperatures and more precipitation than expected at such northern latitudes, especially along the coast. Norway has a climate characterized by large variations between different parts of the country. The mainland has temperate climate in the lowlands and polar climate in the mountains, along the coast of Finnmark and on Svalbard. The entire coast from the Oslo fjord to Troms has a temperate rain climate with mild winters while the inland has a cold temperate climate with annual snow cover and with coniferous forest as natural vegetation. Due to the large topographic variation in the country, the average annual precipitation is between 300-3000mm per year. (Dannevig, P., Harstveit, K., 2024)

The population comprises approximately 81.5% Norwegian and ~ 18.5% of mixed origin. The Sami are the Nordic countries only officially indigenous people. About 40,000 people in Norway are of Sami decent.

The Sámi people are indigenous to the Far North and have traditionally inhabited central and northern parts of Norway and Sweden, as well as areas in northern Finland and in Russia on the Kola Peninsula. Another national minority are the Kven people, descendants of Finnish-speaking people who migrated to northern Norway from the 18th up to the 20th century. Because of this "Norwegianization process", many families of Sámi or Kven ancestry now identify as ethnic Norwegian.

The official language is Norwegian and it has two official written forms, Bokmål and Nynorsk. English is the primary foreign language taught in schools and most of the population born after World War II, is fluent in English. The indigenous Sami people speak any of or a variety of 10 official Sami languages.

Norway is one of the world's richest countries. This is due, among other things, to good access to several energy sources: hydropower, oil and gas. The country has strong industrialisation, a short distance to important markets in Western Europe, political stability, well-developed infrastructure and a population with a high level of education. (Thuesen et al 2024)

Norway's infrastructure is good. Electricity is available through a national grid to virtually everyone in the country, almost all have access to telephone and the road network has a total length of 93,000 km. The rail network is well developed, and freight trains are common from the major terminals to the ports and smelters in the Nordic region. There are also major and minor airports available in most regions with an international airport currently under construction at Mo i Rana.

The Norwegian merchant fleet is among the largest in the world and the Mo i Rana Port just adjacent to the project.

3.3 Mineral Tenure

In Norway, all metals with an SG \geq 5g/cm3 are vested in the State including chromium, manganese, molybdenum, niobium, vanadium, iron, nickel, copper, zinc, silver, gold, cobalt, lead, platinum, tin, zinc, zirconium, tungsten, titanium arsenic, pyrrhotite, pyrite, uranium, cadmium and thorium and ores of such metals (excluding alluvial gold). All other minerals that are not owned by the State belong to the landowners such as industrial minerals, natural stone and building materials. Mineral Resources Acquisition and Extraction Act (Minerals Act) of 2010 (Lov om erverv og utvinning av mineralressurser (mineralloven)) and the Regulations to the Minerals Act (2010) (Forskrift til mineralloven) regulates the exploration and mining industry in the country. The Acts lays down conditions for exploration, investigations, and extraction of minerals, in addition to setting requirements for how the exploration and exploitation must take place. The purpose of the Act is to ensure that the country's mineral resources are managed in a sustainable and socially responsible manner.

The Norwegian Geological Survey (NGU) is usually the first contact for investors and the Directorate for Mineral Management with the Mine inspector for Svalbard (DMF) "Direktoratet for mineralforvaltning med Bergmesteren for Svalbard" is the government department that handles all applications for and allocation of mineral rights in Norway.

An Exploration Permit (UN) is valid for up to 7 years if the UN's annual fee is maintained and paid as outlined within the mineral regulations. The UN can be extended a further total of not more than three years, if extraordinary reasons exist, for example if the permit holder shows that considerable work has been undertaken in the area and that further exploration will probably result in the granting of an exploitation concession.

Chapters 4 and 9 as well as Chapter 10 Section 55 to 56 of the Minerals Act of 2010 and Chapter 1 Section 1.1 to 1.4, Chapter 2 and Chapter 5 Section 5.1-5.2 of the Minerals Regulations of 2010 detail the rights and obligations of the holder of an EP. These include entitlement to carry out exploration.

Licence types include:

- Landowners Minerals Anyone can search for the landowner minerals, subject to the restrictions outlined by the minerals act and other legislation.
- State Minerals Anyone can search for the state minerals, subject to the restrictions outlined by the minerals act and other legislation, however, has no rights to the minerals found.
- Exploration Permit ('UN'-(Undersøkelsesrett)) –An exploration permit is valid for up to 7 years (10 years with special extension), with increasing fees after year 2 (10 NOK/ha), 4 (30 NOK/ha) and 6 (50 NOK/ha) and gives the permit holder the right to apply for the exploitation concession of any mineable minerals found.
- Exploitation Concession ('UT' -(Utvinningsrett)) Allows the permit holder to carry out mining operations and are valid until either; a) the licence to operate has not been granted within 10 years from when the concession was granted, b) when the operations does not

comply with the laws of the operating license and more than 10 years since granting of the permit has passed, c) the time extension according to §34 as expired or d) one year after the license to operate has expired. Annual UT license fees are 100 NOK/ha.

 Operating License (Driftskonsesjon) - All mining operations with a production volume exceeding 10,000m3 needs an operating license granted by the DMF. An operating license can only be given to a holder of an exploitation license. When granting an operation license, DMF will emphasise whether the project appears to be economically feasible, whether it is planned in a responsible manner and whether the applicant has sufficient expertise for operating the deposit.

Granting of licences is determined by the Mines Inspector and granting is based on the Inspectors perception as to the ability and intention of the applicant to complete exploration as outlined in the application and the validity of the proposed program to find resources. To be granted an exploration or an exploitation permit you must be a company that is registered with the Norwegian Business Register. The licensee and others involved in mineral activities shall have the necessary qualifications to carry out the work in a proper manner as outlined in Chapter 1 Section 6.a Qualifications for conducting mineral activities.

The exploitation concession (UT) does not in itself give the right to start mining operations on a deposit. To start mining a deposit, a number of permits are required under, among other things, the Planning and Building Act, the Natural Diversity Act and the Pollution Act, as well as an operating license under the Minerals Act. The UT must also be registered with the land registry, and this is facilitated by the DMF.

3.4 **Project Location**

3.4.1 The Mofjell Project Area

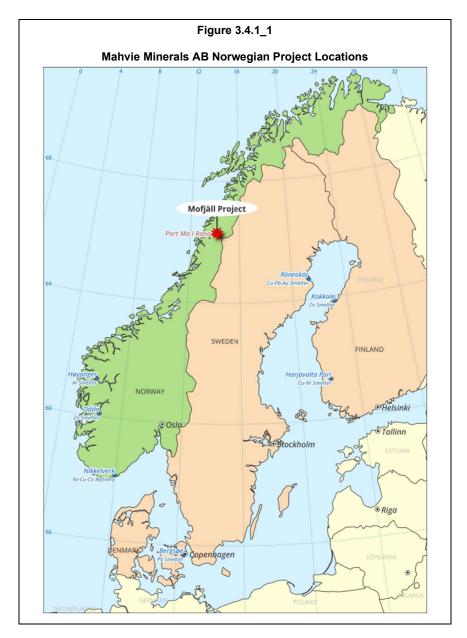
The focus has been the Mofjell, historical mine, the entrance to the mine located within the Mo i Rana industrial estate located approximately 2km (by road) east of Mo i Rana centrum. The project is situated approximately 740km (970km by road) NNE of Oslo and about 70 km (100km by road) NNW of Hemavan (Sweden) (Figure 3.4.1_1).

3.5 Tenement Status

3.5.1 Licences

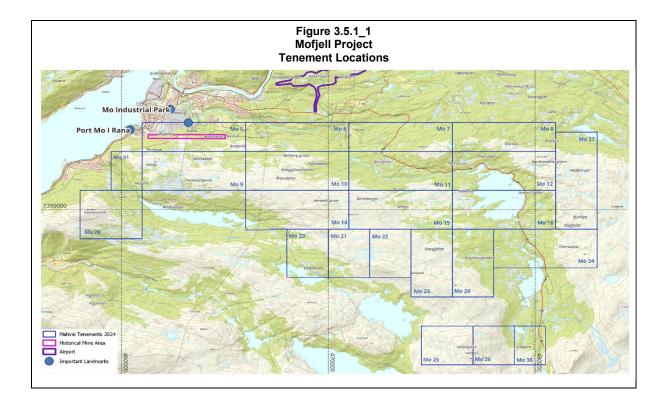
The twenty-three exploration permits Mo 5 - Mo 12, Mo 14 – Mo 16, Mo 20 – Mo28, Mo 31, Mo34 and Mo 36 are owned by the Norwegian company Mo I Rana Vms AS. The Swedish company Mahvie Minerals AB who manages the projects owns 100% of Mo I Rana Vms AS. The tenements total 171.5 km² (Figure 3.5.1_1).

The tenements UN 0035/2021(Mo 10), 0036/2021(Mo 11), 0037/2021(Mo 12), 0039/2021(Mo 14), 0040/2021(Mo 15), 0041/2021(Mo 16), 0046/2021(Mo 20), 0047/2021(Mo 21), 0048/2021(Mo 22), 0049/2021(Mo 23), 0050/2021(Mo 24), 0051/2021(Mo 25), 0052/2021(Mo 26), 0053/2021(Mo 27), 0054/2021(Mo 28), 0059/2021(Mo 5), 0060/2021(Mo 6), 0061/2021(Mo 7), 0062/2021(Mo 8) and 0063/2021(Mo 9) was granted to Mo I Rana Vms AS on 10th of February 2021 for an initial seven-year period to explore for base metals (Zn, Pb, Cu, Co, Ni,



Ag, Au). Mo i Rana VMS AS, including the tenements was purchased by Mahvie Minerals AB on the 12th of February 2022 and subsequent statutory annual fees have been paid. The tenements are 15,550 hectares in size and includes the Mofjell and Mos gruve historical mines as well as Hesjelia, Raudsandhaugtjern, Skarbekken, Bertelberget, Heramb gruve and Sølvberg grube the test mines.

The tenements UN 0133/2021(Mo 31), 0136/2021(Mo 34) and 0138/2021(Mo 36) was granted to Mo I Rana Vms AS on 5th of March 2021 for an initial seven-year period to explore for base metals (Zn, Pb, Cu, Co, Ni, Ag, Au). Mo i Rana VMS including the tenement was purchased by Mahvie Minerals AB on the 12th of Februari 2022 and subsequent statutory annual fees have been paid. The tenements are 1,600 hectares in size.



In accordance with the Chapter 10 Section 56 of the Minerals Act of 2010 permit holders must pay an annual fee to the Direktoratet for mineralforvaltning. The annual fees specified in Chapter 5 Section 2 of the Minerals Regulations of 2010 are paid in advance prior to the 15th of January annually. Late payments are penalized with an additional 50% of the statutory fees added to the annual fees and must be paid prior to the 30th of April the same year or else the permit is revoked. The annual fees for 2024 have been paid and all tenements are valid.

The tenement schedule is included as Table 3.5.1_1. Tenement coordinates are listed in Appendix 3.

Presently there are no known impediments to operating in the area and the tenement is in good standing.

Table 3.5.1_1 Mofjell Project Tenement Schedule						
Tenement Name	Tenement No.	Grant Date	Holder	Area (ha)	Tenement Type	Status
Mo 10	0035/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 11	0036/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 12	0037/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 14	0039/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 15	0040/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 16	0041/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 20	0046/2021	10/02/2021	Mo I Rana Vms AS (100%)	500	UN	Valid
Mo 21	0047/2021	10/02/2021	Mo I Rana Vms AS (100%)	500	UN	Valid
Mo 22	0048/2021	10/02/2021	Mo I Rana Vms AS (100%)	500	UN	Valid
Mo 23	0049/2021	10/02/2021	Mo I Rana Vms AS (100%)	700	UN	Valid
Mo 24	0050/2021	10/02/2021	Mo I Rana Vms AS (100%)	700	UN	Valid
Mo 25	0051/2021	10/02/2021	Mo I Rana Vms AS (100%)	500	UN	Valid
Mo 26	0052/2021	10/02/2021	Mo I Rana Vms AS (100%)	400	UN	Valid
Mo 27	0053/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 28	0054/2021	10/02/2021	Mo I Rana Vms AS (100%)	750	UN	Valid
Mo 5	0059/2021	10/02/2021	Mo I Rana Vms AS (100%)	750	UN	Valid
Mo 6	0060/2021	10/02/2021	Mo I Rana Vms AS (100%)	750	UN	Valid
Mo 7	0061/2021	10/02/2021	Mo I Rana Vms AS (100%)	750	UN	Valid
Mo 8	0062/2021	10/02/2021	Mo I Rana Vms AS (100%)	750	UN	Valid
Mo 9	0063/2021	10/02/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 31	0133/2021	5/03/2021	Mo I Rana Vms AS (100%)	300	UN	Valid
Mo 34	0136/2021	5/03/2021	Mo I Rana Vms AS (100%)	1000	UN	Valid
Mo 36	0138/2021	5/03/2021	Mo I Rana Vms AS (100%)	300	UN	Valid

3.6 Royalties and Agreements

3.6.1 Third Parties

Mahvie Minerals purchased the Mo i Rana VMS AS including all properties from Eurasian Minerals Sweden AB on the 12th of February 2022 and this included a net smelter royalty (NSR) or 2.5% on minerals produced from the properties.

3.6.2 Government Royalties

According to Chapter 10 Section 57 of the Minerals Act, 2010, a 0.5% royalty "of the sale value of what is mined¹ will be paid to the landowner(s)." 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.

¹ 'The basis for the calculation of the tax shall initially be the miner's sales revenue (excluding value added tax) from the sale of extracted quantities and quantities that potentially have a marketable value, but which the miner processes under his own authority or makes use of in some other way without making a sale. In the event of a significant discrepancy between the miner's sales revenue and normal sales value, the Directorate for Mineral Management can make a decision on the calculation basis. If further processing takes place beyond normal processing, the sales value before the processing is used as the basis.'

Businesses in Norway, including mining and exploration 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% (2024).

3.7 Environmental Liabilities, Acts and Regulations

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. The historical mining licenses over the old Mofjell mine is currently held by the state and as such, Mahvie Minerals does not inherit any legacy environmental liabilities located within the Mofjell properties.

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).

Any environmental damage as a result of Mahvie Minerals own exploration (or eventual mining activities) are the sole responsibility of Mahvie Minerals as set out in Sections 50, 52 and 55 of the current Minerals Act.

There a few acts and ordinances that Mahvie Minerals is aware of that may be relevant for any exploration in Norway. These include (amongst others):-

- The Minerals Act, of 2010. (LOV-2009-06-19-101)
- The Minerals Ordinance of 2010. (FOR-2009-12-23-1842)
- Regulations on maps of underground and open pit facilities (FOR-2010-12-20-1784)
- The Planning and Building Act and Regulations (LOV-2008-06-27-71 & FOR-2010-03-26-488).
- The Natural Diversity Act and Regulations (LOV-2009-06-19-100, FOR-2011-05-13-512)
- The Pollution Act and Regulations (LOV-1981-03-13-6, FOR-2004-06-01-931)
- Act on motor traffic in outlying areas and waterways (LOV-1977-06-10-82)
- The Water Resources Act (LOV-2000-11-24-82)
- The Reindeer Driving Act (LOV-2007-06-15-40)
- The Cultural Heritage Act (LOV-1978-06-09-50)
- The Land Act (LOV-1995-05-12-23)
- The Regulations on Impact Assessments (FOR-2017-06-21-854)

3.8 Permitting Status

The status of the UN's is discussed in Section 3.5.1. Other permits required may include:-

- 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.
- Work Plan For more invasive exploration, such as trenching, drilling etc, a workplan must be submitted to achieve consent from the landowner and land user. 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. Notification to the DMF of specific work plans are required no later than three weeks before work initiates.
- Off Road Permit In Norway you are not allowed to drive off road with any vehicle unless you hold a current permit. This is decided and administered by the local municipality which subsequently notifies and obtains approval from the affected landowners. The permit takes about 6-8 weeks to process. If there are objections from landowners to the Off Road Permit is received, the exploration company can appeal to the DMF and seek permission to access the area to conduct exploration.

The obtained work plan and off road permit has expired and new plans will need to be submitted by Mahvie Minerals prior to any further exploration work.

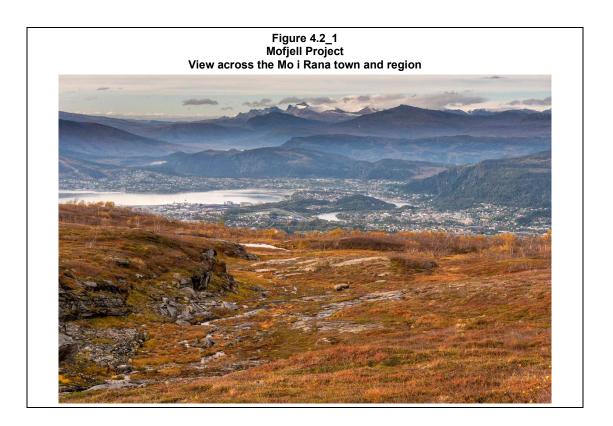
4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 **Project Access**

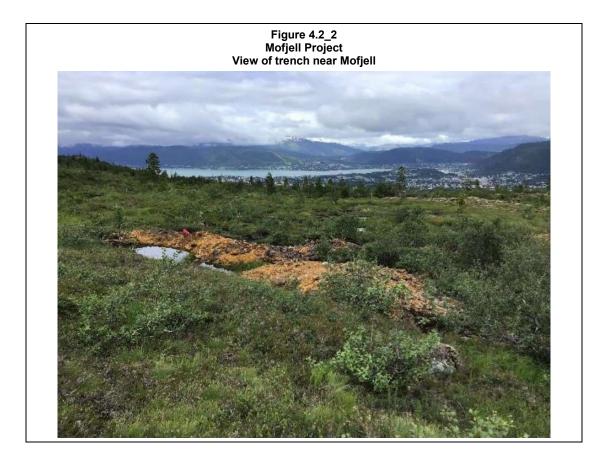
The Mofjell Project is located approximately 2 km (by road) east of Mo i Rana centrum, the main town of the Rana Municipality in the Nordland County. Access to the Mofjell Project is currently gained via the sealed roads from Hemavan in Sweden, then by well maintained sealed and unsealed road into the Historical Mofjell Mining area and local tracks and roads to the more regional areas.

4.2 Physiography and Climate

The Rana Municipality, is located just south of the Arctic circle, on the southern side of the Saltfjellet mountains with the Svartisen glacier, Norway's second largest glacier. The Project is located in Rana Municipality within the subalpine mountains just adjacent to the Mo i Rana industrial area (Vestre Mofjellet, Hellerfjellet, Stanfjellet, Reinfjellet, Raufjellet, Slagfjellet, Hauknes and Kvernbekksjönna (Figure 4.2_1)). The entire region lies within the Calcedonies.



The landform is a collective group of Cambro-Silurian rocks of intermediate and sub alpine mountain areas, wide areas with distant peaks, to densely formed glacially scoured and rounded rock formation interspersed with water bodies above the forest line and shorter U shaped valley stretches. The mountainous terrain formations along the fjord line are somewhat more rounded with a plateau character and moraines along the fjords and in the valley floor. Weathered soil is very common. Generally, the region is characterized by good soil. Typically,



in Helgeland, the landform is dominated by the large geological structures that lie roughly north south along the mountain chain longitudinal direction. The main valleys are shaped according to this pattern, fissure valleys also occur these often form sharp landforms. The climate is cool oceanic to slightly continental, the number of growing days is between 120-140 days. Birch and spruce forest dominate with elements of pine in several districts. The forest line is around 2-300 m above sea level close to the coast and rises into the fjords to 600 m above sea level. Several of the mountain areas are summer pastures for reindeer. (Elgersma, A., Asheim, V., 1996)

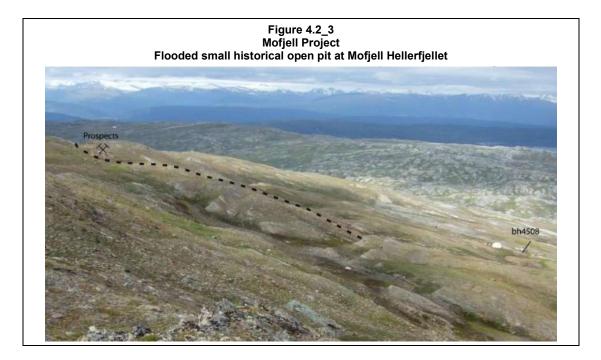
The climate in the area can be described as subarctic. The average temperatures² in the Mofjell region is -5° C in December and +17 ° C in July with daylight hours³ on January 1st of nearly 3 hours and nearly 24 hours on July 1st. Figure 4.2_4 summarises the average temperatures per month.

The average precipitation is between 204mm in March and 116mm in May and June with an average of between 10 to 17 rainfall days per month all year around. Figure 4.2_5 summarises the average rainfall per month.

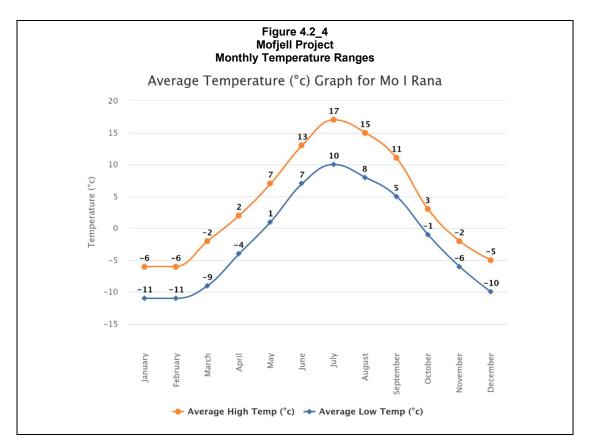
² Averages are for Mo i Rana / Rossvoll, which is 9 kilometers from Mo i Rana. Info obtained from:

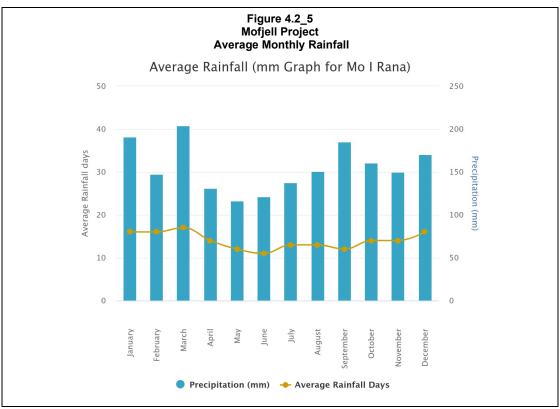
https://www.worldweatheronline.com/mo-i-rana-weather-averages/nordland/no.aspx

³ Info obtained from: *https://www.timeanddate.com/sun/norway/mo-i-rana*



Although it occupies almost the same degrees of latitude as Alaska, Norway owes its warmer climate to the Norwegian Current (the northeastern extension of the Gulf Stream), which carries four to five million tons of tropical water per second into the surrounding seas. This current usually keeps the fjords from freezing, even in the Arctic Finnmark region. Even more important are the southerly air currents brought in above these warm waters, especially during the winter.





4.3 Local Infrastructure and Services

Mo i Rana is a city with over 21,000 inhabitants, it is the largest city in the Helgeland region and the third largest city in northern Norway. Mo i Rana is the city centre in Rana Municipality, the fourth largest municipality in Norway by size. (Iselin Breirem, Rana Utvikling, 2024)

Mo i Rana is located at a junction of two major European roads (E6 and E12) and is accessible by both car, plane and train and hosts an ice-free harbour. The main north–south road in Norway, European route E6, passes through the city. The European route E12 begins in Mo i Rana and connect the city to Sweden and Finland. A bus network runs throughout most of the city and its suburbs. Mo i Rana is connected to the Nordland Line railway. This is a railway line between Trondheim and Bodø. An international tourist route Blue Highway (in Norwegian: Blå vegen) begins in Mo i Rana. The route goes via Sweden and Finland to Russia. (Wikipedia contributors. 2024, April 20)

Mo i Rana Airport, Fagerlia is a large new regional airport under construction, which will serve the town of Mo i Rana in the municipality of Rana and surrounding municipalities in Nordland county, Norway. The airport will be located about 10 kilometres outside the town and is expected to be completed in 2027. It will replace the old nearby Røssvoll Airport which only allows small propeller aircraft from Trondheim and Bodø to land due to its short runway. The new airport will have a 2400 m long runway allowing Boeing 737-800 and similar aircraft to take off and land from Oslo and connecting to international routes. (Wikipedia contributors. 2024, January 25).

Rana Municipality pursues an active policy that facilitates social and business development that attracts people and companies alike. In 2019, the unemployment rate in the municipality was only 2.2 per cent. This indicates an optimistic business environment where both private and public employers recognise their staff as their key asset.

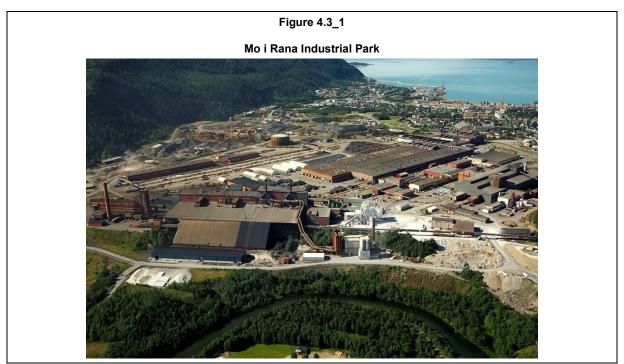
The city and the region have a range of international businesses, with significant exports of metals, iron ore and energy. The processing industry is an important pillar in the private sector.

Mo Industrial Park is the leading industrial development zone in Northern Norway. One hundred and eight businesses are located in the park, ranging from recycled steel products to fish farming and district heating from the surplus heat of the industrial processes. In total, around 2,500 people work in the industry park, which is known for its ambitious goals relating to climate, sustainability and the circular economy. The largest companies have daily links with the world market. In 2018, the companies at Mo Industrial Park had exports worth NOK 5.5 billion.As Rana is rich in minerals, another important employer is the mining company Rana Gruber.

In the industrial part, there are also two smelters, Ferroglobe Mangan Norge AS which produces manganese alloys, Elkem Rana AS which produces ferrosilicon and one steel mill, Celsa Armeringsstål AS which is a scrap based re-bar producer. There is also SMA Mineral which produces burnt lime and dolomite. On the premises, an assaying company, Nemko Norlab AS, is also present.

Helgelands Kraft supplies electric power to the Helgeland region. NRK (Norwegian Broadcasting Corporation) has a division in Mo i Rana. Rana Blad and Rana No Are the towns local newspapers. Radio 3 Rana is the local radio station.

The largest hospital in Helgeland is situated here offering a broad range of health disciplines. The municipality of Rana also has a strong public sector that provides good government services on behalf of the Norwegian state, with the whole of Norway as users, as well as regional and municipal services.



The Mo i Rana branch of the National Library of Norway is internationally renowned for its digitalisation of cultural heritage and collaborates with prestigious libraries and universities around the world.

Mo i Rana has a flourishing IT environment: from Skatteetaten (the Norwegian Tax Administration), Statens innkrevingssentral (the Norwegian National Collection Agency) and Evry, producing and monitoring fraud prevention for all credit cards in Northern Europe, to TAG Sensors, producing temperature sensors with tracking for the food industry worldwide.

Rana Development Agency (Rana Utvikling) is the municipality's business development agency and is responsible for implementing the municipality's business plan. The Agency facilitate new business activities and help to improve the framework conditions for businesses. (Your career opportunities in Mo i Rana)

Education in Mo i Rana has many options, including everything from pre-school to university level. The city has 2 different universities, Nord University and UiT – The Arctic University of Norway, located at Campus Helgeland. They offer education within a range of subjects.

Mo i Rana has a growing shopping sector that is used both by locals and people in the region as a whole. The city has three malls with stores and cafes that sell everything from books to kitchen utilities. There is over 17 restaurants, 9 cafés and 9 bars in the town.

The people of Mo i Rana also benefit from the city's close proximity to Sweden and the town Hemavan. Many ranværinger drive over to Sweden to buy food in bulk or alcohol due to the low prices. (Wikipedia contributors. 2024, April 20)

4.4 Norwegian Mineral Industry

Petroleum and natural gas are Norway's principal mineral resources and are extracted from the North Sea continental shelf. Norway is the world's eighth largest exporter of crude oil, behind Saudi Arabia and Russia, and the world's third largest exporter of natural gas. Norway is a small player in the global crude market, covering about 2% of the global demand. However, Norway is the third largest exporter of natural gas, covering about 25% of the EU gas demand. Combined oil and gas cover about half of the total value of the Norwegian export of goods.

Other mineral resources include iron ore (Sydvaranger AS near Kirkenes), coal (Svalbard archipelago), lead, zinc and copper. Europe's only molybdenite mine and its largest deposit of ilmenite are also located in Norway. Deposits of chalk, dolomite, quartzite, graphite and limestone are commercially mined. Until the 1970s, when offshore drilling for petroleum and natural gas began, mining was relatively unimportant in Norway. This sector now accounts for about one-eighth of Norway's GDP.

Presently, there are two advances mining projecs in Norway, Nordic Mining AS and its Engebø rutile and garnet asset as well as Nussir AS with its Nussir copper project. Both are in the final project financing stage.

5 HISTORY

The Mofjell production area has an extensive history dating as far back as 1688 when the deposit was first discovered until 1987 when the mine closed. A brief outline highlighting key events is outlined here.

1688 – The Mofjell deposit was first discovered

1852 - The first Pb tenements were registered at Mofjellet in 1852.

1860-1862 – Ranens Bly og Sølv-verk was formed in 1860 and the first test mining project was completed.

1899-1904 – Additional test mining/processing was completed by Ranens Bly og Sølv-verk.

1912-1914 – The third test mining and processing phase was completed by Ranens Bly og Sølv-verk, this time with electric smelting of the complex sulphide ore with negative results.

1918-1920 – According to the deposit fact sheet there is another test mining/processing phase at Mofjell here.

1926-1928 – The French-dominated "Bergverks-selskapet Nord-Norge A/S" (BNN) bought the project and started to undertake extensive systematic diamond drilling, test mining and selective floatation metallurgical test work which resulted in official production commencing in 1928.

1928 – Mofjellet Gruber officially commenced underground mining and production with zinc and lead concentrates produced at the Andfiskå floatation plant (about 4.5 km from the mine).

1931 - The floatation plant in Andfiskå commences production of copper and pyrite concentrates after initially only producing zinc and lead concentrates.

1953 - The Norwegian company "Norske Sink- og Blygruber A/S" bought out the French interests from the project.

1973 - BNN A/S and Fangelselskapene were taken over by AS Sydvaranger.

1987 – Due to the low zink prices the mine was unable to expand and the operations at Mofjellet Gruber ceased in July 1987. Mofjellet Gruver produced 4.35 Mt of ore from the underground mine with average grades of 3.61 % Zn, 0.71 % Pb and 0.31 % Cu in the period 1928–1987. The average silver and gold contents in the mainly semi-massive ore were around 10 and 0.3 ppm, respectively.

1974-1999 – Bedrock and geophysical surveys were completed over the Mofjell region which was funded by BNN A/S och NGU.

2005 – Gexco acquires the landholding over the region and starts exploration.

2005 – 2008 Drilling and resource update was completed by Gexco.

2007 – TEM survey was completed by Gexco.

2008 - A partnership between industry, the Norwegian Geological Survey (NGU) and the local county administration was formed to investigate additional potential in the Mo-i-Rana belt. This effort generated high resolution airborne geophysical data sets, as well as district scale mapping and geochemical sampling campaigns carried out by the NGU.

2013 – On the 27th of November 2013, Sotkamo silver acquires all remaining mining and tenement rights from Gexco Norge AS.

2021 – EMX acquired the Mo i Rana VMS belt including the Mofjell historical mine and numerous mines and prospects with VMS and carbonate replacement styles of mineralization.

2022 - Mo i Rana VMS AS, including the tenements was purchased by Mahvie Minerals AB from EMX. Data acquisition and compilation commences

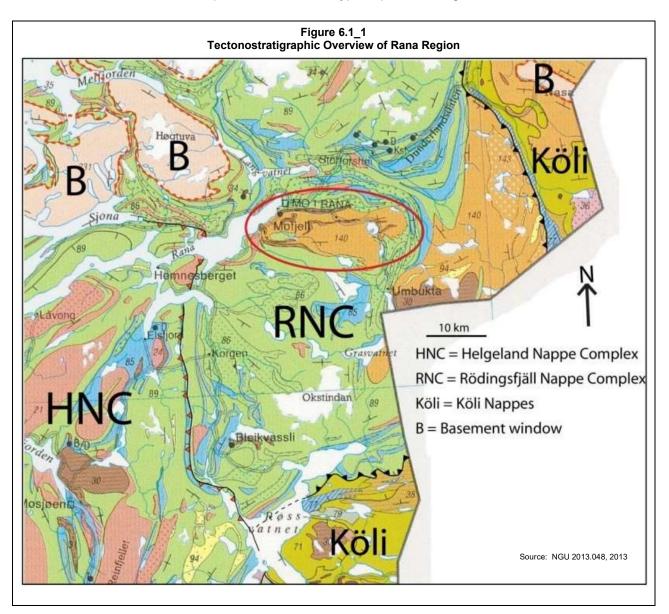
2023 – Mahvie Minerals AB continues with data compilation and construction of 3D model. Drilling of 11 diamond drillholes are completed.

2024 – Mahvie Minerals maiden Mineral Resource estimate is finalised and announced.

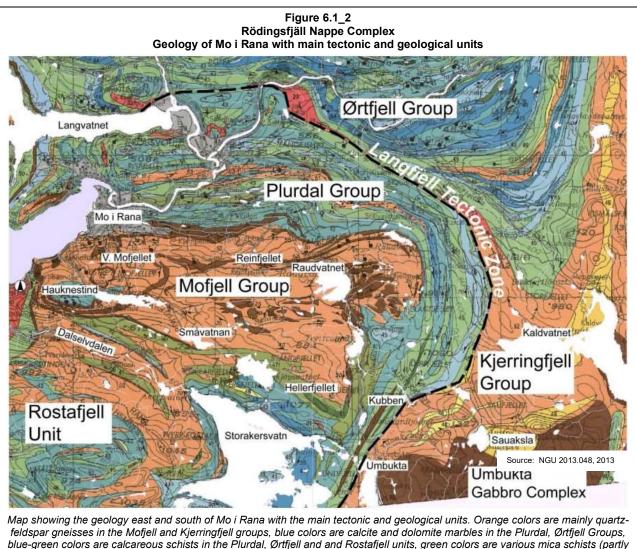
6 GEOLOGICAL SETTING

6.1 Regional Setting

The Mofjell Group is part of the Rana–Hemnes Zn-Pb-Cu metallogenic area, which covers a large area around the Okstindan mountains in Nordland (Figure 6.1_1). In the area, there are two major sulfide deposits: Bleikvassli and Mofjell, as well as numerous smaller deposits, especially in the Mofjell district (op.cit.). The deposits are situated in the Rödingsfjäll Nappe Complex in the Uppermost Allochthon of the Scandinavian Caledonides (Bjerkgård et al. 1997, Sandstad et al., 2012). According to Grenne et al. (1999), most of the sequences in the Rana-Hemnes area were probably deposited on the margin of the Laurentian plate during rifting of Rodinia and development of an Atlantic-type or passive margin.



The Mofjell Group (Søvegjarto et al., 1988) is separated from the Plurdal and Rostafjell Unit by a major unconformity, which is probably also a tectonic boundary (Figure 6.1 2). The group in general, is dominated by quite massive grey gneisses with persistent layers of amphibolite and aluminous biotite and muscovite gneisses (Figure 6.1_4). The group was mapped in great detail in 1:5000 and 1:10000 scales by M. Marker in 1974-1981 and 1999. For detailed descriptions of the lithologies refer to Marker (1983).

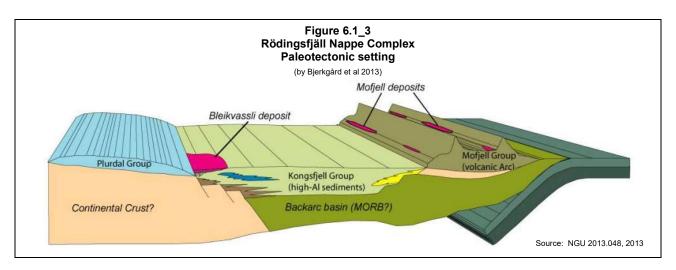


blue-green colors are calcareous schists in the Plurdal, Ørtfjell and and Rostafjell units, green colors are various mica schists (partly kyanite, graphite or/and garnet-bearing), brown colors are amphibolite and gabbro, while red colors are granitic rocks. The thick stippled line marks the Langfjell Tectonic Zone.

The results from Bjerkgård et al 2013 indicate that from both lithological observations and lithogeochemistry, that the Mofjell Group consists of a largely bimodal volcanic-sedimentary assemblage and show the unit originated in an island arc setting. This work also shows that the proportion of felsic volcanic rocks is much higher than previously described.

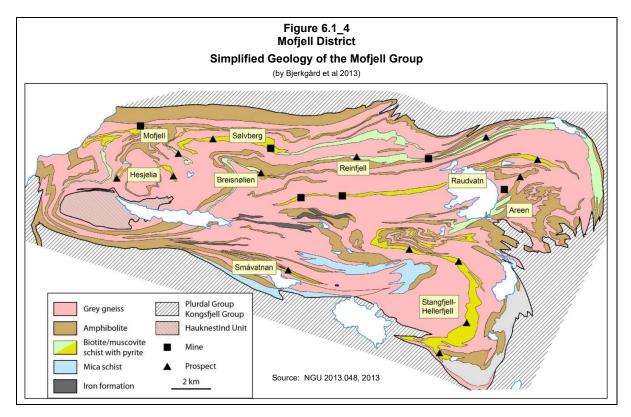
Regionally, earlier lithological and lithogeochemical work (e.g. Bjerkgård et al., 1997) strongly indicate that the part of the Rödingsfjäll Nappe Complex constituting the Kongsfjell Group to the south of Mofjellet between Røssvatnet and Mo i Rana, was formed in an extensional back-arc regime. Therefore both the Mofjell and Kongsfjell Group were formed in an arc setting, however without geochronological constraints it is difficult to say if they were part of the same marginal regime. A possible paleotectonic model for this part of the Rödingsfjäll Nappes Complex is shown in Figure 6.1_3.

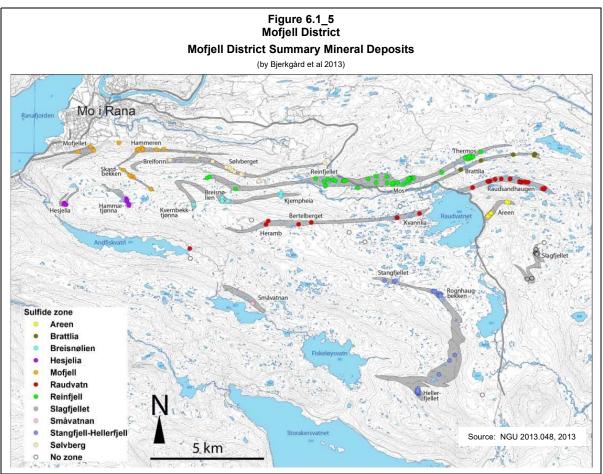
Similar lithogeochemical work completed on Plurdal Group in the Bleikvassli/Røssvatn area, indicate that this unit could be part of the back-arc regime (e.g. Bjerkgård et al., 1995, 1997). The differences in lithochemistry between the Mofjell Group and Kjerringfjell Group, indicate that they were formed in two different tectonic environments and came in contact with each other at a later stage, perhaps in connection with thrusting along the Langfjell Tectonic Zone. If this is the case, this zone is a very important Caledonian structure, in relation to the development of the whole Rödingsfjäll Nappe Complex. (Bjerkgård et al 2013)

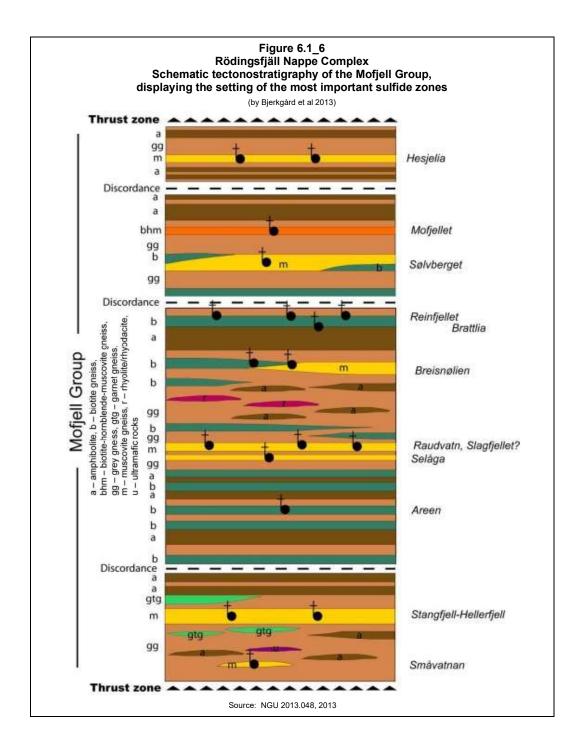


Previous detailed bedrock mapping in the Mofjell area by Marker (1981) provides a basis for grouping of the deposits into different structural levels in the Mofjell Group. Eleven main levels of sulfide mineralizations in the area are defined (Figure 6.1_5, Figure 6.1_6).

The sulfide deposits are in most cases related to extensive zones of iron sulfides (mainly pyrite) hosted by quartz-muscovite and biotite schists. The pyrite locally occurs in massive layers, which have been mined, as the Mos, Areens, Reinfjellet and Avensjøen deposits. The largest of these, the Mos mine, produced c. 52 000 t of pyrite in the period 1911-1920 from a total resource of c. 120 000 t. Contents of Cu and Zn were on average 0.5 and 1 %, respectively. The other pyrite mines produced less than 300 t in total.







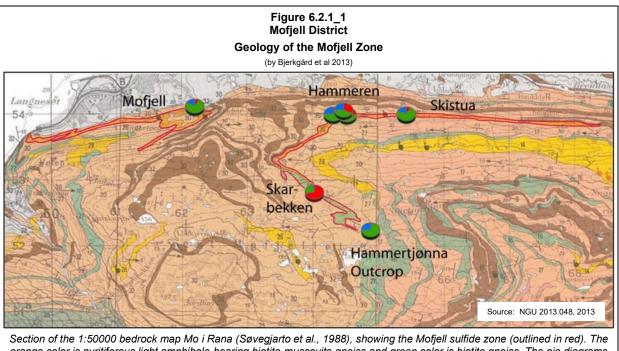
6.2 Project Geology

6.2.1 Geology of the Mofjell deposit

VMS style polymetallic deposits are developed in the Rana-Hemmes Zn-Pb-Cu metallogenic region of Norway. The Mofjell deposit is situated in the Rödingsfjäll Nappe Complex in the Uppermost Allochthon of the Scandinavian Caledonides.

The Mofjell Group is separated from the Plurdal and Rostafjell Unit by a major unconformity, which is probably also a tectonic boundary. The group in general, is dominated by quite massive grey gneisses with persistent layers of amphibolite and aluminous biotite and muscovite gneisses.

The Mofjell zone is situated structurally below the Hesjelia zone and is the northernmost of the sulfide zones. It is mineralized over a strike length of 8 km from the Ranafjord to 4-500 meters above sea level in the slopes of W Mofjellet (Figure 6.2.1_1).



Section of the 1:50000 bedrock map Mo I Rana (Søvegjarto et al., 1988), showing the Motjell sulfide zone (outlined in red). The orange color is pyritiferous light amphibole-bearing biotite-muscovite gneiss and green color is biotite gneiss. The pie diagrams show the proportions of Cu (red), Zn (green) og Pb (blue) in the Motjellet mine and prospects.

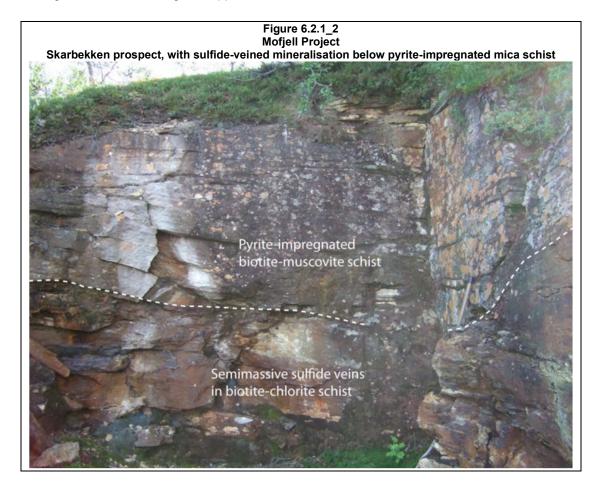
The biotite (+/-hornblende) and muscovite gneisses invariably contain disseminated pyrite, as well as quartz-rich exhalites. The zones can be traced for several kilometers along strike and are important by hosting all the stratabound Zn-Pb-Cu sulfide mineralizations recorded in the Mofjell Group, including the Mofjell deposit.

Outcrops of the deposit are located at several places in the steep north-facing slopes of Mofjellet, as well as further east at Skistua and Hammeren. The outcrop of the Mofjellet deposit at Skistua is very similar to the mined ore, consisting of rich pyrite-sphalerite impregnations with subordinate galena and accessory chalcopyrite in a matrix of quartz, epidote, clinoamphibole

and barite with minor muscovite, biotite and plagioclase. Similar mineralization is known from the Hammeren prospects further west.

The Skarbekken mineralization on the other hand, consists of semimassive pyrite-pyrrhotitechalcopyrite ore with accessory sphalerite and galena. Late magnetite replaces pyrrhotite. Biand Ag-tellurides and sulphosalts are associated with galena. The gangue minerals are quartz, staurolite, biotite, muscovite and epidote/clinozoisite.

The Skarbekken occurrence is found in the southern continuation of the Mofjell zone, about 1 km from the Mofjellet mine (Figure 6.2.1_2). It consists of several small prospects over a strike length of c. 200 m. In the main prospect is a 1.5 m thick zone with several layers and lenses of semi-massive pyrite-pyrrhotite mineralization with lesser chalcopyrite and minor sphalerite. It is a possibility that Skarbekken may represent a more proximal part of the Mofjellet deposit, taking into account the higher copper content and the lens-like sulfide occurrences.



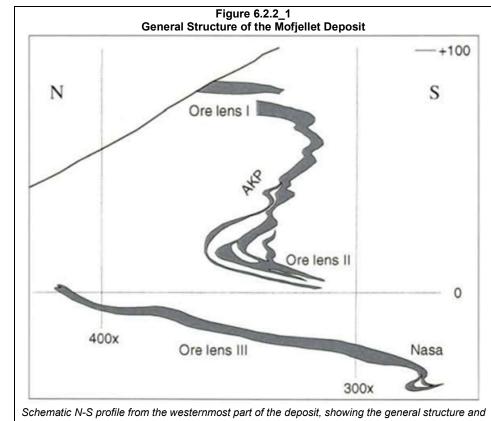
The hosting lithologies of the Mofjellet deposit is dominated by quite massive grey gneisses with persistent layers of amphibolite and aluminous biotite and muscovite gneisses. For detailed descriptions of the lithologies are referred to Marker (1983). The rocks of the mining area are the same as those in the rest of Mofjellet with one exception: Hornblende gneisses, grading into biotite gneisses, are specific for the ore-bearing horizon though they usually do not actually host the ore. The hornblende and hornblende-biotite gneisses, containing subordinate garnet, staurolite and kyanite, have been suggested to represent tuffitic or mixed sedimentary and

tuffitic material. There is also a possibility that they represent lithological levels affected by fluid activity. Muscovite or muscovite-biotite gneisses adjacent to the hornblende-bearing gneisses often host the more massive ores. In addition, the ore-bearing horizon contains several layers of amphibolite.

6.2.2 Structural Geology

The Mofjellet deposit has a lateral extent of nearly 4 kilometers in the east-west direction, outcropping in the far west where the ore was discovered as early as in 1688.

The deposit consists of three ruler-shaped ore lenses situated more or less on top of each other (Figure 6.2.2_1). The ore lenses have a maximum width of about 100 meters. The two upper lenses (lenses I and II) are connected through tight folding in a Z-shaped fold structure. The lower north-facing part of the structure is known as the AKP structure, while the upper, south-facing part is known as the "Omlegg-sone". The upper part disappears eastwards together with ore lens I while the AKP-structure can be followed along the entire length of the ore body. Lens III forms a separate ore lens on the lower limb of this major north-facing fold structure. Based on the lithological succession the ore lenses occur in, it is likely that the separation of Lens III form



division of the deposit into different ore lenses. The grid is 100 x 100m lenses I and II in the ore zone is a primary feature, though it has been proposed that it was disrupted from the other lenses by faulting. A slightly deeper ore lens structure at the southern continuation of Lens III, known as the Nasa structure, was mined in the central 500 meters of the ore body in the last years before the mine was closed. The lateral extent and shape of the ore-rich Nasa structure is unknown, but is seems to be basically a tight fold structure on the southernmost known part of Lens III. On the basis of surface mapping, a major south-facing major fold closure exists at depth, and since the ore body has not been delimited in the south, it could be that important concentrations of ore are present in this major closure. This is the target for the deep-hole drilling program mentioned above.

Bjerkgård et al., 2001 show that the ore forming fold structure is most open in the west, with a separation of Lens I, AKP-, Lens II and Lens III with ore in all levels. In the central part of the deposits, Lens II and Lens III are still separated, but are very close-lying. Their increasing closeness eastwards may be a primary feature of the ore distribution, but several quite extensive movement zones, expressed as biotite-rich rocks with secondary ore mineralisation's occur at the top of Lens III. These movement zones are best interpreted as adjustments during folding, but more extensive early shear movements cannot be excluded. The Nasa structure is prominent in the southernmost part of Lens III in this part of deposit. In the eastern part of the deposit, Lens II and III have coalesced and cannot really be distinguished from each other. Ore is concentrated in Lens II/III and the AKP structure, while the upper part of the structure is poor in ore.

There is thus a clear trend as to structure and ore distribution from west to east: The lower part of the ore-bearing structure gets tighter towards the east and Lens II and Lens III approach each other and coalesce at about 44500E with development of movement zones in the area between them. At the same time the sulfide content decreases towards the east in the upper part of the structure

6.2.3 Lithologies

Grey Gneiss - The grey gneiss consists of quartz and plagioclase with varying proportions of subordinate biotite and muscovite. The more schistose and micaceous type of gneiss most likely represent greywacke type metasediments. The massive units probably are of igneous origin, and this seems to be confirmed by lithogeochemistry

Amphibolites - Parts of the commonly garnet-bearing amphibolites contain pods and stripes of calc-silicate rock (interpreted to represent pillow lavas originally). In attenuated parts in fold limbs they contain significant amount of biotite replacing hornblende.

Biotite-, Muscovite Gneisses - The biotite and muscovite gneisses or schists are generally rich in quartz and aluminosilicates in addition to mica. They may form separate, generally persistent layers, but grade into each other with changing proportions of biotite and muscovite. Biotite-dominated types may also contain amphibole and grade into hornblende-biotite gneisses. The biotite gneisses contain excessive kyanite in addition to garnet and staurolite, while the muscovite gneisses are mostly poor in these minerals. The biotite (+/-hornblende) and muscovite gneisses invariably contain disseminated pyrite, as well as quartz-rich exhalites. The zones can be traced for several kilometers along strike and are important by hosting all the stratabound Zn-Pb-Cu sulfide mineralizations recorded in the Mofjell Group, including the Mofjellet deposit.

6.2.4 Other prospects of note

A brief outline of some of the other prospects and deposits are:

Hammertjønna - An underexplored zone of historical mines with VMS style mineralization that can be traced for over 350 meters along strike. Multiple lenses of mineralization have been documented in the mine workings and geophysical data suggests continuity of mineralization between historical mines.

Sølvberget - A four kilometer long zone of VMS occurrences that show evidence for enrichments in gold and silver. Limited historical drilling intersected VMS style mineralization, but the trend remains open at depth and along strike.

Reinfjell - This VMS horizon can be traced for over 8 kilometers and contains a number of prospects and occurrences as well as three significant historical producers;

Thermos, Mos Mine, and Reinfjellet,- all occur within the same stratigraphic VMS horizon. Only a small number of exploration holes have been drilled in this area

Heramb - Historical mining targeted massive sulfide veins and lenses carrying pyrrhotite, pyrite, chalcopyrite, and sphalerite. 2007 airborne Transient Electromagnetic ("TEM") surveys revealed additional conductors along strike of the historical workings which have yet to be tested.

Bertelberget - Historical workings intersected a 5-6 meter thick zone of massive sulfide mineralization. Six exploration holes drilled in 1983 each intersected mineralization below and along strike of the mine workings.

Hellerfjellet - 21 historical mine workings over a strike length of 200 meters with semi-massive and massive sulfide lenses up to 3m thick. A 2008 drill campaign intersected mineralization 250 meters down dip from surficial outcrops and can be traced for 1.5 kilometers along strike in geophysical data sets.

Småvatnan - This area is characterized by rod-shaped bodies of VMS mineralization apparently developed in fold hinges in deformed volcanic rocks. This area has received little exploration as it is covered with boggy terrain. Airborne TEM indicates mineralization continues at depth and remains untested.

7 DEPOSIT TYPES

The Mofjell Group consists of a largely bimodal volcanic-sedimentary assemblage formed in an island-arc setting.

Observations and lithogeochemistry indicate that the Mofjell projects zones of known mineralization are of Volcanogenic Massive Sulphide (VMS) type of deposits. The following is a brief overview of VMS deposits derived from established scientific literature.

VMS deposits are strata-bound accumulations of sulphide minerals that precipitated at or near the sea floor in spatial, temporal, and genetic association with contemporaneous volcanism. The deposits consist of two parts: i. a concordant massive sulphide lens (>60% sulphide minerals) ii. a discordant vein-type sulphide mineralization located mainly in the footwall strata, commonly called the stringer or stockwork zone (Franklin, J.M. et al., 2005). VMS deposits form from metal-enriched fluids associated with seafloor hydrothermal convection. Their immediate host rocks can be either volcanic or sedimentary, and most current classification schemes for these deposits are based around host rock type. VMS deposits are major sources of Zn, Cu, Pb, Ag, and Au, and significant sources for Co, Sn, Se, Mn, Cd, In, Bi, Te, Ga, and Ge. Some also contain significant amounts of As, Sb, and Hg (Galley, A.G., et al., 2007). VMS deposits occur throughout geologic time, having been discovered in submarine volcanic terranes that range from 3.4Ga to actively forming deposits in modern seafloor environments.

7.1 Remaining Ore

No information has been found in relation to remnant resources of the Mofjell field at the time of closure.

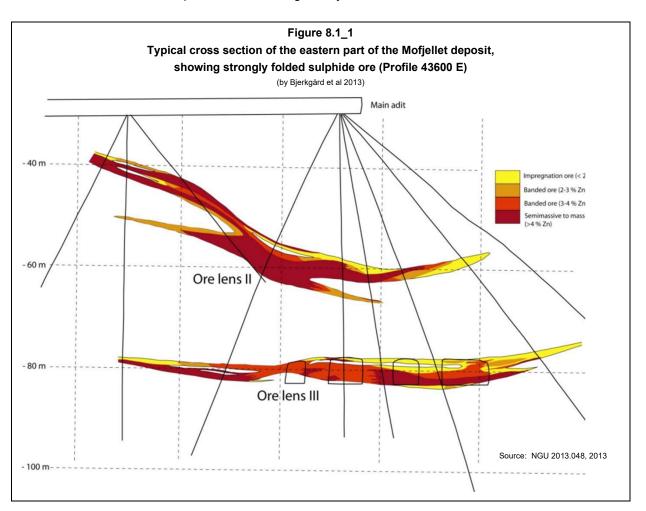
In 2006, Gexco completed some estimations from their widely spaced drilling (200m spacing) which indicated the potential for 3.16Mt grading at 2.5% Zn, 0.4% Pb and 0.3% Cu remaining at Mofjell however they indicate that it is a broad estimate based on limited data.

8 MINERALISATION

8.1 Base Metals

The ore deposit consists of alternating semi-massive ore layers, layers of sulphide disseminations and layers of wall rock at a meter-scale or less (Figure 8.1_1). The ore layers rarely contain as much as 50 % sulphides. The most important ore minerals are pyrite and sphalerite, while galena, chalcopyrite and pyrrhotite occur in subordinate amounts. Various sulphosalts, arsenopyrite, native antimony and gold-silver alloys are found in variable, but generally accessory amounts. Important gangue minerals include quartz, biotite, muscovite, calc-silicates (epidote, amphibole, diopside, garnet), calcite, plagioclase, and magnetite.

In many cases, coarse sulphides form disseminations and semi-massive veins, overprinting the more fine-grained sulphide layers or injected into layers of wall rock. These coarse sulphides have much higher contents of galena, chalcopyrite and sulphosalts, and commonly lower contents of sphalerite and pyrite, than the ordinary ore layers and were apparently formed by remobilization of sulphides from the original layers.



The ore mineralogy of the Mofjell deposit is that of typical metamorphosed sulphide deposits of VMS or SEDEX type. The common sulphides, sphalerite, galena, pyrite, pyrrhotite and chalcopyrite occur as find grained disseminated grains, rarely exceeding 2mm in diameter within

the silicate matrix. Sulphides follow the foliation of the rock and are commonly alighted parallel with the elongation of blades of biotite. Sulphides also occur as irregular aggregates within quartz and in garnet, and filling fractures and micro-shears (chalcopyrite and galena, in particular) within the silicates.

Isolated porphyroblasts of sphalerite, pyrite and galena occur disseminated throughout the ore. All the common sulphides are intimately intergrown with one another, especially chalcopyrite, pyrrhotite and galena. Magnetite occurs as relict grains, overgrown or replaced by pyrrhotite or chalcopyrite. Arsenopyrite and tetrahedrite-tennantite are abundant minor minerals. Both occur intergrown with chalcopyrite and galena. Cubanite is abundant as exsolution lamellae within chalcopyrite.

The ores display abundant evidence of extensive remobilisation, in which sulphides, including the precious metals, have been released from sulphide ore during metamorphic recrystallisation and subsequently re-concentrated within veinlets, deformed quartz rich masses and as fracture filling in pyrite and garnet. Examples of mineralisation is shown in Figure 8.1_2 to Figure 8.1_5.

8.2 Gold and Silver

High gold and silver grades have been found in the disseminated parts of the ore body (up to 5-10 ppm Au and up to 100 ppm Ag) (Bjerkgård et al., 2001, Cook, 2001), but further follow up drilling and resampling and analysis of historical core is required to be able to delineate any goldrich zones.

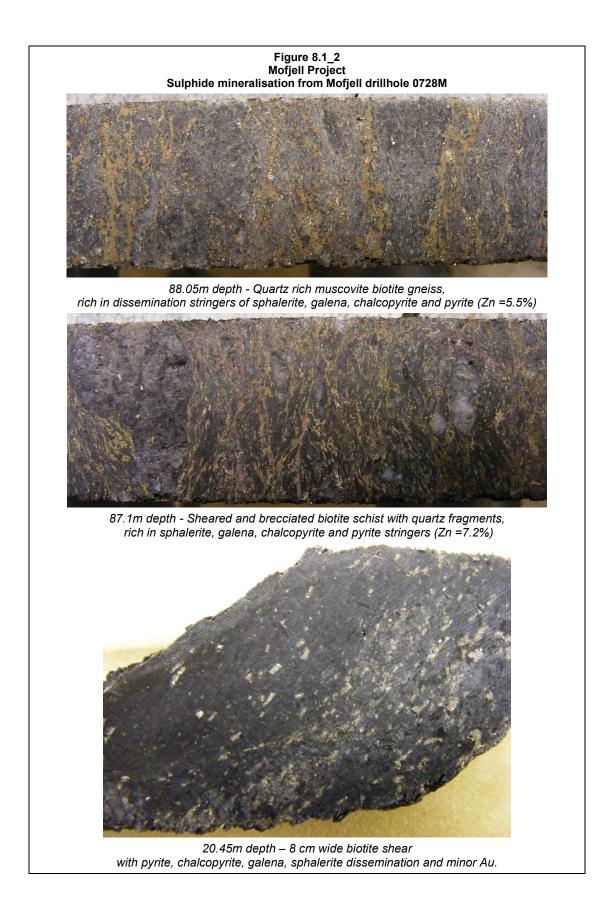
From the historical assay data, only approximately 16% of all samples were analysed for gold and silver. All recent drilling completed by Gexco and Mahvie Minerals have analysed for gold and silver of which 10% of all samples returned gold grades greater than 0.3ppm and 15% returned silver grades greater than 10ppm.

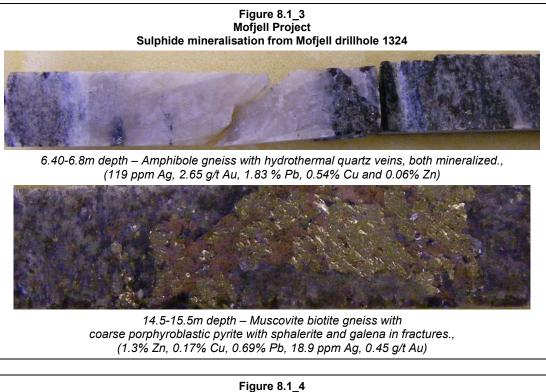
The work completed by Bjerkgård et al., 2001, Cook, 2001 shows that gold and silver are enriched in sulphide disseminated wallrock along the entire length of the ore body and concentrated mainly in fold structures. Gold is present in its native form however typically very fine grained and as alloy with silver in grains which can be separated.

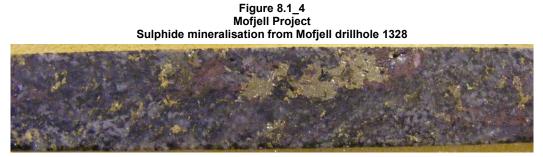
Gold and silver are found preferentially in zones with high contents of copper and lead, but relatively low contents of zinc which means that the high gold and silver values are found in the sulphide disseminated zones outside of the main ore zones. Bjerkgård et al., 2001 show that 75% of the analysed samples are found in zones that are below previously mined average base metal grade of 4.6%.

Silver is predominantly hosted within galena and argentian tetrahedrite.

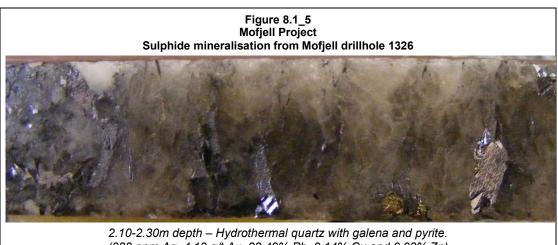
Gold occurs as electrum and is predominately associated with tetrahedrite, galena, Sbsulphosalts, chalcopyrite, pyrite and quartz. Silver is predominantly hosted within galena and argentian tetrahedrite.







1.5-2.25m depth – Brecciated quartz biotite gneiss rich in sphalerite, chalcopyrite, galena ore (5.52% Zn, 1.98% Cu, 0.35% Pb, 39.5 ppm Ag, 1.76 g/t Au)



(888 ppm Ag, 4.13 g/t Au, 22.49% Pb, 0.14% Cu and 0.03% Zn)

9 EXPLORATION

9.1 Exploration by Previous Owners

The previous operators, Bergverks-selskapet Nord-Norge A/S, completed significant amount of exploration and mining between 1920-1987 including drilling (1615 drillholes), testmining, metallurgy, geophysics and subsequently mining. For further details refer to historical reports.

9.1.1 Gexco

Gexco acquires the landholding in 2005 and applies more modern exploration over the area. The historical drilling data of the Mofjell deposit is digitally captured and compiled. From this data and the 73 hole drilling campaign that Gexco undertook on Mofjell and adjacent properties, they created a simple estimate of remaining resources (Section 7.1).

In 2008 a partnership between Gexco, the Norwegian Geological Survey (NGU) and the local county administration was formed to investigate additional potential in the Mo-i-Rana belt. This effort generated high resolution airborne geophysical data sets, as well as district scale mapping and geochemical sampling campaigns carried out by the NGU. NGU report 2013.048 provides a great summary of the work completed from this cooperation.

9.1.2 Sotkamo Silver

On the 27th of November 2013, Sotkamo silver acquires all remaining mining and tenement rights from Gexco Norge AS. No information of any drilling or sampling completed by Sotkamo has been found to date.

9.2 Exploration by Mahvie Minerals AB

9.2.1 Historic Drilling Capture

The data for the 1530 historical drillholes that were included in the resource development were primarly digitally compiled by Gexco. This data was systematically validated, corrected, and captured by Mahvie Minerals in a data verification process explained in more detail in Section 12. Due to various geological codes, formats and coordinate grid systems being used during the lifetime of the project the validation, coding and capture process was time consuming but necessary.

9.2.2 Geophysics

During the autumn of 2007 Gexco completed a helicopter borne geophysical survey over the Mofjell project. The geophysical survey covered an area of 450 square kilometers with roughly 4,000 line kilometers flown at a 125 meter line spacing and stretched from Mo i Rana and east to the border with Sweden.

The geophysical survey identified 130 targets of which 54 were given priority status based on the interpretation of geological, geochemical and geophysical information from measurements by helicopter and from previous mapping, surface sampling and/or core drilling.

Due to lack of funds, Gexco was unable to explore these targets and the data and information provides a very useful tool in Mahvie Minerals current exploration of the project area that will be used in upcoming exploration targeting.

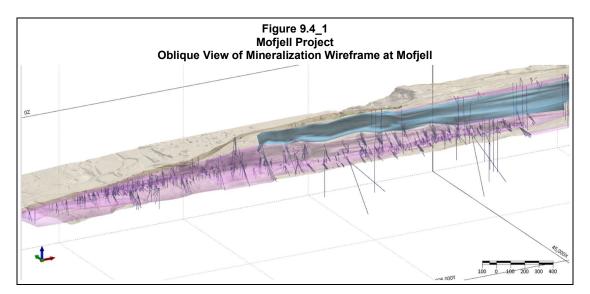
9.3 Historical Drill Core Review

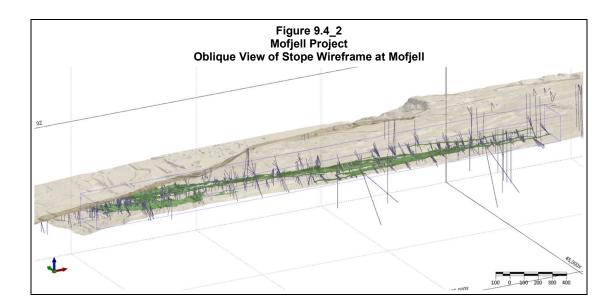
A resampling project was completed in order to validate the historical assay data. 185 samples from 16 drillholes throughout the resource area was selected, logged, cut, re-sampled and analysed by MSA laboratories. The results show good correlation between zinc, lead and copper and although more scattered correlation between silver and gold, the results are as expected from these elements. Duplicate sampling of drillcore will always show a greater scatter than e.g. plup duplicates due to the inhomogeniety of the core samples and in the case of gold and silver the additional scatter due to the mineral formation and distribution within the rock itself. Therefore the results from the resampling is deemed to show a very good correlation and provides confidence in the historical results that may be up to 50 years old. Correlation diagrams are included in Appendix 2.

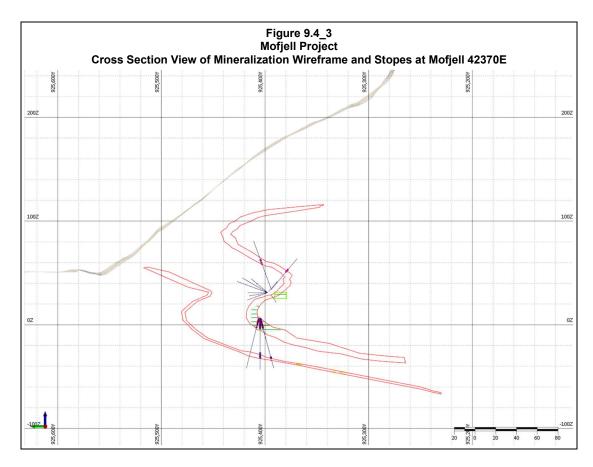
9.4 Mofjell Field 3D Modelling

A extensive modelling program was undertaken by Mahvie Minerals to create a 3D model of the mineralistion and the underground historical workings in order to complete an accurate resource model of remnant resources, additional exploration targets and possible resource extensions. The 3D model was constructed from the drillhole database created and from georerenced cross and plan sections. An overview of the wireframes created are outlined in Figure 9.4_1, Figure 9.4_2 and Figure 9.4_3.

The modelled mineralized units are about 4.5 km in strike, thin beds from between 1-20m wide folded over to a depth from outcropping at surface to about 300m below surface.







9.4.1 Modelling details

The available digital data was compared with each drill section to determine that the drillholes were located correctly and if there may have been any analysis or geology that existed but not captured. All drillholes have been coded if e.g. geology exists but is not captured or if no analysis was found.

The really old drillholes from the 1950's and 1960's were recorded in a local mine grid while the slightly more recent historical holes were recorded in NGO 1948 (Oslo) / NGO zone IV grid. The 3D modelling was therefore completed in this grid (NGO 1948) to avoid any conversion errors into the current standard reference system (ETRS89 UTM Zone 33N). A 2-point planar conversion was completed where the local grid coordinates needed to be converted to the NGO 1948 grid for the resource modelling. A DTM is available for the area and where surface collars needed adjusting this was completed using the DTM. This is not possible for the underground collars but if any obvious errors were noticed in the digitally captured information, the collar locations were recaptured using georeferenced sections and/or adjusted to drive locations.

The deposit strikes east west and most of drilling has been completed in a north or south direction, aiming to drill perpendicular to the orientation of the strike of the deposit.

Where the longer holes have shown obvious deviation from the available sections or plans, this has been measured from the sections and the data added to the database.

Historically, with more staff and less digital methods, sometimes the actual measuring of items could be more accurate. As the data came from an operating mine, the assessment is that the drillhole data location is relatively accurate. Some issues may exist in coordinate conversions between local grids and historical grid systems to get all data into the same format, but this is not material to the overall size of the estimation.

There is no useful structural information historically, so it is possible that there are some offsets to the mineralization that is not evident from the available information and therefore not regarded in the modelling. Previously it has been modelled as three separate lenses which now has been reinterpreted to be relatively continuous and although they split up in the western 2/3rds of the deposit, they are more or less one continuous folded unit to the east. From the modelling some stretching or tight folding / minor faulting may have separated the lenses in places but there is insufficient data to accurately model this. It is however not believed it makes a material difference to the size of the modelled units.

10 DRILLING

10.1 Drilling by Previous Owners

All drilling has been diamond drilling. Core size varies from 21mm (B/T36), 27mm (AQ), 32mm (AWT), 36mm (BQ), 41mm (BQTK) and 45mm (NQ3) core diameter.

The 1530 historical collars were assumed to have been picked up by the mine surveyor using traditional techniques for underground mining operations. Downhole surveys were not found for the historical holes. The drillholes were often not downhole surveyed, partially due to the size of the core/drillholes but also due to the short length and close spacing of the drillholes and historic norwegian procedures. None of the historical core appers to be orientated.

The 87 BQ/NQ drillholes Gexco drilled regionally on the project is from the data interpreted to be picked up by external surveyor and the downhole surveys have been sourced for most of the drillholes. The core appears to be orientated. Occasional drillhole collar, survey, geology or assay data appears to be missing and this is all coded within the database.

Most of the core has been geologically logged, however this data is not always recorded in a way that makes it easy to interpret using modern digital methods. The data is available in historical logs and sections and partially digitally captured. All analyses that have been found has been digitally captured for the interpretation and estimation.

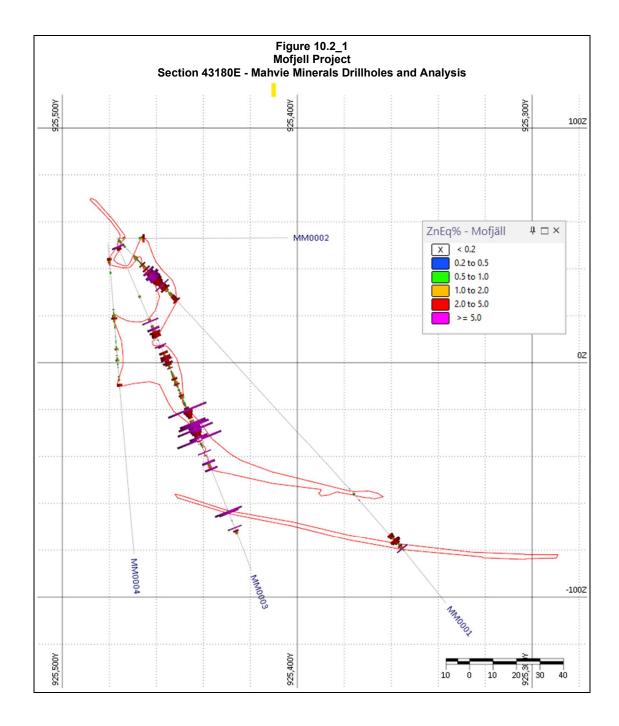
The average drillhole section spacing through the general mining area is 20m and even denser in a few places. This can increase to 40m in areas on the peripheries. Most of the underground drilling are drilled with a fan of drillholes to achieve a spacing between the end of holes on average around 20m but anywhere from 5-30m spacing at end of hole.

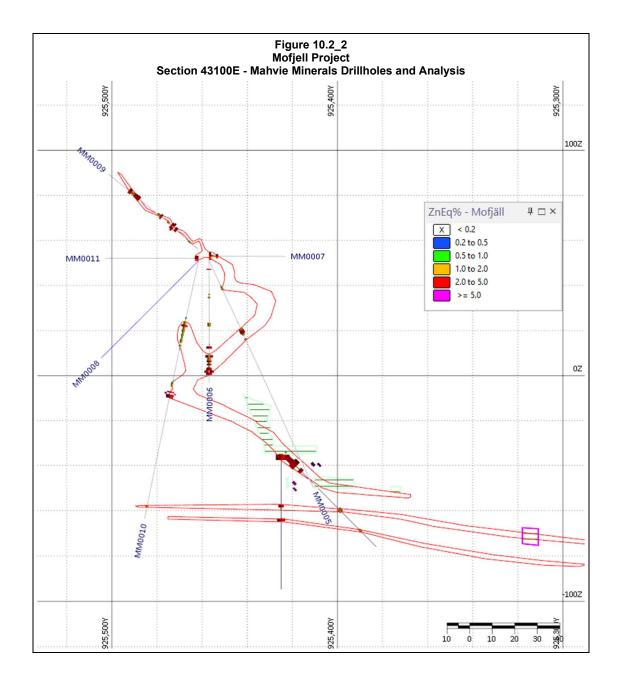
The mining of the historical mine must have had grade control and likely face sampling however this information has not been located, if it exists. The 20m spacing appears to have been adequate in the historical mine continuity however the continuity may still exist over greater distances, however the certainty of course decreases.

10.2 Drilling by Current Owners

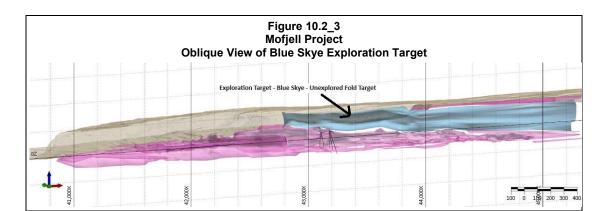
Mahvie Minerals drilled 11 BQ drillholes for 1037.1 meters on two sections from the railway tunnel in 2023 (Figure 10.2_1, Figure 10.2_2). The collars were marked out by an external surveyor and all holes were downhole surveyed and the core orientated. The core has been logged and the core photgraphed both wet and dry.

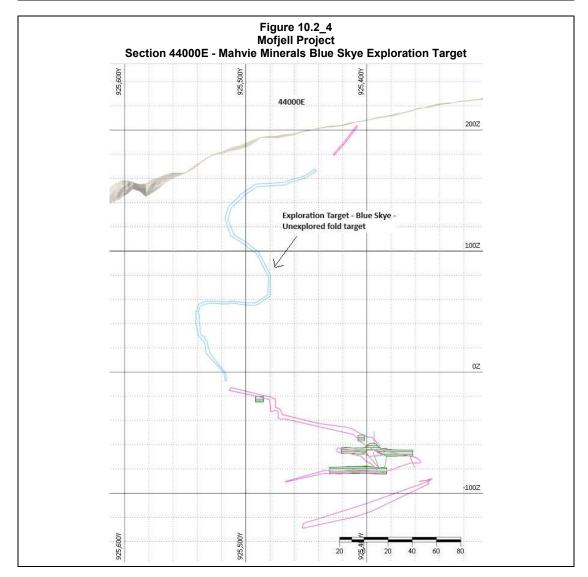
A total of 423 samples were sent for analysis at MSA Laboratory for ICP-AES/MS multi element analysis and Au, Pt & Pd by fire assay. The significant intercepts of these results are summarised in Table 10.2_1.





The results confirmed the proposed geological model and indicates that the deposit is in places tightly folded, often with increased grades in fold hinges. Expanding the interpretation from these drilling results, it opens up a large mainly untested area of possible folding with the potential for additional resources (Figure 10.2_3, Figure 10.2_4)





		Mahvie	e Minerals 2	Table 10.2 Mofjell Proj 2023 Drilling	ect	ant Interce	pts		
HoleID	Depth (from)	Length	Including	ZnEQ %	Zn%	Cu%	Pb%	Ag ppm	Au ppm
MM0001	15.4	21.9		3.46	1.93	0.34	0.64	20.46	0.51
MM0001	19.1	11.2	Including	4.83	2.71	0.46	0.93	29.62	0.81
MM0001	171.75	8.5		2.74	1.32	0.39	0.23	5.94	0.06
MM0001	174.8	1.7	Including	4.64	2.55	0.61	0.20	7.86	0.08
MM0002	10.3	1.75		2.90	1.96	0.11	0.86	27.92	0.19
MM0002	11.05	1	Including	3.66	2.58	0.10	1.11	32.06	0.18
MM0003	1.4	2.10		3.63	2.45	0.20	0.78	37.70	0.37
MM0003	35.1	8.75		3.14	1.99	0.21	0.70	23.78	0.66
MM0003	39.4	4.45	Including	4.30	2.70	0.32	0.83	29.64	1.19
MM0003	47.35	24.85		2.05	1.19	0.19	0.38	10.30	0.21
MM0003	52.3	3.9	Including	4.27	2.76	0.27	0.94	23.53	0.42
MM0003	76	16.85		6.94	5.00	0.35	1.17	15.87	0.29
MM0003	82.95	3.85	Including	11.87	9.94	0.18	1.97	21.32	0.18
MM0003	89.5	1.9	Including	13.93	8.76	1.02	2.74	26.89	0.52
MM0003	96.55	8.45		2.22	1.20	0.26	0.27	6.22	0.08
MM0003	100.9	4.1	Including	3.52	2.15	0.33	0.46	9.80	0.12
MM0003	123.6	1.4		11.03	7.71	0.75	1.34	15.86	0.39
MM0003	131.15	3.15		2.40	1.28	0.24	0.52	17.67	1.20
MM0004	6.3	3.1		1.47	0.78	0.15	0.30	23.75	0.16
MM0004	30.65	3.25		1.79	0.98	0.17	0.37	17.06	0.39
MM0004	58.05	3.45		1.30	0.40	0.23	0.22	14.45	0.47
MM0005	33.1	5.75		1.41	0.95	0.11	0.17	4.01	0.06
MM0006	41.8	8.9		2.49	0.74	0.51	0.19	12.96	0.31
MM0006	41.8	1.25	Including	3.42	1.66	0.47	0.38	13.91	0.11
MM0006	48.65	1.1	Including	4.34	0.83	1.03	0.29	22.42	0.38
MM0007	0	4.15		1.94	1.12	0.19	0.29	13.25	0.20
MM0007	0	1	Including	3.54	2.02	0.30	0.80	29.21	0.42
MM0009	12.65	11.55		1.37	0.70	0.17	0.19	8.57	0.20
ММ0009	12.65	3.75	Including	2.56	1.37	0.29	0.37	17.12	0.51
MM0009	34.3	6.25		2.00	0.97	0.27	0.23	12.78	0.30
MM0010	27.5	11.5		1.37	0.71	0.17	0.19	11.11	0.29
MM0010	59.3	3		3.89	1.73	0.58	0.41	28.58	0.73
MM0011	0	1.6		2.55	1.29	0.32	0.32	34.94	0.41

11 SAMPLE PREPARATION AND ANALYSES

11.1 Sample Preparation and Analysis

Diamond drill core was used to obtain samples of various lengths which were subsequently analysed. Most of the data is historic (from the 1950's-1980's) and there is very little known about the actual analytical methods and sample preparation details; however. it was an operational mine where reconciliation likely occurred and actual mining of the resource was undertaken.

The really old core was mechanically split rather than cut so there can be some difference in sample size of each sample. In general half core has been sampled, where any additional sampling was then taken from the remaining half core (leaving quarter core in the tray). Reviewing the available historical core, there are sections through the mineralization that has been completely sampled, so no core remains to be resampled. In other cases, quarter or half core remains.

In recent drilling the core has been cut and half the core sent the lab. In the last sampling program duplicate sampling came from the course split after crushing. It is unknown what standards and duplicates were collected historically.

Historically. core recoveries in general appear to be good. Nearly 20% of the drillholes have not had the geology digitally captured but of the drillholes that have the geology digitally captured 13% have recorded core loss but the recoveries in these holes have an average recovery >96%. The location of the core loss is often around the mineralized zones and zones of high sulphide contents. so that may result in some underestimation of mineralization. The recent drilling has very good core recoveries because of the larger core diameter and more emphasis put on the drilling of the core.

Resampling of some of the historical core was. however. undertaken. These core samples were prepped by MSA Labs and dried. crushed to 70% passing 2mm. split 1000g. pulverize to 85% passing 75µm followed by:

- Au. Pt & Pd by Fire Assay using 30g fusion. ICP-AES. Trace Level.
- Ore grade Cu. Pb. Zn using 0.2g material with 4-acid digestion. ICP-AES.
- Multi-Element suite using 0.25g material with 4-acid digestion. ICP-AES/MS. Ultra Trace Level.

The comparison from the resampling that was completed shows expected variability due to the nature of duplicate sampling of diamond drill core. however overall, the results are comparable providing some validation to and confidence in the historical analytical results. Most of the historical samples were not analysed for Ag and Au. likely due to the cost of the methods in those times.

The historical sampling: however. is lacking the sampling marginal to the ore zones which provide a clear boundary between waste and the mineralized sections. therefore the snapping of the wireframes for any resource estimation has been done on the available analyses. The recent drillholes done by Mahvie Minerals used the same analytical methods as the resampling with MSA labs.

The drilling completed by Gexco in 2005-2008 were analyzed with ALS Chemex using crushing to 70% passing 2mm. split 1000g. pulverize to 85% passing 75µm followed by:

- Au by Fire Assay using 50g fusion with AAS finish.
- Ore grade Cu. Pb. Zn with 4-acid digestion with AAS finish.
- 33 Multielement suite with 4-acid digestion with ICP-AES finish

11.2 Quality Control Procedures

It is unknown to what extent any quality control procedures were completed on the historical analysis and if any standards or blanks were utilised and evaluated.

It is unknown to what lab or facility the historical samples were sent to for crushing. pulverisation and chemical analysis.

For the drilling completed by Gexco. the resampling of historical core and the recent drilling completed by Mahvie Minerals appropriate QAQC procedures were completed with acceptable levels of accuracy and precision determined from the internal and external QAQC sampling completed. CRM's were used in the analysis and passed validation.

The sampling completed by Mahvie Minerals included duplicates at an interval of 1:30. blanks at an interval of 1:40 and standards at an interval of 1:25. resulting in an overall QAQC sample inserted approximately every 10th sample.

The laboratory procedures and assay methods in recent years are considered appropriate and for the elements of interest the four-acid digestion is considered total dissolution.

Procedures that were used for the QAQC of the sampling and analysis of holes in 1950's-1980's are unknown.

No audits or reviews of sampling techniques and data have been done from external sources in recent years. Historically it is unknown what was completed. For this resource model, the sampling and data was validated and reviewed, however, most of the results are historic and it is unknown what audits were completed on this.

Recently drilled drill core has been securely stored and sampled and available historical core is securely stored in the NGU Løkken core facility. The core drilled by Gexco and Mahvie Minerals is also currently stored at the NGU Løkken core facility.

12 DATA VERIFICATION

Most of the information that form the basis of the report and resource estimate is from publicly available drillhole information. documents. and reports.

The preexisting digitally captured dataset of the historical drilling (from previous explorer Gexco) were verified against available historical sections and where discrepancies or questions existed. checked against original drillhole logs and records. Some modifications were completed to match the historical drillhole logs and sections.

The author checked all drillholes that did not have any geology records or chemical analysis in the preexisting dataset and this information was recorded within the collar file to allow for filtering and prioritisation. If any analysis were found that had not been captured. this was rectified and captured by the author. Where no analysis was found, this was coded into the collar file. If there was geology logs available but not digitally captured, this was coded into the collar file, and in some cases where the data was of significance during the interpretation of a section, key features, of the data was digitally coded into the dataset. It was however beyond the scope to capture all geology information that was not already digitally available.

Verification of some converted drillhole coordinates was completed by the author by registering and converting from the original grid and it was within acceptable error. The historical and local grids have not been independently verified or assessed by a qualified surveyor.

The author also reviewed available assay data that was resampled from historical drillholes and compared with historical results. The correlation was within expectations for the elements assessed providing further confidence in the historical data.

The site was visited by the author on at least three separate occasions. one which also included entry into the historical underground workings. and a separate occasion when assisting Mahvie Minerals will exploration drilling of 11 drillholes from within the historical railway tunnel. Therefore the location of the existing historical workings. drillhole locations. evidence of mineralisation. confirmation of geology and available access to the site has been verified and consistent with the historical records.

In relation to the resource estimation. the assays were validated by the consulting geologist and the resource geologist did the compositing of the analytical results for the resource estimate. As far is known no twinned holes have been completed for comparative purposes. The historical data exists in pdfs of the typed or handwritten logs and analysis as well as the sections. plans and long sections of the drilling. results and the underground workings. This data was captured into excel files which were then imported into the 3D package where the resource model was created and imported into a secure database.

13 MINERAL PROCESSING & METALLURGICAL TESTING

No mineral processing or metallurgical testing analysis has been carried out yet. Therefore the recoveries are not known currently.

13.1 Previous processing

From older production reports (BV3337) it is clear that the process outline was convectional: crushing. grinding and flotation. Four different concentrates was produced. a zinc concentrate. a lead concentrate. a copper concentrate and a pyrite concentrate. An example of the different concentrate compositions is found in Table 13.1_1. Accordingly, it is worth noticing the presence of strategic metals such as Bismuth (Bi) and Antimony (Sb). From the same report. the presence of Baryte (BaSO4) can also be identified in the ore. Whether or not a Baryte concentrate was produced is uncertain. As the report is from 1963 it is highly likely that higher values and higher selectivity was achieved in later years and would be achieved today.

							1				
		%		%				%		%	
Mofjell ore	Zn	55,56	Cd	0,26		Mofjell ore	Zn	8,89	Cd	trace	
av. Analysis	Pb	0,74	Cr	0,05		av. Analysis	Pb	2,55	Cr	0,03	
Zinc conc.	Cu	0,78	SiO2	0,24		Copper conc.	Cu	24,1	SiO2	0,76	
	S	33,22	Mn	0,08	5		S	33,21	Mn	none	
	Fe	8,96	P2O5	0,02			Fe	28,7	P205	0,04	
	As	0,03	CaO	0,01			As	0,04	CaO	0,15	
	Se	trace	MgO	0,02			Se	none	MgO	trace	
	Bi	0,003	Ba	0,007			Bi	0,01	Ba	0,01	°
	Al	0,12	Ag	19	ppm		Al	trace	Ag	169	ppm
	Sb	0,02	Au	trace	200		Sb	trace	Au	6	ppm
	Sn	0,12					Sn	0,06	3		1
	Ni	trace					Ni	trace			
	-	76		76			-			70	
		%		%				%		%	8
Motiell ore	Zn	2.84	Cd	none		Mofiell ore	Zn	1.86	Cd	none	2
Mofjell ore	Zn	2,84	Cd	none		Mofjell ore av Analysis	Zn	1,86	Cd	none	
av. Analysis	Pb	59,82	Cr	none		av. Analysis	Pb	0,34	Cr	trace	
	Pb Cu	59,82 7,71	Cr SiO2	none 0,8			Pb Cu	0,34	Cr SiO2	trace 2,2	
av. Analysis	Pb Cu S	59,82 7,71 20,18	Cr SiO2 Mn	none 0,8 0,02		av. Analysis	Pb	0,34	Cr	trace	
av. Analysis	Pb Cu S Fe	59,82 7,71 20,18 8,48	Cr SiO2 Mn P2O5	none 0,8 0,02 0,04		av. Analysis	Pb Cu S	0,34 0,34 47,39	Cr SiO2 Mn	trace 2,2 trace	
av. Analysis	Pb Cu S Fe As	59,82 7,71 20,18 8,48 0,06	Cr SiO2 Mn P2O5 CaO	none 0,8 0,02 0,04 trace		av. Analysis	Pb Cu S Fe	0,34 0,34 47,39 46,5	Cr SiO2 Mn P2O5 CaO	trace 2,2 trace 0,04	
av. Analysis	Pb Cu S Fe As Se	59,82 7,71 20,18 8,48 0,06 0,03	Cr SiO2 Mn P2O5 CaO MgO	none 0,8 0,02 0,04 trace trace		av. Analysis	Pb Cu S Fe As	0,34 0,34 47,39 46,5 0,02	Cr SiO2 Mn P2O5	trace 2,2 trace 0,04 trace trace	
av. Analysis	Pb Cu S Fe As	59,82 7,71 20,18 8,48 0,06	Cr SiO2 Mn P2O5 CaO MgO Ba	none 0,8 0,02 0,04 trace trace 0,01		av. Analysis	Pb Cu S Fe As Se	0,34 0,34 47,39 46,5 0,02 none	Cr SiO2 Mn P2O5 CaO MgO	trace 2,2 trace 0,04 trace trace 0,1	ppm
av. Analysis	Pb Cu S Fe As Se Bi	59,82 7,71 20,18 8,48 0,06 0,03 0,044	Cr SiO2 Mn P2O5 CaO MgO	none 0,8 0,02 0,04 trace trace 0,01 652	ppm ppm	av. Analysis	Pb Cu S Fe As Se Bi	0,34 0,34 47,39 46,5 0,02 none 0,003	Cr SiO2 Mn P2O5 CaO MgO Ba	trace 2,2 trace 0,04 trace trace 0,1	ppm
av. Analysis	Pb Cu S Fe As Se Bi Al	59,82 7,71 20,18 8,48 0,06 0,03 0,044 0,21	Cr SiO2 Mn P2O5 CaO MgO Ba Ag	none 0,8 0,02 0,04 trace trace 0,01 652	ppm ppm	av. Analysis	Pb Cu S Fe As Se Bi Al	0,34 0,34 47,39 46,5 0,02 none 0,003 trace	Cr SiO2 Mn P2O5 CaO MgO Ba Ag	trace 2,2 trace 0,04 trace trace 0,1 11	ppm

Table 13.1_1 Mofjell Project Example of concentrate compositions at Mofjell

14 MINERAL RESOURCE ESTIMATES

The interpreted resource shapes are based on the current dataset that contains 1530 drillholes. Of these 11 holes have been drilled by Mahvie minerals in 2023 and 73 holes were drilled by Gexco in 2005-2008. The rest are all historical holes and as the report concerns a resource estimate. a table of each individual hole for the reporting of these results are not included.

The resource for the Mofjell deposit as estimated by Thomas Lindholm AB in February 2024 is 8.9 Mt at 3.8% ZnEq (Figure 14_1). The more detailed grade divisions are outlined in Table 14.1_1. The JORC Table 1 associated with the resource is included in Appendix 1 and detailed and expanded within relevant sections of this report.

Moljeli Interred Resources Feb 2024						
Zneq	Tonnes	Cu %	Pb %	Zn %	Zneq %	
2.5 -> 3.0	2.682.200	0.23	0.40	1.74	2.75	
3.0 -> 3.5	1.992.700	0.26	0.42	2.13	3.24	
3.5 -> 4.0	1.380.500	0.28	0.43	2.54	3.73	
4.0 -> 4.5	990.800	0.30	0.44	2.99	4.24	
4.5 -> 5.0	628.500	0.32	0.54	3.36	4.74	
5.0 -> 5.5	452.000	0.33	0.62	3.75	5.24	
5.5 -> 6.0	277.000	0.35	0.69	4.14	5.74	
6.0 -> 6.5	182.000	0.38	0.74	4.51	6.24	
6.5 -> 7.0	115.600	0.41	0.76	4.90	6.73	
7.0 -> 7.5	64.500	0.48	0.76	5.16	7.23	
7.5 -> 8.0	34.800	0.49	0.84	5.58	7.73	
8.0 -> 8.5	18.200	0.61	0.71	5.82	8.26	
8.5 -> 9.0	16.400	0.65	0.73	6.22	8.80	
9.0 -> 9.5	17.100	0.77	0.66	6.29	9.21	
9.5 -> 10.0	2.100	0.77	0.71	6.77	9.73	
10.5 -> 11.0	100	0.66	0.50	8.39	10.85	
11.0 -> 11.5	100	0.70	0.53	8.77	11.38	
Grand Total	8.854.600	0.28	0.46	2.55	3.75	

Table 14.1_1 Mofjell Project Mofjell Inferred Resources Feb 2024

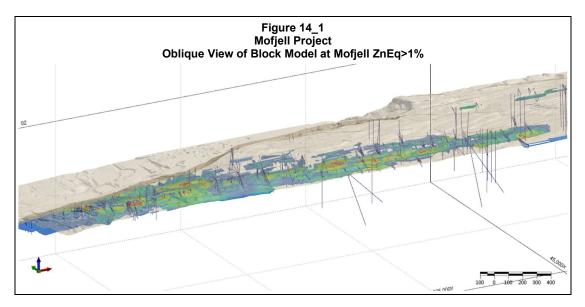
The estimate also includes an exploration target of:

Table 14.1_2 Mofjell Project Mofjell Exploration Target Feb 2024							
MTonnes	Cu %	Pb %	Zn %	Zneq %			
0.58-0.71	0.58-0.71 0.26-0.32 0.49-0.60 2.33-2.85 3.50-4.2						

The ZnEq field is a concatenation of data. As a lot of samples are missing Au and Ag analyses most of the ZnEq field is composited from only the Zn. Pb and Cu analysis. In cases when Pb and/or Cu is also missing, then the ZnEq is only composed of Zn values. Therefore, the ZnEq is underestimating the actual ZnEq that would exist if the missing elements were analysed. The calculation used for the zink equivalent values was derived from EMX Royalty Corp and is:

• ZnEq = Zn + (Pb*0.69) + (Cu*3.207) + (Ag*0.027) + (Au*1.996)

The ZnEq calculation was based on the derived average metal prices between 1999-mid 2022 where Zn = 2900 US\$/t. Pb = 2000 US\$/t. Cu = 9300 US\$/t. Au = 1800 US\$/oz and Ag = 24 US\$/oz



The Mofjell resource model was completed using a combination of Micromine for modelling of wireframes and Geovia's Surpac 7.4 for block modelling and resource estimation. Mineralisation's were interpreted using diamond drilling as primary data and any other available data to assist interpretation.

The sample intervals represent downhole depths and as each hole is different (different angle and different location and orientation through the mineralization) therefore the true width is unknown. No bias is considered in the sampling due to the direction of drilling.

The samples were selected using the interpreted 3D shapes. intersecting the drillholes. The samples were coded with 35 individual domain codes for geostatistical analysis and resource estimation. The samples were composited for 2m composites using Surpac's 'best fit' downhole compositing method. The length. 2m was selected after sample length analysis.

Directional variograms were modelled for Zn. being the principal value element. Analysis was done domain by domain for major domains. The variogram ellipsoid was typically oriented to main geological continuity orientation and no orientations in the cross-cutting directions were used. Some of the smaller domains did not have enough data points to model variograms and most similar major domain variograms was used to estimate the smaller domains. Variogram

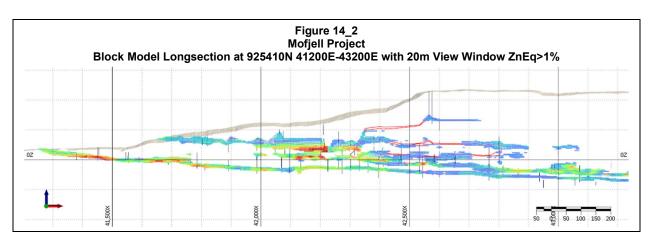
ellipsoids for Cu and Pb were set to match Zn variogram ellipsoid as there is no geological evidence about different controls between elements.

The block model was constructed using $20m \times 10m \times 10m (XYZ)$ parent blocks. allowing $5m \times 2.5m \times 2.5m$ standard sub-blocking to maximize the filling of wireframes. The block size was selected based on the drilling density. The blocks were coded by the individual domain codes for all 35 domains. One single block model was done to cover the entire Mofjell mineralisation.

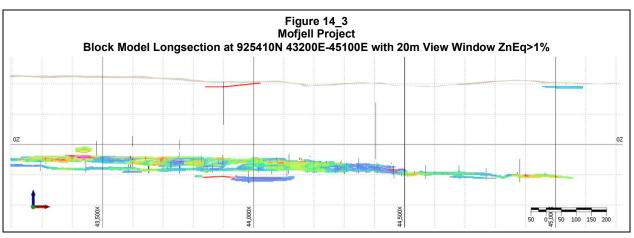
Selective mining units were not modelled.

No assumptions were done between correlation of the elements nor post-processing for element correlations were done.

Global top-cut analysis was completed for Cu. Pb and Zn. This showed that extreme outliers do not have an impact in the estimation and therefore top-cutting was not applied.



No by products were estimated.



Four search passes were applied for grade calculations. A search ellipse. using 50 metres radius in the major direction wase used in the 1st pass. 80m in the 2nd. 130m in the 3rd and 175m in the 4th. Octant search was not applied. A minimum 8 composites were required in the

1st to 3rd search passes to estimate the grade and maximum 20 composites were allowed for estimation.

Underground infrastructure. including stoped out areas. underground tunnels and rises were flagged to the blocks and depleted from the final resource model.

Several steps of validation were done during and after the estimation:

- 1. visual validation of the sample selection process.
- 2. visual validation of block model grades vs drillhole grades in profiles and 3D.
- 3. volume of the domain wireframes vs volume of the blocks of the domain.

The tonnages of the mineral resource have been estimated on a dry tonnage basis.

The mineral resources are reported inside mineralization envelopes and using 2.5% Zn-eq cutoff for reporting. This is based on that much of the mine infrastructure already exist. thus lowering the need for development.

The bulk density has been assumed to be 3.2 tonnes/m3 based on historical documentation. In sulphide deposits, the density is typically a function of the contents of sulphide minerals, such a function will be developed as the project progress. No bulk density results were found from the drilling completed by Gexco and not have yet been completed by Mahvie Minerals.

The resource is classified as inferred based on the historical nature of the information. The relative accuracy and confidence are reflected in the resource classification. The mineral resource statement relates to the global estimate. No production data are available for comparison.

No independent audit or review has been done on this resource estimate to date.

15 MINERAL RESERVE ESTIMATES

No mineral reserve estimates have been completed on the Mofjell property by Mahvie Minerals AB.

16 MINING METHODS

Mofjell is a historical mine with a long history of mining. it was in production from 1926 until 1987. Key parameters and assumptions are based on operational data and those have been evaluated in the underground mine. Confidence of mining assumptions exceeds the requirement of RPEEE for the mineral resource reporting.

Most of the historical production was done using the room and pillar method due to the geometry of the ore lenses. It is reasonable to assume that this will be utilized in future mining as well.

Most of the needed infrastructure in the form of ramps. drifts and ventilation shafts is already in place although the dimensions of these may not be suitable for current mining equipment.

No preliminary economic assessments. pre-feasibility studies and feasibility studies have been completed as of yet. so all information reported is based on historical data and derivations and assumptions from that.

17 RECOVERY METHODS

The process used historically was flotation. resulting in a zinc concentrate grading 54-56% Zn. a copper concentrate grading 22-25% Cu and a lead concentrate grading 60-65% Pb. Gold and silver reported to the lead and copper concentrates. The recoveries are not known at this time.

It is reasonable to assume that flotation will still be the most suitable process to recover the value metals.

During the previous period of operation. the tailings were deposited in an underwater repository at sea. Since this is also the current policy of Norway. it is assumed this is possible to permit. The development waste will be used as backfill. to help stabilize the mine.

No preliminary economic assessments. pre-feasibility studies and feasibility studies have been completed as of yet. so all information reported is based on historical data and derivations and assumptions from that.

18 ADJACENT PROPERTIES

The Mahvie Minerals exploration leases are situated within the highly Mofjell group of the prospective Rana-Hemnes Zn-Pb-Cu metallogenic area which hosts both larger and smaller deposits. The region i.e. the Rødingfjell nappe complex hosts both the Rana-Hemnes Zn-Pb-Cu metallogenic area as well as the Ørtfjell iron ore deposit.

Significant nearby zinc and lead projects include amongst others the Bleikvassli Zn-Pb deposit and the iron ore deposits of Rana Fe Gruver. (Appendix 1 Figure 2).

18.1 Bleikvassli Zn-Pb desposit

The sediment-hosted Bleikvassli deposit produced c. 5.0 Mt of ore grading about 0.15 % Cu. 4.0 % Zn. 2 % Pb. and 25 g/t Ag in the period 1957-1997. Structurally below the deposit is a thick and laterally persistent unit of amphibolite. a large gabbroic sill or a massive volcanic flow. Some of the quartz-feldspar gneisses represent felsic volcanics. including the units associated with the deposit. The ore body consists of a discontinuous layer of massive. semi-massive and disseminated sulphides. is more than 1500 m long. up to 300 m wide and up to 20 m thick in fold hinges. In-situ values based on more than 1400 drill-hole analyses are 0.27 % Cu. 5.17 % Zn. 2.72 % Pb. 45 g/t Ag and 0.21 g/t Au. The average iron content is 16.9 %. showing that it is a semi-massive ore body. Three types of sulphide ore are recognized in the Bleikvassli deposit: 1) massive pyrite ore. 2) massive pyrrhotite ore and 3) mobilisate-type veins and veinlets. mainly in the wallrocks. The mobilisates are enriched in galena. chalcopyrite. sulphosalts. silver and gold. It has been suggested that the observed unconformity between the Kongsfjell and Anders Larsa Groups represented a pathway for both the volcanics and the hydrothermal solutions forming the Bleikvassli deposit.

18.2 Rana Fe Gruver

The outcropping iron oxide deposits and mineralisation cover an area of about 105 km2 in the Dunderland valley north of Mo i Rana. The known iron ore mineralisation and deposits in the Dunderland valley belong to the Ørtfjell Group. The immediate host rocks to the mineralisation are mica schists of various types (garnet bearing. carboniferous). but the schists themselves occur in a sequence dominated by dolomitic and calcitic marble several hundred meters thick. Due to the tectonic overprint in the region both the host rock and the iron ore formations are strongly folded and often show a distinct cleavage underlined by the occurrence of flaky hematite crystals (specularite). In general. the ore can be described as an iron-oxide rich mica schist.

The Neoproterozoic rocks of the Ørtfjell. Ørtvann and Stensundtjern deposits consist of mica schists and marbles. Amphibolite facies metamorphism governs mineral assemblages and deformation obscures most primary structures (Søvegjarto. 1972; Tøgersen et al. 2018). No thin sections or thin section reports are available.

The Kvannevann mine is one of several iron ore mines operated and owned by Rana Gruber AS in the Dunderland valley. The Kvannevann mine is the only underground mine in the region. The deposit is located in the northern part of Norway. approximately 50 km south from the Arctic

Circle. Today Rana Gruber AS combines underground and open pit methods for mining and concentrating iron ore for multiple purposes.

The open-pit mines at Ørtfjell are closed and from 2000 onwards the iron ore comes from the new Kvannevann underground mine in the vicinity of the Ørtfjell area. Due to the raised demand for iron ore since 2004. Rana Gruber has invested heavily in the infrastructure of the Kvannevann mine. A new production level was put in operation in 2012 with sublevel caving to increase the iron ore recovery and the production.

Since 2008 the mining operations have targeted additional iron ore bodies in the surrounding area which have been mined by open-pit methods.

19 RECOMMENDATIONS

There are a few recommendations to continue to drive the Mofjell project forward.

Firstly, to upgrade the resource category there are several items that should be completed. These include:

- Reviewing all available historical core and samples (if any) in order to:
 - a) Confirm and improve on the geological model
 - b) Resample historical core where possible and review if there are any coarse rejects or pulps from historical drilling that can be re-assayed. It is recommended to analyse the samples with multi element analysis and fire assay to determine the amount of Gold (Au), Silver (Ag) and other accessory minerals for example Bismuth (Bi) Antimony (Sb) and Baryte (BaSO4) in addition to validating and expanding on the current base metal analysis. This will determine the mineralised boundaries, improve sampling length and therefore improve geostatics and variography, and of course determine the amount of base metal and possible accessory mineralisation that will add value to overall resource.
 - c) Complete bulk density measurements on the historical and recent core and include it in any future drilling programs. Bulk density measurements should be determined for all major rock groups.
- Infill drilling where required to add further confidence in the historical data, thereby aiming to upgrade the resource category.
- Plan and execute drill program to test the fold structures and the blue skye fold target with the aim to expand the resource base.
- It is recommended that a licensed surveyor confirms and verifies the historical grids against existing survey stations, infrastructure and historical drillholes.

Secondly it is recommended to review all the prospects within the tenement area, initially with focus on the ones proximal to the Mofjell resource. It is likely that for example Sølvberget is stratigraphically parallel with Mofjellet and may also contain the same remobilisation and enrichment into structural fold hinges that is identified in Mofjellet, thereby opening up the possibility to trace and identify currently undiscovered mineralisation.

Finally, there are also some more distant prospects within the tenement package with very interesting results, for example Hellerfjellet. These prospects warrant additional work and as the skills and software is available within the company, it would be very useful to put all regional data into 3D context and complete a regional 3D model that honours all currently known drilling, sampling, historical mines/pits and mapping. This will provide a very useful targeting tool and expand the understanding and knowledge of the tenement area to continually maximise the exploration expenditure, geological knowledge and interpretaion and project value.

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Appendix 1

Mofjell Feb 2024 Resource – JORC Table 1

Appendix 1 Mofjell Feb 2024 Resource - JORC Table 1

JORC Code. 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels. random chips. or specific specialized industry standard measurement tools appropriate to the minerals under investigation. such as down hole gamma sondes. or handheld XRF instruments. etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized to produce a 30 g charge for fire assay'). In other cases. more explanation may be required. such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Diamond drilling was used to obtain samples of various lengths which were subsequently analyzed. Most of the data is historic (from the 1950's-1980's) and there is very little known about the actual analytical methods and sample preparation details; however. it was an operational mine where reconciliation likely occurred and actual mining of the resource was undertaken. Reesampling of some of the historical core was. however. undertaken. These core samples were prepped by MSA Labs and dried. crushed to 70% passing 2mm. split 1000g. pulverize to 85% passing 75µm followed by: Au. Pt & Pd by Fire Assay using 30g fusion. ICP-AES. Trace Level. Ore grade Cu. Pb. Zn using 0.2g material with 4-acid digestion. ICP-AES. Multi-Element suite using 0.25g material with 4-acid digestion. ICP-AES/MS. Ultra Trace Level. Most of the historical samples were not analyzed for Ag and Au. likely due to the cost of the methods in those times. The comparison from the resampling that was completed shows expected variability due to the nature of duplicate sampling of diamond drill core. however overall. the results are comparable providing some validation to and confidence in the historical analytical results. The historical sampling: however. is lacking the sampling marginal to the ore zones which provide a clear boundary between waste and the mineralized sections. therefore the snapping of the wireframes for any resource estimation has been done on the available analyses. The drilling completed by Gexco in 2005-2008 were analyzed with ALS Chemex using crushing to 70% passing 27µm followed by:

Appendix 1 Mofjell Feb 2024 Resource - JORC Table 1

Criteria	JORC Code explanation	Commentary
Drilling techniques	• Drill type (eg core. reverse circulation. open-hole hammer. rotary air blast. auger. Bangka. sonic. etc) and details (eg core diameter. triple or standard tube. depth of diamond tails. face-sampling bit or other type. whether core is oriented and if so. by what method. etc).	 Au by Fire Assay using 50g fusion with AAS finish. Ore grade Cu. Pb. Zn with 4-acid digestion with AAS finish. 33 Multielement suite with 4-acid digestion with ICP-AES finish All drilling has been diamond drilling. Core size varies from 21mm (B/T36). 27mm (AQ). 32mm (AWT). 36mm (BQ). 41mm (BQTK) and 45mm (NQ3) core diameter. Apart from the BQ and NQ drilling done by Gexco and Mahvie. the historical core is not known to be orientated.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Historically. core recoveries in general appear to be good. Nearly 20% of the drillholes have not had the geology digitally captured but of the drillholes that have the geology digitally captured 13% have recorded core loss but the recoveries in these holes have an average recovery >96%. The location of the core loss is often around the mineralized zones and zones of high sulphide contents. so that may result in some underestimation of mineralization. The recent drilling has very good core recoveries because of the larger core diameter and more emphasis put on the drilling of the core.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation. mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean. channel. etc) photography. The total length and percentage of the relevant intersections logged. 	 Most of the core has been geologically logged. however this data is not always recorded in a way that makes it easy to interpret using modern digital methods. The data is available in historical logs and sections and partially digitally captured. All analyses that have been found has been digitally captured for the interpretation and estimation. Recent drilling by Mahvie has been logged from the core and the core photographed wet and dry however this photographical data is not available for the historical core.
Sub- sampling techniques and sample preparation	 If core. whether cut or sawn and whether quarter. half or all core taken. If non-core. whether riffled. tube sampled. rotary split. etc and whether sampled wet or dry. For all sample types. the nature. quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximize representativity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected. including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	course split after crushing. It is unknown what standards and duplicates were collected historically.

Appendix 1 – Mofjell Project Norway

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests Verification of sampling and	 The nature. quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools. spectrometers. handheld XRF instruments. etc. the parameters used in determining the analysis including instrument make and model. reading times. calibrations factors applied and their derivation. etc. Nature of quality control procedures adopted (eg standards. blanks. duplicates. external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	 analysis of holes in 1950's-1980's are unknown. In relation to the resource estimation. the assays were validated by the consulting geologist and the resource geologist did the compositing of the analytical results for the resource estimate. As far
assaying	 Documentation of primary data. data entry procedures. data verification. data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	is known no twinned holes have been completed for comparative purposes. The historical data exists in pdfs of the typed or handwritten logs and analysis as well as the sections. plans and long sections of the drilling. results and the underground workings. This data was captured into excel files which were then imported into the 3D package where the resource model was created and imported into a secure database.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys). trenches. mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Drilling done by Mahvie and Gexco had the drill collars surveyed using an external surveyor. Downhole surveying of the drillholes was undertaken for the drilled holes. The historical collars were assumed to have been picked up by the mine surveyor using traditional techniques for underground mining operations. Shorter holes were often not downhole surveyed. partially due to the size of the core/drillholes but also due to the short length and close spacing of the drillholes. Where the longer holes have shown obvious deviation from the available sections or plans. this has been measured from the sections and the data added to the database. A DTM is available for the area and where surface collars needed adjusting this was completed using the DTM. This is not possible for the underground collars but if any obvious errors were noticed in the digitally captured information. the collar locations were recaptured using georeferenced sections and/or adjusted to drive locations. The really old drillholes from the 1950's and 1960's were recorded in a local mine grid while the slightly more recent historical holes were recorded in NGO 1948 (Oslo) / NGO zone IV grid. The 3D modelling

Criteria	JORC Code explanation	Commentary
		was therefore completed in this grid (NGO 1948) to avoid any conversion errors into the current standard reference system (ETRS89 UTM Zone 33N). A 2-point planar conversion was completed where the local grid coordinates needed to be converted to the NGO 1948 grid for the resource modelling.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The exploration results are reported where drill fans are spaced more than 80m. The average drillhole section spacing through the general mining area is 20m and even denser in a few places. This can increase to 40m in areas on the peripheries. Most of the underground drilling are drilled with a fan of drillholes to achieve a spacing between the end of holes on average around 20m but anywhere from 5-30m spacing at end of hole. The mining of the historical mine must have had grade control and likely face sampling however this information has not been located. if it exists. The 20m spacing appears to have been adequate in the historical mine continuity however the continuity may still exist over greater distances. however the certainty of course decreases.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known. considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias. this should be assessed and reported if material. 	 The deposit strikes east west and most of drilling has been completed in a north or south direction. aiming to drill perpendicular to the orientation of the strike of the deposit. No bias is considered in the sampling due to the direction of drilling.
Sample security	The measures taken to ensure sample security.	 It is unknown what was done historically but the samples in recent drilling programs have been securely stored and sampled.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 No audits or reviews of sampling techniques and data have been done from external sources in recent years. Historically it is unknown what was completed. For this resource model, the sampling and data was validated and reviewed, however, most of the results are historic and it is unknown what audits were completed on this.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	 Type. reference name/number. location and ownership including agreements or material issues with third parties such as joint ventures. partnerships. overriding royalties. native title interests. historical sites. wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The resource is located on exploration lease Mo 5 (0059/2021) and it owned by Mahvie Minerals Norwegian subsidiary called Mo I Rana Vms AS. The tenement was granted on the 10th of February 2021 and is 750 Ha. It is adjacent to the Mo I Rana Industrial Park. Presently there are no known impediments to operating in the area and the tenement is in good standing.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 As in section 1 above.
Geology	Deposit type. geological setting and style of mineralisation.	 VMS style polymetallic deposits are developed in the Rana-Hemmes Zn-Pb-Cu metallogenic region of Norway. The Mofjell deposit is situated in the Rödingsfjäll Nappe Complex in the Uppermost Allochthon of the Scandinavian Caledonides. According to Grenne et al. (1999). most of the sequences in the Rana-Hemnes area were probably deposited on the margin of the Laurentian plate during rifting of Rodinia and development of an Atlantic-type or passive margin. The Mofjell Group is separated from the Plurdal and Rostafjell Unit by a major unconformity. which is probably also a tectonic boundary. The group in general. is dominated by quite massive grey gneisses with persistent layers of amphibolite and aluminous biotite and muscovite gneisses. The biotite (+/-hornblende) and muscovite gneisses invariably contain disseminated pyrite. as well as quartz-rich exhalites. The zones can be traced for several kilometers along strike and are important by hosting all the stratabound Zn-Pb-Cu sulfide mineralizations recorded in the Mofjell Group. including the Mofjell deposit.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	• The interpreted resource shapes are based on the current dataset that contains 1530 drillholes. Of these 11 holes have been drilled by Mahvie minerals in 2023 and 73 holes were drilled by Gexco in 2005-2008. The rest are all historical holes and as the report concerns a resource estimate. a table of each individual hole for the reporting of these results are not material.

Criteria	JORC Code explanation	Commentary
	 dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report. the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	 In reporting Exploration Results. weighting averaging techniques. maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results. the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 The calculation used for the zink equivalent values are: ZnEq = Zn + (Pb*0.69) + (Cu*3.207) + (Ag*0.027) + (Au*1.996) The ZnEq field is a concatenation of data. As a lot of samples are missing Au and Ag analyses. most of the ZnEq field is composited from only the Zn. Pb and Cu analysis. In cases when Pb and/or Cu is also missing. then the ZnEq is only composed of Zn values. Therefore. the ZnEq is underestimating the actual ZnEq that would exist if the missing elements were analysed. The ZnEq calculation was based on the derived average metal prices between 1999-mid 2022 i.e. Zn = 2900 US\$/t. Pb = 2000 US\$/t. Cu = 9300 US\$/t. Au = 1800 US\$/oz and Ag = 24 US\$/oz
Relationship between mineralisatio n widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known. its nature should be reported. If it is not known and only the down hole lengths are reported. there should be a clear statement to this effect (eg 'down hole length. true width not known'). 	 As the report concerns resource results. this is not applicable. The sample intervals represent of course downhole depths and as each hole is different (different angle and different location and orientation through the mineralization) therefore the true width is unknown.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include. but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Not Applicable
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable. representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	Not Applicable
Other substantive exploration data	 Other exploration data. if meaningful and material. should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density. groundwater. geotechnical and rock characteristics; potential 	Not Applicable

Criteria	JORC Code explanation	Commentary
	deleterious or contaminating substances.	
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions. including the main geological interpretations and future drilling areas. provided this information is not commercially sensitive. 	Not Applicable

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1. and where relevant in section 2. also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by. for example. transcription or keying errors. between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 The available digital data was compared with each drill section to determine that the drillholes were located correctly and if there may have been any analysis or geology that existed but not captured. It was not possible in the timeframe to capture all the missing geology. but if any analytical results existed but had not been captured. this was completed. Some notable results or widths were compared with the original paper documents and fixed where required. Some locations were fixed after comparison with sections and paper logs. All drillholes have been coded if e.g. geology exists but is not captured or if no analysis was found. The data was during this process imported into a database to ensure validation and security of data.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• The geologist that built the 3D mineralization model has visited site and is a consultant to Mahvie Minerals.
Geological interpretatio n	 Confidence in (or conversely. the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect. if any. of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Historically. with more staff and less digital methods. sometimes the actual measuring of items could be more accurate. As the data came from an operating mine. the assessment is that the drillhole data location is relatively accurate. Some issues may exist in coordinate conversions between local grids and historical grid systems to get all data into the same format. but this is not material to the overall size of the estimation. There is no useful structural information historically. so it is possible that there are some offsets to the mineralization that is not evident from the available information and therefore not regarded in the modelling. Previously it has been modelled as three separate lenses

Criteria	JORC Code explanation	Commentary
		 which now has been reinterpreted to be relatively continuous and although they split up in the western 2/3rds of the deposit. they are more or less one continuous folded unit to the east. From the modelling the geologist finds that it is clear it is all the same unit. however some stretching or tight folding / minor faulting may have separated the lenses in places but there is insufficient data to accurately model this. It is however not believed it makes a material difference to the size of the modelled units.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise). plan width. and depth below surface to the upper and lower limits of the Mineral Resource. 	• The modelled mineralized units are about 4.5 km in strike. thin beds from between 1-20m wide folded over to a depth from outcropping at surface to about 300m below surface.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions. including treatment of extreme grade values. domaining. interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation 	 The Mofjell resource model was completed using a combination of Micromine for modelling of wireframes and Geovia's Surpac 7.4 for block modelling and resource estimation.
	method was chosen include a description of computer software and parameters used.	 Mineralisation's were interpreted using diamond drilling as primary data and any other available data to assist interpretation.
	 The availability of check estimates. previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. 	 The samples were selected using the interpreted 3D shapes. intersecting the drillholes. The samples were coded with 35 individua domain codes for geostatistical analysis and resource estimation.
	 Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation. the block size in relation to 	 The samples were composited for 2m composites using Surpac's 'best fit' downhole compositing method. The length. 2m was selected after sample length analysis.
	 the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control 	 Directional variograms were modelled for Zn. being the principal value element. Analysis was done domain by domain for major domains. The variogram ellipsoid was typically oriented to main geological continuity orientation and no orientations in the cross-
	 the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation. the checking process used. the comparison of model data to drill hole data. and use of reconciliation data if available. 	cutting directions were used. Some of the smaller domains did not have enough data points to model variograms and most similar major
		• The block model was constructed using 20m x 10m x 10m (XYZ)

parent blocks. allowing 5m x 2.5m x 2.5m standard sub-blocking to

Criteria	JORC Code explanation	Commentary
		maximize the filling of wireframes. The block size was selected based on the drilling density. The blocks were coded by the individual domain codes for all 35 domains.
		 One single block model was done to cover the entire Mofjell mineralisation.
		Selective mining units were not modelled.
		 No assumptions were done between correlation of the elements nor post-processing for element correlations were done.
		 Global top-cut analysis was completed for Cu. Pb and Zn. This showed that extreme outliers do not have an impact in the estimation and therefore top-cutting was not applied.
		No by products were estimated.
		• Four search passes were applied for grade calculations. A search ellipse. using 50 metres radius in the major direction wase used in the 1 st pass. 80m in the 2 nd . 130m in the 3 rd and 175m in the 4 th . Octant search was not applied. A minimum 8 composites were required in the 1 st to 3 rd search passes to estimate the grade and maximum 20 composites were allowed for estimation.
		 Underground infrastructure. including stoped out areas. underground tunnels and rises were flagged to the blocks and depleted from the final resource model.
		 Several steps of validation was done during and after the estimation: visual validation of the sample selection process. visual validation of block model grades vs drillhole grades in profiles and 3D. volume of the domain wireframes vs volume of the blocks of the domain.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture. and the method of determination of the moisture content.	• The tonnages of the mineral resource have been estimated on a dry tonnage basis.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	• The mineral resources are reported inside mineralization envelopes and using 2.5% Zn-eq cut-off for reporting. This is based on that

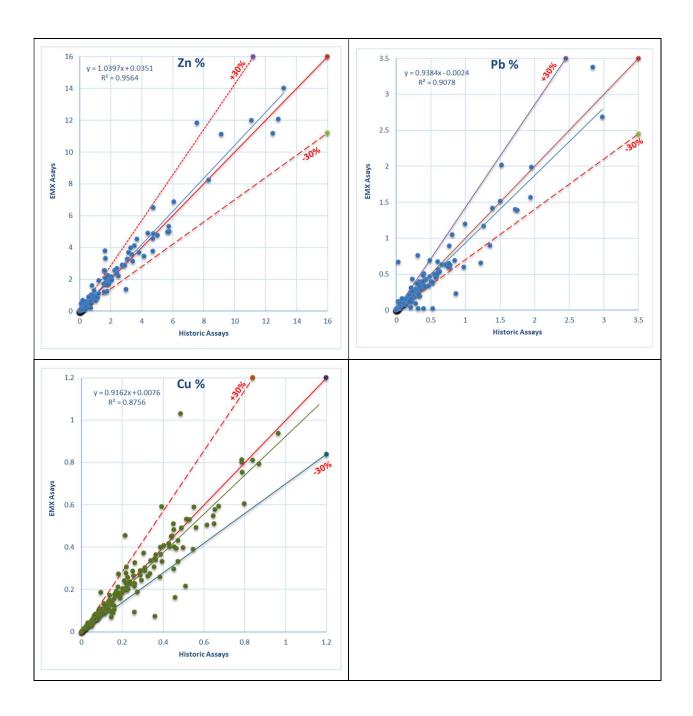
Criteria	JORC Code explanation	Commentary
		much of the mine infrastructure already exist. thus lowering the need for development.
Mining factors or assumptions	• Assumptions made regarding possible mining methods. minimum mining dimensions and internal (or. if applicable. external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods. but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case. this should be reported with an explanation of the basis of the mining assumptions made.	 Mofjell is a historical mine with a long history of mining. it was in production from 1926 until 1987. Key parameters and assumptions are based on operational data and those have been evaluated in the underground mine. Confidence of mining assumptions exceeds the requirement of RPEEE for the mineral resource reporting. Most of the historical production was done using the room and pillar method due to the geometry of the ore lenses. It is reasonable to assume that this will be utilized in future mining as well.
		 Most of the needed infrastructure in the form of ramps. drifts and ventilation shafts is already in place.
<i>Metallurgical factors or assumptions</i>	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods. but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case. this should be reported with an explanation of the basis of the metallurgical assumptions made.	 The process used historically was flotation. resulting in a zinc concentrate grading 54-56% Zn. a copper concentrate grading 22-25% Cu and a lead concentrate grading 60-65% Pb. Gold and silver reported to the lead and copper concentrates. The recoveries are not known at this time. It is reasonable to assume that flotation will still be the most suitable process to recover the value metals.
Environmen- tal factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts. particularly for a greenfields project. may not always be well advanced. the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	• During the previous period of operation. the tailings were deposited in an underwater repository at sea. Since this is also the current policy of Norway. it is assumed this is possible to permit. The development waste will be used as backfill. to help stabilize the mine.
Bulk density	• Whether assumed or determined. If assumed. the basis for the assumptions. If determined. the method used. whether wet or dry. the frequency of the measurements. the nature. size and representativeness of the samples.	 The bulk density has been assumed to be 3.2 tonnes/m³ based on historical documentation. In sulphide deposits. the density is typically a function of the contents
	 The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs. porosity. 	 In supride deposits, the density is typically a function of the contents of sulphide minerals, such a function will be developed as the project progress.

Criteria	JORC Code explanation	Commentary
	 etc). moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	
Classificatio n	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations. reliability of input data. confidence in continuity of geology and metal values. quality. quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	The resource is classified as inferred based on the historical nature of the information.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	No audit has been done to date.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits. or. if such an approach is not deemed appropriate. a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 The relative accuracy and confidence are reflected in the resource classification. The mineral resource statement relates to the global estimate. No production data are available for comparison.

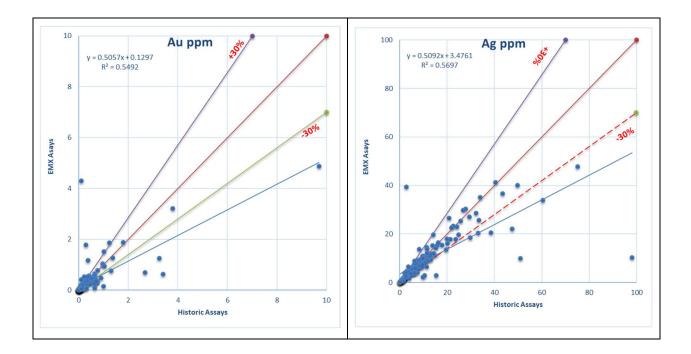
Appendix 2

Resampling of historical core

Appendix 2 Resampling of Historical Core



Appendix 2 Resampling of Historical Core



Appendix 3 Tenement Coordinate Summary

Appendix 3

Tenement Coordinate Summary

Appendix 3 Tenement Coordinate Summary

Tenement No (Name)	Point	Easting ^	Northing ^
	1	471000	7353000
UN 0025/2024 (Ma 40)	2	471000	7351000
UN 0035/2021 (Mo 10)	3	466000	7351000
	4	466000	7353000
	1	476000	7353000
	2	476000	7351000
UN 0036/2021 (Mo 11)	3	471000	7351000
	4	471000	7353000
	1	481000	7353000
	2	481000	7351000
UN 0037/2021 (Mo 12)	3	476000	7351000
	4	476000	7353000
	1	471000	7351000
	2	471000	7349000
UN 0039/2021 (Mo 14)	3	466000	7349000
	4	466000	7351000
	1	476000	7351000
	2	476000	7349000
UN 0040/2021 (Mo 15)	3	471000	7349000
	4	471000	7351000
	1	481000	7351000
	2	481000	7349000
UN 0041/2021 (Mo 16)	3	476000	7349000
	4	476000	7351000
	1	468000	7349000
	2	470000	7349000
UN 0046/2021 (Mo 20)	3	470000	7346500
	4	468000	7346500
	1	472000	7349000
	2	472000	7346500
UN 0047/2021 (Mo 21)	3	472000	7346500
	4		
		470000	7349000
	1	474000	7349000
UN 0048/2021 (Mo 22)	2	474000	7346500
	3	472000	7346500
	4	472000	7349000
	1	476000	7349000
UN 0049/2021 (Mo 23)	2	476000	7345500
	3	474000	7345500
	4	474000	7349000
	1	478000	7349000
UN 0050/2021 (Mo 24)	2	478000	7345500
	3	476000	7345500
	4	476000	7349000
	1	474500	7342000
UN 0051/2021 (Mo 25)	2	474500	7344000
513 500 1/202 1 (INIO 20)	3	477000	7344000
	4	477000	7342000

Appendix 3 Tenement Coordinate Summary

Tenement No (Name)	Point	Easting ^	Northing ^
	1	479000	7344000
UN 0052/2021 (Mo 26)	2	479000	7342000
UN 0052/2021 (MO 20)	3	477000	7342000
	4	477000	7344000
	1	481000	7354000
UN 0052/2024 (Ma 27)	2	483000	7354000
UN 0053/2021 (Mo 27)	3	483000	7349000
	4	481000	7349000
	1	461000	7348500
UN 0054/0004 (Ma 00)	2	458000	7348500
UN 0054/2021 (Mo 28)	3	458000	7351000
	4	461000	7351000
	1	461000	7354500
	2	466000	7354500
UN 0059/2021 (Mo 5)	3	466000	7353000
	4	461000	7353000
	1	471000	7354500
	2	471000	7353000
UN 0060/2021 (Mo 6)	3	466000	7353000
	4	466000	7354500
	1	476000	7354500
	2	476000	7353000
UN 0061/2021 (Mo 7)	3	471000	7353000
	4	471000	7354500
	1	481000	7354500
	2	481000	7353000
UN 0062/2021 (Mo 8)	3	476000	7353000
	4	476000	7354500
	1	466000	7353000
	2	466000	7351000
UN 0063/2021 (Mo 9)	3	461000	7351000
	4	461000	7353000
	1	459500	7351000
	2	459500	7353000
UN 0133/2021 (Mo 31)	3	461000	7353000
	4	461000	7351000
	1	483000	7349000
	2	483000	7347000
UN 0136/2021 (Mo 34)	3	478000	7347000
	4	478000	7349000
	1	480500	7344000
	2	480500	7342000
UN 0138/2021 (Mo 36)	3	479000	7342000
	4	479000	7344000
^ Coordinates are in ETRS89 / UTM zo			7 344000

^ Coordinates are in ETRS89 / UTM zone 33N (EPSG:25833) Grid System